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2011 EXPLOITATION RATE ANALYSIS AND MODEL CALIBRATION

REPORT TCCHINOOK (12)-2

June 7, 2012

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## List of Acronyms with Definitions

| AABM | Aggregate Abundance Based Management |
| :---: | :---: |
| AC | Allowable Catch |
| AI | Abundance Index |
| ADF\&G | Alaska Department of Fish \& Game |
| AEQ | Adult Equivalent |
| Agreement | 2008 Pacific Salmon Treaty Annex |
| AUC | Area-Under-the-Curve |
| AWG | Analytical Working Group of the CTC |
| ERA | Exploitation Rate Analysis |
| BCAFC | British Columbia Aboriginal Fisheries Commission |
| BTR | Base Terminal Run |
| C\&S | Ceremonial \& Subsistence |
| CBC | Central British Columbia Fishing area Kitimat to Cape Caution |
| CCMP | Comprehensive Chinook Management Plan |
| CDFO | Canadian Department of Fisheries \& Oceans |
| CI | Confidence Interval |
| CNR | Chinook salmon Non-retention |
| CR | Columbia River |
| CRITFC | Columbia River Intertribal Fish Commission |
| CRFMP | Columbia River Fishery Management Plan |
| CTC | Chinook Technical Committee |
| CUS | Columbia Upriver Spring Chinook salmon stock |
| CWT | Coded Wire Tag |
| DIT | Double Index Tag |
| ESA | U.S. Endangered Species Act |
| Est+fw | Estuary Plus Fresh Water Area |
| FL | Fork Length |
| FMP | PFMC Framework Management Plan |
| FNC | First Nations Caucus |
| FOG | Fisheries Operational Guidelines |
| FR | Fraser River |
| GCG | Gene Conservation Group |
| GW | Gitwinksihlkw |
| GS | Strait of Georgia |
| HOR | Hatchery Origin Returns |
| IDFG | Idaho Department of Fish \& Game |
| IDL | InterDam Loss |
| IM | Incidental Mortality |
| ISBM | Individual stock based management |
| LFR | Lower Fraser River |
| LGS | Lower Strait of Georgia |
| Mar | Marine Area |
| mar+fw | Marine Plus Fresh Water Area |
| MOC | Mid Oregon Coast |
| MRP | Mark-Recovery Program |


| MSF | Mark-Selective Fishery |
| :---: | :---: |
| MSH | Maximum sustainable harvest |
| MSY | Maximum Sustainable Yield for a stock, in adult equivalents |
| MSY ER | Exploitation Rate sustainable at the escapement goal for a stock, in AEQs |
| NBC | Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands |
| NA | Not Available |
| NBC | Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands |
| NM | Nautical Mile |
| NMFS | National Marine Fisheries Service |
| NOC | Oregon Coastal North Migrating Stocks |
| NPS | North Puget Sound |
| NPS-S/F | North Puget Sound Summer/Fall Chinook salmon stock |
| NR | Not Representative |
| NWIFC | Northwest Indian Fisheries Commission |
| ODFW | Oregon Department of Fish \& Wildlife |
| PFMC | Pacific Fisheries Management Council |
| PS | Puget Sound |
| PSC | Pacific Salmon Commission |
| PSARC | Pacific Scientific Advice Review Committee |
| PSMFC | Pacific States Marine Fisheries Commission |
| PST | Pacific Salmon Treaty |
| QDNR | Quinault Department of Natural Resources, Division of fisheries |
| QIN | Quinault Nation |
| QCI | Queen Charlotte Islands |
| RER | Recovery Exploitation Rate |
| SMSY | Escapement producing MSY |
| SEAK | Southeast Alaska Cape Suckling to Dixon Entrance |
| SPFI | Stratified Proportional Fishery Index |
| SPS | South Puget Sound |
| SWVI | Southwest Vancouver Island |
| TAC | Technical Advisory Committee |
| TBR | Transboundary Rivers |
| TTC | Transboundary Technical Committee |
| UAF | University of Alaska Fairbanks |
| UFR | Upper Fraser River |
| UGS | Upper Strait of Georgia |
| USCTC | U.S. members of the CTC |
| USFWS | U.S. Fish \& Wildlife Service |
| UW | University of Washington |
| WA/OR | Ocean areas off Washington and Oregon North of Cape Falcon |
| WAC | Washington Coast (Grays Harbor northward) |
| WACO | Washington, Oregon, Columbia River Chinook salmon stock group |
| WCVI | West Coast Vancouver Island excluding Area 20 |
| WDFW | Washington Department of Fisheries and Wildlife |

## Executive Summary

This report contains the results of the annual exploitation rate assessment of CWT data through 2009 and the preseason Chinook salmon model calibration for 2011 (CLB 1106). Results include the AIs for the AABM fisheries and ISBM indices for each country.

AABM Abundance Indices and Associated Catches
The pre- and postseason AIs for the three AABM fisheries, SEAK, NBC, and WCVI are presented in Table 1-1. The Agreement specifies that the AABM fisheries are to be managed through the use of the AIs. Each calibration provides the 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 are used to track catch overages and underages.

Table 1-1. Abundance Indices for 1999 to 2011 for the SEAK, NBC, and WCVI AABM fisheries (from CLB 1106).

|  | 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 | 1.31 | 1.17 | 1.23 | 0.96 | 0.95 |
| 2011 | 1.69 |  | 1.38 |  | 1.15 |  |

The 2008 Pacific Salmon Treaty 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 observed treaty catches are shown in Table 1-2.

Table 1-2. Preseason allowable catches for 1999 to 2011, and postseason allowable catches and observed catches for 1999 to 2010, for AABM fisheries.

| PST Treaty Allowable and Observed Catches ${ }^{3}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | Postseason Allowable Catch | Observed Catch |
| 1999 | 192,800 | 184,200 | 198,842 | 145,600 | 126,100 | 75,127 ${ }^{2}$ | 128,300 | 107,000 | 38,540 ${ }^{2}$ |
| 2000 | 189,900 | 178,500 | 186,493 | 130,000 | 123,500 | 32,048 ${ }^{2}$ | 115,500 | 86,200 | 88,617 ${ }^{2}$ |
| 2001 | 189,900 | 250,300 | 186,919 | 132,600 | 158,900 | $43,751^{2}$ | 141,200 | 145,500 | 120,304 ${ }^{2}$ |
| 2002 | 356,500 | 371,900 | 357,133 | 192,700 | 237,800 | $150,121^{2}$ | 203,200 | 196,800 | $157,886^{2}$ |
| 2003 | 366,100 | 439,600 | 380,152 | 197,100 | 277,200 | 194,162 ${ }^{2}$ | 181,800 | 268,900 | $173,561^{2}$ |
| 2004 | 383,500 | 418,300 | $\begin{gathered} 417,019 \\ 421,666^{4} \end{gathered}$ | 243,600 | 267,000 | 243,306 ${ }^{2}$ | 192,500 | 209,600 | 215,252 ${ }^{2}$ |
| 2005 | 416,400 | 387,400 | 390,470 | 246,600 | 240,700 | 243,606 | 188,200 | 179,700 | 199,479 |
| 2006 | 346,800 | 354,500 | 362,402 | 223,200 | 200,000 | 215,985 | 160,400 | 145,500 | 145,485 |
| 2007 | 329,400 | 259,200 | 328,504 | 178,000 | 143,000 | 144,235 | 143,300 | 121,900 | 140,614 |
| 2008 | 170,000 | 152,800 | 173,040 | 124,800 | 120,900 | 95,647 | 162,600 | 136,900 | 145,726 |
| 2009 | 218,800 | 176,000 | 230,401 | 143,800 | 139,100 | 109,470 | 107,800 | 91,300 | 124,617 |
| 2010 | 221,800 | 215,800 | 231,591 | 152,100 | 160,400 | 136,613 | 143,700 | 142,300 | 139,047 |
| 2011 | 294,800 |  |  | 182,400 |  |  | 196,800 |  |  |

${ }^{1}$ Nomenclature is T for troll, N for net, and S for sport.
${ }^{2}$ Updated with data from DFO (2009).
${ }^{3}$ AABM troll accounting period is from October 1 to September 30.
${ }^{4}$ 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 1-3 shows the differences between the postseason allowable catches and the observed treaty catches in AABM fisheries for 1999-2010, and the cumulative deviation for those years. In 2010, SEAK observed catch was $7.3 \%$ higher than the postseason allowable catch; the NBC observed catch was $14.8 \%$ lower than the postseason allowable catch; and WCVI observed catch was $2.3 \%$ lower than the postseason allowable catch. In SEAK, observed treaty catches have been below final allowable catches for four of the twelve years; the cumulative deviation is a $1.6 \%$ overage. In NBC, observed catches have been below the final allowable catches in nine of the twelve years; the cumulative deviation is a $23.3 \%$ underage. In WCVI, observed catches have been below allowable catches in five of the twelve years; the cumulative deviation is a $7.8 \%$ underage.

Table 1-3. Deviations in numbers of Chinook salmon and percentages from allowable catches derived from the postseason AI (Table 1-2) for Pacific Salmon Treaty AABM fisheries in 1999 to 2010.

|  | SEAK |  | NBC $^{1}$ |  | WCVI $^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Number of Fish | Percent <br> Difference | Number of Fish | Percent <br> Difference | Number of <br> Fish | Percent Difference |
| 1999 | 14,642 | $+7.9 \%$ | $-50,973$ | $-40.4 \%$ | $-68,460$ | $-64.0 \%$ |
| 2000 | 7,993 | $+4.5 \%$ | $-91,452$ | $-74.1 \%$ | 2,417 | $+2.8 \%$ |
| 2001 | $-63,381$ | $-25.3 \%$ | $-115,149$ | $-72.5 \%$ | $-25,196$ | $-17.3 \%$ |
| 2002 | $-14,767$ | $-4.0 \%$ | $-87,679$ | $-36.9 \%$ | $-38,914$ | $-19.8 \%$ |
| 2003 | $-59,448$ | $-13.5 \%$ | $-83,038$ | $-30.0 \%$ | $-95,339$ | $-35.5 \%$ |
| 2004 | $-1,281$ | $-0.3 \%$ | $-23,694$ | $-8.9 \%$ | 5,652 | $+2.7 \%$ |
|  | $3,366^{2}$ | $+0.8 \%$ |  |  |  |  |
| 2005 | 3,070 | $+0.8 \%$ | 2,906 | $+1.2 \%$ | 19,779 | $+11.0 \%$ |
| 2006 | 7,902 | $+2.2 \%$ | 15,985 | $+8.0 \%$ | -15 | $-0.0 \%$ |
| 2007 | 69,304 | $+26.7 \%$ | 1,235 | $+0.9 \%$ | 18,714 | $+15.4 \%$ |
| 2008 | 20,240 | $+13.2 \%$ | $-25,253$ | $-20.9 \%$ | 8,826 | $+6.4 \%$ |
| 2009 | 54,401 | $+30.9 \%$ | $-29,630$ | $-21.3 \%$ | 33,317 | $+36.5 \%$ |
| 2010 | 15,791 | $+7.3 \%$ | $-23,787$ | $-14.8 \%$ | $-3,253$ | $-2.3 \%$ |
| Cum. | 54,466 | $+1.6 \%$ | $-510,529$ | $-23.3 \%$ | $-142,472$ | $-7.8 \%$ |

${ }^{1}$ 1999-2004 from DFO (2009).
${ }^{2}$ 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.

## ISBM Indices

For ISBM fisheries, the 2008 Agreement specifies that Canada and the United States 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 Agreement and is referred to as the 'general obligation' and does not apply to stock groups that achieve their CTC agreed escapement goals. 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. Postseason ISBM indices were computed for 2009 using CWT data and preseason ISBM indices were computed for 2011 using the Chinook salmon model.

## Postseason ISBM Indices for 2009

Canadian postseason ISBM indices computed were reduced more than required under the Agreement for the 7 indices calculated (Table 1-4).

Seven of the 16 U.S. postseason ISBM indices computed were reduced more than required. The other 9 U.S. postseason ISBM indices exceeded 0.60, but these stocks met or exceeded their respective escapement goals, and thus are exempted from the general obligation (Table 1-5).

## Preseason ISBM Indices for 2011

Eight of the 19 Canadian preseason ISBM indices, based on outputs from calibration 1106, are predicted to exceed the allowable ISBM index of 0.635 in 2011 (Table 1-4). Seven of these 8 stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted escapement goals.

Nine of the 23 U.S. ISBM indices based on calibration 1106 are predicted to exceed the allowable limit of 0.60 for U.S. ISBM fisheries in 2011 (Table 1-5). All but Skagit (which has exploitation rate objectives) have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Deschutes, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw. Of the stocks with goals, all but Nehalem were above their goals in 2010.

Table 1-4. Canadian 2009 ISBM indices based on CWT and the 2011 indices predicted from the PSC Chinook Model.

|  |  | Canadian ISBM Indices |  |
| :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | CWT Indices for 2009 | Model Indices for 2011 |
| Lower Strait of Georgia | Cowichan Nanaimo | $\begin{aligned} & 0.400^{4} \\ & \text { NA }^{1,5} \end{aligned}$ | $0.367{ }^{6}$ |
| Fraser Late | Harrison River ${ }^{2}$ | $0.058{ }^{7}$ | 0.193 |
| North Puget Sound Natural Springs | Nooksack | 0.106 | 0.732 |
|  | Skagit | NA | 0.731 |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.247 | 0.578 |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | NA | 0.222 |
| West Coast Vancouver Island Falls | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | $0.464{ }^{8}$ | 0.491 |
| Puget Sound Natural Summer / Falls | Skagit | NA | 0.745 |
|  | Stillaguamish | 0.252 | 0.793 |
|  | Snohomish | NA | 0.744 |
|  | Lake Washington | NA | $0.752{ }^{9}$ |
|  | Green River | 0.208 | $0.756{ }^{9}$ |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA | 0.598 |
| Washington Coastal Fall Naturals ${ }^{3}$ | Hoko, Grays Harbor, Queets ${ }^{2}$, Hoh ${ }^{2}$, Quillayute ${ }^{2}$ | NA | 0.332 |
| Columbia River Falls ${ }^{3}$ | Upriver Brights ${ }^{2}$ | NA | 0.620 |
|  | Deschutes | NA | 0.620 |
|  | Lewis ${ }^{2}$ | NA | 0.994 |
| Columbia R Summers ${ }^{3}$ | Mid-Columbia Summers ${ }^{2}$ | NA | 0.359 |
| Far North Migrating OR Coastal Falls ${ }^{3}$ | Nehalem ${ }^{2}$, Siletz ${ }^{2}$, Siuslaw ${ }^{2}$ | NA | 0.529 |

${ }^{1}$ 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 group listed in Annex 4, Chapter 3, Attachment V.
${ }^{4}$ 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 salmon.
${ }^{5}$ Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook salmon. 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 salmon, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.
${ }^{8}$ 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. A more extended review of the indices for WCVI Chinook salmon will be carried out to determine whether they adequately represent impacts on the WCVI wild aggregate.
${ }^{9}$ For Canadian ISBM fisheries, Lake Washington and Green the same distribution and Index value are assumed.
Table 1-5. U.S. 2009 ISBM indices based on CWT and the 2011 indices predicted from the PSC Chinook Model.

|  |  | U.S. ISBM Indices |  |
| :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | CWT Indices for 2009 | Model Indices for 2011 |
| Washington Coastal Fall Naturals | Hoko | NA ${ }^{1}$ | 0.419 |
|  | Grays Harbor | 0.700 | 0.549 |
|  | Queets ${ }^{4}$ | 0.450 | 0.327 |
|  | Hoh ${ }^{4}$ | 1.220 | 0.760 |
|  | Quillayute ${ }^{4}$ | 1.970 | 1.058 |
| Columbia River Falls | Upriver Brights ${ }^{4}$ | 2.790 | 0.841 |
|  | Deschutes ${ }^{4}$ | 2.360 | 1.044 |
|  | Lewis ${ }^{4}$ | 0.140 | 0.426 |
| Puget Sound Natural Summer / Falls | Skagit | NA | 0.789 |
|  | Stillaguamish | 0.200 | 0.169 |
|  | Snohomish | NA | 0.211 |
|  | Lake Washington | NA | 0.387 |
|  | Green R | 0.290 | 0.236 |
| Fraser Late | Harrison River ${ }^{4}$ | $0.150{ }^{5}$ | 0.497 |
| Columbia R Summers | Mid-Columbia Summers ${ }^{4}$ | 1.310 | 1.398 |
| Far North Migrating OR Coastal Falls | Nehalem ${ }^{4}$ | 0.590 | 2.146 |
|  | Siletz ${ }^{4}$ | 0.730 | 0.643 |
|  | Siuslaw ${ }^{4}$ | 1.070 | 1.427 |
| North Puget Sound Natural Springs | Nooksack | 0.520 | 0.484 |
|  | Skagit | NA | 0.271 |
| Lower Strait of Georgia ${ }^{3}$ | Cowichan, | 5.140 | 0.367 |
|  | Nanaimo | NA | NA |
| Upper Strait of Georgia ${ }^{3}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NA | NC ${ }^{2}$ |
| Fraser Early (spring and summers) ${ }^{3}$ | Upper Fraser, Mid Fraser, Thompson | NA | 0.239 |
| West Coast Vancouver Island Falls ${ }^{3}$ | WCVI (Artlish, Burman, Kaouk, Tahsis, Tashish, Marble) | NA | 0.378 |
| North / Central B. C. ${ }^{3}$ | Yakoun, Nass, Skeena, Area 8 | NA | NC |

${ }^{1}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2} \mathrm{NC}$ means that the current model assumes the stock is not caught in U.S. ISBM fisheries.
${ }^{3}$ Stock group listed in Annex 4, Chapter 3, Attachment IV.
${ }^{4}$ Stock with a CTC agreed escapement goal.
${ }^{5}$ 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.

## 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 salmon model calibration. The results of the 2011 preseason calibration (CLB 1106) are based on the exploitation rate analysis (ERA) using CWT data through catch year 2009, coast-wide data on catch, spawning escapements and age structure through 2010, and forecasts of Chinook salmon returns expected in 2011. This chapter includes:

1. estimated postseason abundance indices for 1979 through 2010 and the preseason projection for 2011 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 2009 and modeled ISBM projections for the 2011 ISBM fisheries,
3. estimated stock composition for 1979 through 2010 and a projection for 2011 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, escapement indicator stocks, model stocks, and Pacific Salmon Treaty (PST) Annex stocks. Appendices B to I present 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 1106. Appendix C shows the percent distribution of landed catch and total mortality by catch year for exploitation rate indicator stocks. Appendix D shows CWT survival indices (completed brood years only) for exploitation rate indicator stocks and age 2 or 3 Chinook model (EV) survival indices for corresponding model 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 cohort at a given age accounting for the exploitation history of a given stock and brood year. This technique 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 ISBM indices. Post season ISBM indices are computed through a separate process using the CWT data that comes out of the Exploitation Rate Analysis. Projected AIs for 2011 are used to determine the allowable 2011 catch of Treaty Chinook salmon for AABM fisheries. Postseason AIs are used to appraise the previous (2010) 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 exploitation rates relative to the base period. Postseason ISBM indices for 2009 are computed using results of the exploitation rate analysis ( 2010 will be available next year). Forecasts of the 2011 ISBM indices are computed using the PSC Chinook 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 performance post-season, however the post-season indices are computed on a 2 year-lag because some data are reported two years later.

## 2 Exploitation Rate Assessment (THROUGH Fishery year 2010)

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 these analyses. This is primarily because some of these stock codes have been discontinued while new ones have been added. An exploitation rate indicator stock is not used in the ERA if the number of CWT recoveries is very limited (minimum of 10 estimated recoveries for a given stock and age combination) no quantitative estimate of tags in the spawning escapement, or less than 4 brood years with CWT recoveries (see footnotes in Table 2-2). Indicator stocks used for exploitation rate analysis and the type of analysis performed for each 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. CWT exploitation rate indicator stocks, their location, run type, and smolt age.

| Stock/Area | Exploitation Rate Indicator Stocks | Hatchery | Run Type | Smolt <br> Age |
| :---: | :---: | :---: | :---: | :---: |
| Southeast Alaska | Alaska Spring | Crystal Lake, Whitman Lake, Little Port Walter, Deer Mountain, Neets Bay | Spring | Age 1 |
| North/Central BC | Kitsumkalum | Deep Creek | Summer | Age 1 |
| WCVI | Robertson Creek | Robertson Cr. | Fall | Age 0 |
| Strait of Georgia | Quinsam <br> Puntledge <br> Big Qualicum <br> Cowichan <br> Nanaimo | Quinsam <br> Puntledge <br> Big Qualicum <br> Cowichan <br> Nanaimo | Fall <br> Summer <br> Fall <br> Fall <br> Fall | Age 0 <br> Age 0 <br> Age 0 <br> Age 0 <br> Age 0 |
| Fraser River | Chilliwack (Harrison Stock) ${ }^{1}$ <br> Lower Shuswap <br> Nicola <br> Dome | Chilliwack Shuswap Falls <br> Spius Creek <br> Penny Creek | Fall <br> Summer <br> Spring <br> Spring | Age 0 <br> Age 0 <br> Age 1 <br> Age 1 |
| North Puget Sound | Skagit Spring Fingerling Skagit Spring Yearling ${ }^{1}$ Skagit Summer Fingerling Nooksack Spring Fingerling Nooksack Spring Yearling Samish Fall Fingerling ${ }^{1}$ | Marblemount <br> Marblemount <br> Marblemount <br> Kendall Cr. <br> Kendall Cr. <br> Samish | Spring <br> Spring <br> Summer <br> Spring <br> Spring <br> Summer/Fall | Age 0 <br> Age 1 <br> Age 0 <br> Age 0 <br> Age 1 <br> Age 0 |
| Central Puget Sound | Stillaguamish Summer Fingerling South Puget Sound Fall Fingerling ${ }^{1}$ Univ. of Washington Accelerated | Stillaquamish Tribal <br> Soos Cr. / Grovers Cr. UW | Summer/Fall <br> Summer/Fall <br> Summer/Fall | Age 0 <br> Age 0 <br> Age 0 |
| South Puget Sound | South Puget Sound Fall Yearling White River Spring Yearling ${ }^{2}$ Nisqually Fall Fingerling ${ }^{1}$ | Tumwater Falls White R. Clear Cr. | Summer/Fall <br> Spring <br> Summer/Fall | Age 1 <br> Age 1 <br> Age 0 |
| Hood Canal | George Adams Fall Fingerling ${ }^{1}$ | George Adams | Summer/Fall | Age 0 |
| Juan de Fuca | Elwha Fall Fingerling Hoko Fall Fingerling | Lower Elwha Hoko | Summer/Fall Summer/Fall | $\begin{aligned} & \hline \text { Age } 0 \\ & \text { Age } 0 \\ & \hline \end{aligned}$ |
| North Wash. Coast <br> Willamette R. | Sooes Fall Fingerling <br> Queets Fall Fingerling (wild brood) <br> Willamette Spring ${ }^{1}$ | Makah NFH <br> Salmon R. (WA) <br> Willamette H | Fall <br> Fall <br> Spring | Age 0 <br> Age 0 <br> Age 1 |
| Lower Columbia R. <br> Upper Columbia R. | Cowlitz Tule (WA) <br> Spring Creek Tule (WA) ${ }^{1}$ <br> Columbia Lower River Hatchery ${ }^{1}$ <br> Lewis River Wild <br> Columbia Summers (WA) <br> Columbia Upriver Bright <br> Hanford Wild | Cowlitz <br> Spring Cr. NFH <br> Big Creek <br> Wild <br> Wells <br> Priest Rapids <br> Wild | Fall Tule <br> Fall Tule <br> Fall Tule <br> Fall Bright <br> Summer <br> Fall Bright <br> Fall Bright | Age 0 <br> Age 0 <br> Age 0 <br> Age 0 <br> Age 1 <br> Age 0 <br> Age 0 |
| Snake River | Lyons Ferry ${ }^{3,1}$ | Lyons Ferry | Fall Bright | Age 0 |
| North Oregon Coast | Salmon River | Salmon R. | Fall | Age 0 |
| Mid Oregon Coast | Elk River | Elk R. | Fall | Age 0 |

${ }^{1}$ 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 during the base period years 1979-1982.

| Exploitation Rate Indicator Stocks | Fishery Index | $\begin{aligned} & \text { ISBM } \\ & \text { Index } \end{aligned}$ | BER ${ }^{1}$ | Survival Index | Dist | Esc | Base <br> 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 |  |  | 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 |  | 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 | - |  | 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 |

${ }^{1}$ 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.
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 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:

$$
\begin{equation*}
B Y E X P_{B Y, F}=\frac{\sum_{a=\text { Minage }}^{\text {Maxage }}\left(\sum_{f \in\{F\}} \text { TotMorts }_{B Y, a, f} * A E Q_{B Y, a, f}\right)}{\sum_{a=\text { Minage }}^{\text {Maxage }}\left(\sum_{f=1}^{\text {Numfisheries }} \operatorname{TotMorts}_{B Y, a, f} * A E Q_{B Y, a, f}+E S C_{B Y, a}\right)} \tag{Equation 2.1}
\end{equation*}
$$

The AEQ rate is calculated as:

$$
\begin{aligned}
& A E Q_{B Y, a-1, f}=\text { MatRte }_{a-1, B Y}+\left(1-\text { MatRte }_{a-1, B Y}\right) * \text { Surv }_{a} * A E Q_{B Y, a, f} \\
& A E Q_{B Y, M a x a g e, f} \equiv 1.0
\end{aligned}
$$

$$
\text { Equation } 2.2
$$

See Table 2-3 for a description of notation.

Table 2-3. Parameter definitions for all equations except those used for Stratified Proportional Fishery Index (SPFI) in SEAK.

| Parameter | Description |
| :---: | :---: |
| $a=$ | age class |
| $A=$ | set of all ages that meet selection criteria |
| $A E Q_{B Y, a, f}=$ | adult equivalent factor in brood year $B Y$, age $a$, and fishery $f$ (for terminal fisheries, $A E Q=$ 1.0 for all ages) |
| Age 2 CohSurv $_{\text {BY }}=$ | cohort survival of CWT fish to age 2 (pre-fishery) for brood year BY |
| AvgMatRte $_{\text {a }}=$ | average maturation rate for age $a$ |
| $B P E R=$ | base period years (1979 through 1982) |
| BYEX $_{\text {BY, }} \mathrm{F}=$ | brood year exploitation rate in adult equivalent for brood year BY and fishery $F$ |
| BPISBMER $_{f, a}=$ | average base period ISBM exploitation rate for fishery $f$ and age $a$ |
| $B Y=$ | brood year |
| Cohort $_{B Y, a}=$ | cohort by brood year BY and age a (where stock is implied from context) |
| Cohort $_{s, B Y, a}=$ | cohort by stock s, brood year BY and age $a$ (where stocks are defined explicitly in a summation) |
| $C Y=$ | calendar year |
| CYDist $_{\text {C,F }}=$ | proportion of total stock mortality (or escapement) in a calendar year $C Y$ attributable to a fishery or a set of fisheries $F$ |
| $C Y_{\text {end }}=$ | end year for average |
| $C Y_{\text {start }}=$ | start year for average |
| $d_{t, s, a}=$ | distribution parameter for timestep $t$, stock $s$, and age $a$ |
| $E s c_{Y, a}=$ | escapement past all fisheries for either brood year BY or calendar year $C Y$ and age a |
| $E R_{s, a, f, C Y}=$ | exploitation rate (based on total mortality) at age $a$ divided by cohort size at age $a$ for stock $s$ in fishery $f$ in year $C Y$ |
| $E V_{n, B Y}=$ | the stock productivity scalar for iteration $n$ and brood year BY |
| $f=$ | a single fishery |
| $f \in\{F\}=$ | a fishery $f$ within the set of fisheries of interest |
| $F=$ | ocean, terminal or other sets of fisheries or spawning escapements |
| FI ${ }_{\text {f,CY }}=$ | fishery exploitation rate index for fishery $f$ in year $C Y$ |
| ${ }^{F P_{\text {a.s.CYY, }}}=$ | ratio of $E R_{\text {s, }, \text { f, }, C Y}$ to BPISBMER |
| ISBMIdxCY = | ISBM index for calendar year CY |
| MatRte $_{a-1, B Y}=$ | 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 $_{C Y, a, f}=$ | landed or total fishing mortality in year $C Y$ and age $a$ in fishery $f$ |
| NMa = | annual natural mortality prior to fishing on age $a$ cohort |
| Numfisheries = | total number of fisheries |
| $R T_{C Y}=$ | ratio of the catch quota in the current year to the catch that would be predicted given current abundance, current size limits, and base period exploitation rates |
| $s=$ | a particular stock |
| $S=$ | set of all stocks that meet selection criteria |
| $S C_{B Y}=$ | ratio of the estimated and model predicted terminal run for brood year $B Y$ |
| Surva $_{\text {a }}=$ | survival rate ( $1-N M_{a}$ ) by age |
| TotMorts $_{\text {BY,a,f }}=$ | total fishing related mortality for brood year $B Y$ or calendar year $C Y$ or during the base period BPER and age $a$ in fishery $f$ |
| TotCWTRelease $_{\text {BY }}=$ | 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 salmon 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. (For yearling stocks, the survival rate is calculated for the estimated age 3 cohort.)

$$
\text { Age2CohSurv }_{B Y}=\frac{\text { Cohort }_{B Y, 2}}{\text { TotCWTRelease }_{B Y}}
$$

## Equation 2.3

where CohortBY,2 is calculated recursively from the oldest age down to age-2 using:
Cohort $_{B Y, a}=\frac{\sum_{f=1}^{\text {Numfsheries }^{\text {TotMorts }}}{ }_{B Y, a, f}+\text { Esc }_{B Y, a}+\text { Cohort }_{B Y, a+1}}{1-N M_{a}}$ Equation 2.4
If ocean age- 5 tags are absent, the age- 4 cohort size is estimated using the following formula:
Cohort $_{B Y, 4}=\frac{\sum_{f \in \text { Preeerminal }} \text { TotMorts }_{\text {BY }, 4, f}+\frac{\text { Esc }_{B Y, 4}+\sum_{f \in \text { lemminal }} \text { TotMorts }_{\text {BY }, 4, f}}{\text { AvgMatRe }_{4}}}{1-N M_{4}}$
Equation 2.5
For each stock, equation 2.3 is then converted into a survival index for a given brood year by dividing the age 2 survival rate for the brood year by the average survival rate for all brood years.

### 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). To gain insight on impacts within a fishing year, stock mortality distributions (reported catch or total) are calculated over all ages in the fisheries in a calendar year (if at least three brood years contribute to recoveries) as follows:

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;

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

## Equation 2.7

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


Equation 2.8
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 due to inadequate sampling and catch estimation 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 all AABM 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 and the University of Washington Accelerated stock is no longer tagged. One example of a change in the fishing pattern is for 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. 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 (2009a) 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 AABM fisheries.

For computation of the SPFI, the CWT harvest rate (ht,cy) must initially be set to an arbitrary value between 0 and 1. Then, the distribution parameter ( $\mathrm{dt}, \mathrm{s}, \mathrm{a}$ ) is calculated (Equation 2.9), and the result is substituted into Equation 2.10 below to recursively recalculate ht,cy and subsequently dt,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.

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

Equation 2.9

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.

$$
H_{t, C Y}=\left[\left(\frac{\sum_{s} \sum_{a} c_{t, C Y, s, a}}{\sum_{s} \sum_{a}^{2} r_{t, C Y, s, a}}\right) *\left(C_{t, C Y}-A_{t, C Y}\right)\right] /\left[\left(C_{t, C Y}-A_{t, C Y}\right) / h_{t, C Y}\right]
$$

Equation 2.11

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

Equation 2.12

$$
S_{t, C Y}=H_{t, C Y} / \sum_{C Y=1979}^{1982} H_{t, C Y}
$$

Equation 2.13
$S_{C Y}=H_{C Y} / \sum_{C Y=1979}^{1982} H_{C Y}$
Equation 2.14
Table 2-4. Parameter descriptions for equations used for the SPFI.

| Parameter | Description |
| :--- | :--- |
| $A_{t, C Y}=$ | Alaska hatchery origin catch by strata $t$, year $C Y$ |
| $c_{t, C Y, s, a}=$ | adult equivalent CWT catch by strata $t$, year $C Y$, stock $s$ and age $a$ |
| $C_{t, C Y}=$ | catch by strata $t$, year $C Y$ |
| $d_{t, s, a}=$ | distribution parameter by strata $t$, stock $s$ and age $a$ |
| $h_{t, C Y}=$ | CWT harvest rate by strata $t$, year $C Y$ |
| $H_{C Y}=$ | harvest rate by year $C Y$ |
| $H_{t, C Y}=$ | harvest rate by strata $t$, year $C Y$ |
| $n_{C Y, s, a}=$ | CWT cohort size by year $C Y$, stock $s$ and age $a$ |
| $r_{t, C Y, s, a}=$ | CWT recoveries by strata $t$, year $C Y$, stock $s$ and age $a$ |
| $S_{. C Y}=$ | SPFI by year $C Y$ |
| $S_{t, C Y}=$ | SPFI by strata $t$, year $C Y$ |

### 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-AABM 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. Paragraph 8(d), Chapter 3 of the 2008 PSC Agreement directs the CTC to use these ISBM indices to measure the performance of ISBM fisheries:
"(d) unless otherwise recommended by the CTC and approved by the Commission, the nonceiling index defined in TCChinook (05)-3 where data are available for the required time periods, the average total annual adult equivalent mortality rate that occurred in 1991 to 1996 (see Attachments IV and V), or an alternative metric recommended by the CTC and approved by the Commission will be used to monitor performance of ISBM fisheries relative to the obligations set forth in this paragraph;"

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:

$$
\text { ISBMId } \left._{C Y}=\frac{\sum_{f \in\{F\}} \sum_{a=\text { Minage }}^{\text {Maxage } \left.^{( } \text {TotMorts }_{C Y, f, a} * A E Q_{B Y=C Y-a, a, f}\right)}}{\sum_{f \in\{F\}} \sum_{a=\text { Minage }}^{\text {Maxage }}(B P I S B M E R} R_{f, a} * \text { Cohort }_{B Y=C Y-a, a}\right)
$$

Equation 2.15
where,
BPISBMER $_{f, a}=\frac{\sum_{\text {BPER }=79}^{82} \frac{\left(\text { TotMorts }_{B P E R, f, a} * A E Q_{B Y=B P E R-a, a, f}\right)}{\text { Cohort }_{B Y=B P E R-a, a}}}{4}$
Equation 2.16
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 only marked hatchery fish which makes the estimated CWT-based exploitation rate non-representative of the untagged stocks.

In those instances the following methods were used:
For terminal fisheries with marked harvest rates that were not representative of the untagged stocks of interest, external estimates were used instead of model estimates. For preseason estimates, the Fisheries Resource Assessment Model (FRAM) and the Columbia River Harvest Model were used to generate external estimates for Puget Sound net and sport, and Columbia River net and sport fisheries, respectively. For postseason CWT-based estimates, base period exploitation rates for the model stock associated with the wild stock were used if the indicator stock did not have base period recoveries.

Many ISBM fisheries or stock/fishery combinations have no preseason predictions of harvest rates and some have no abundance forecasts. In those cases, the previous year's harvest rates were assumed.

### 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 1106 are listed in Appendix G.
6) The procedures for estimating the mortality of CWT fish of legal size during periods of Chinook salmon 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).

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 salmon 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 salmon model and the CWT cohort analysis. Legal and sublegal fishery specific mortality rates are applied to the following types of Chinook salmon encounters:

1) Shakers: Chinook salmon below the legal size limit that are encountered, brought to the boat, and released during a Chinook salmon retention fishery.
2) Sublegal CNR: Chinook salmon below the legal size limit that are encountered, brought to the boat, and released during a Chinook salmon non-retention fishery. The mortality rate per encounter applied to sublegal CNR is the same applied to shakers.
3) Legal CNR: Chinook salmon above the legal size limit that are encountered, brought to the boat, and released during a Chinook salmon non-retention fishery.
4) Drop-off: Chinook salmon 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. Drop-off 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 salmon 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 salmon retention period exists for the fishery. The 'season length' method used in the exploitation rate assessment was described in CTC (1988). The Chinook salmon 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 salmon model have been described by the unpublished draft model documentation 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 Appendices C through E. Appendix C summarizes tag distributions for each stock by year, region (specifically AABM and ISBM fisheries) and escapement. Appendix D summarizes survival indices by stock based on CWTs and the PSC Chinook salmon model. Summaries of how these two types of indices 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 described in the draft model documentation (CTC AWG 1991). For 2011, 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 2010 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 salmon).

### 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 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 salmon 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.

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

${ }^{1}$ 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 draft 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 inter-dam 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 reestimation 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 S = sibling; R = return rate; 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 Natural | 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 of escapements 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 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 (SCBY) 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:

$$
S C_{B Y}=\frac{\sum_{a=\text { Minage }}^{\text {Maxage }}(\text { ObservedTerminal Run })_{a}}{\sum_{a=\text { Minage }}^{\text {Maxae }}(\text { Model PredictedTerminal Run })_{a}}
$$

Equation 3.1
$S C_{B Y}=\frac{900+4000+1000}{1500+4500+1500}$

## Equation 3.2

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 BY is computed as:

$$
E V_{n, B Y}=E V_{n-1, B Y} * S C_{B Y}
$$

Equation 3.3
(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.
$\left|\frac{E V_{n, B Y}-E V_{n-1, B Y}}{E V_{n-1}}\right|<0.05$

## Equation 3.4

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 2011 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 2011 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 2010 using updated catch and escapement data through 2010. Average exploitation rate scalars ( ${ }^{\overline{F P}}$ ) were then computed and used as input values for 2011 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 ${ }^{F P}$ for each model fishery were obtained from the Stage 1 calibration using the following formula:

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

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 2011; 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 1106 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 1106 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 2009a). 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 2009) and model landed catch fishery indices (through 2009) for the SEAK troll fishery


Figure 3-2. Estimated CWT based SPFI (through 2009) and model total mortality fishery indices (through 2009) 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 2009a), 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 an assessment of how the SPFI affects results in the calibration procedures was originally intended to be included in this report. This analysis has been deferred to the 2012 CLB and ER report.

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 2009) and model landed catch fishery indices (through 2009) for the NBC troll fishery.


Figure 3-4. Estimated CWT ROM (FI), SPFI (through 2009) and model total mortality fishery indices (through 2009) 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 2009) and model landed catch fishery indices (through 2009) for the WCVI troll fishery.


Figure 3-6. Estimated CWT ROM (FI), SPFI (through 2009) and model total mortality fishery indices (through 2009) 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 2011 preseason AI for the SEAK troll fishery is 1.69, for the NBC troll fishery it is 1.38 , and for the WCVI troll fishery is 1.15 . This is the third year of the 2008 Agreement that reduced 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 in-season adjustments to the preseason AI's for the SEAK troll fishery. However, the in-season AI has not provided a reliable estimate of the postseason AI due to its reliance on the preseason AI in the calculations and has not been used for in-season management action since 2001.

The postseason AI is 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 rate objective. Postseason AIs for 1999-2010 are also listed in Table 3-3.

Table 3-3. Abundance indices (AI) for 1999 to 2011 for the AABM troll fisheries (from CLB 1106).

|  | 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 | 1.31 | 1.17 | 1.23 | 0.96 | 0.95 |
| 2011 | 1.69 |  | 1.38 |  | 1.15 |  |

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

Table 3-4. Observed catches and postseason allowable catches for 1999 to 2010, and preseason allowable catches for 1999 to 2011, for AABM fisheries.

| PST Treaty Allowable and Observed Catches |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SEAK (T, N, S) ${ }^{1}$ |  |  | NBC (T, S) |  |  | WCVI (T, S) |  |  |
| Year | Preseason Allowable Catch | Post- <br> season <br> Allowable <br> Catch | Observed Catch | Pre- <br> season <br> Allowable <br> Catch | Post- <br> season <br> Allowable <br> Catch | Observed Catch | Pre- <br> season <br> Allowable <br> Catch | Postseason Allowable Catch | Observed Catch |
| 1999 | 192,800 | 184,200 | 198,842 | 145,600 | 126,100 | 75,127 ${ }^{2}$ | 128,300 | 107,000 | 38,540 ${ }^{2}$ |
| 2000 | 189,900 | 178,500 | 186,493 | 130,000 | 123,500 | $32,048^{2}$ | 115,500 | 86,200 | 88,617 ${ }^{2}$ |
| 2001 | 189,900 | 250,300 | 186,919 | 132,600 | 158,900 | $43,751^{2}$ | 141,200 | 145,500 | 120,304 ${ }^{2}$ |
| 2002 | 356,500 | 371,900 | 357,133 | 192,700 | 237,800 | $150,121^{2}$ | 203,200 | 196,800 | $157,886^{2}$ |
| 2003 | 366,100 | 439,600 | 380,152 | 197,100 | 277,200 | $194,162^{2}$ | 181,800 | 268,900 | $173,561^{2}$ |
| 2004 | 383,500 | 418,300 | $\begin{aligned} & \hline 417,019 \\ & 421,666^{3} \\ & \hline \end{aligned}$ | 243,600 | 267,000 | 243,306 ${ }^{2}$ | 192,500 | 209,600 | 215,252 ${ }^{2}$ |
| 2005 | 416,400 | 387,400 | 390,470 | 246,600 | 240,700 | 243,606 | 188,200 | 179,700 | 199,479 |
| 2006 | 346,800 | 354,500 | 362,402 | 223,200 | 200,000 | 215,985 | 160,400 | 145,500 | 145,485 |
| 2007 | 329,400 | 259,200 | 328,504 | 178,000 | 143,000 | 144,235 | 143,300 | 121,900 | 140,614 |
| 2008 | 170,000 | 152,800 | 173,040 | 124,800 | 120,900 | 95,647 | 162,600 | 136,900 | 145,726 |
| 2009 | 218,800 | 176,000 | 230,401 | 143,800 | 139,100 | 109,470 | 107,800 | 91,300 | 124,617 |
| 2010 | 221,800 | 215,800 | 231,591 | 152,100 | 160,400 | 136,613 | 143,700 | 142,300 | 139,047 |
| 2011 | 294,800 |  |  | 182,400 |  |  | 196,800 |  |  |

${ }^{1}$ Nomenclature is T for troll, N for net, and S for sport.
${ }^{2}$ Updated with data from DFO (2009).
${ }^{3}$ 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.

### 3.3.1 Model estimates of stock composition of the AABM fishery abundances, 19792011

The majority of catches in each AABM fishery are often comprised of only a small subset of the 30 model stocks listed in Appendix A. Figure 3-7 through Figure 3-9 shows the relative abundance for each major stock (resulting from CLB 1106). In general, postseason AIs had a peak during the late 1980s (1987-1989) and another in 2003 and 2004.

The major model stocks contributing to the SEAK AIs are: Oregon Coastal, Columbia Upriver (URB) and Mid-Columbia Brights (MCB), WCVI Natural and Hatchery, North/Central BC, Alaska South Southeast, and Fraser Early (Figure 3-7). The "other" category is mainly Upper Georgia Strait, Columbia River Summers, and Willamette Springs.


Figure 3-7. Annual stock composition of the abundance indices for the SEAK troll fishery for major model stocks from CLB 1106.

The major model stock groups contributing to the NBC AABM fishery AIs are: Oregon Coastal, URB and MCB, WCVI Natural and Hatchery, North/Central BC, Washington Coastal Wild and Hatchery, Upper and Lower Georgia Strait, and Fraser Early (Figure 3-8). The "other" category is mainly Columbia River Summers, Willamette Springs, and Alaska South Southeast.


Figure 3-8. Annual stock composition of the abundance indices for the Northern BC troll fishery for major model stocks from CLB 1106.

The major model stock groups in the WCVI fishery are: CR Tules, Upriver Brights, Puget Sound, WCVI Natural and Hatchery, and Fraser Lates (Figure 3-9). The "Other" category is mainly Oregon Coast, Georgia Strait, and Washington Coastal.


Figure 3-9. Annual stock composition of the abundance indices for the WCVI troll fishery for major model stocks from CLB 1106.

### 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- shows the annual differences between the postseason allowable catches and the observed catches in AABM fisheries for 1999-2010, as well as the cumulative differences. In SEAK, the 2010 catch was $7.3 \%$ above the postseason allowable catch, and the cumulative differences were $1.6 \%$ above. In NBC, the 2010 catch was $14.8 \%$ below the preseason allowable catch and the cumulative differences were $23.3 \%$ below. In WCVI, the 2010 catch was $2.3 \%$ below and the cumulative differences were $7.8 \%$ below. The SEAK, NBC, and WCVI AABM fisheries have been over the preseason allowable catch 8 , 3 , and 7 of the last 12 years, respectively.

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 2010.

| Year | SEAK |  | $\mathrm{NBC}^{1}$ |  | $\mathrm{WCVI}^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Fish | Percent Difference | Number of Fish | Percent Difference | Number of Fish | Percent Difference |
| 1999 | 14,642 | +7.9\% | -50,973 | -40.4\% | -68,460 | -64.0\% |
| 2000 | 7,993 | +4.5\% | -91,452 | -74.1\% | 2,417 | +2.8\% |
| 2001 | -63,381 | -25.3\% | -115,149 | -72.5\% | -25,196 | -17.3\% |
| 2002 | -14,767 | -4.0\% | -87,679 | -36.9\% | -38,914 | $4-19.8 \%$ |
| 2003 | -59,448 | -13.5\% | -83,038 | -30.0\% | -95,339 | -35.5\% |
| 2004 | -1,281 | -0.3\% | -23,694 | -8.9\% | 5,652 | +2.7\% |
|  | 3,366 ${ }^{2}$ | +0.8\% |  |  |  |  |
| 2005 | 3,070 | +0.8\% | 2,906 | +1.2\% | 19,779 | +11.0\% |
| 2006 | 7,902 | +2.2\% | 15,985 | +8.0\% | -15 | +0.0\% |
| 2007 | 69,304 | +26.7\% | 1,235 | +0.9\% | 18,714 | +15.4\% |
| 2008 | 20,240 | +13.2\% | -25,253 | -20.9\% | 8,826 | - $+6.4 \%$ |
| 2009 | 54,401 | +30.9\% | -29,630 | -21.3\% | 33,317 | +36.5\% |
| 2010 | 15,791 | +7.3\% | -23,787 | -14.8\% | -3,253 | -2.3\% |
| Cum. | 54,466 | +1.6\% | -510,529 | -23.3\% | -142,472 | -7.8\% |
|  | 59,113 | +1.7\% ${ }^{2}$ |  |  |  |  |

${ }^{1}$ 1999-2004 updated with data from DFO (2009).
${ }^{2}$ 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.

### 3.5 ISBM Indices by Stock

For ISBM fisheries, the 2008 PST 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 2009 preseason indices as predicted by the 2009 Chinook Model (clb0907) and the 2009 post-season indices as estimated by the 2011 Chinook model (clb1106), and the 2011 CWT analysis, as well as the 2011 preseason indices as predicted by the 2011 Chinook Model (clb1106). The 2009 post-season indices as estimated by the 2011 Chinook model (clb1106) are presented in Tables 3-6 and 3-7 to facilitate comparison of the estimates from the Chinook Model and CWT analysis. The agreement specifies that the indices for postseason assessment be assessed using the CWTbased estimates; 2009 is the most recent analysis available. CWT-based indices for 1999-2009 and model-based indices for 1999-2011 are presented in Appendix B.

Table 3-6. Canadian 2009 ISBM indices based on 2009 and 2011 PSC Chinook Model, 2011 CWT analysis and the 2011 indices predicted from the 2011 PSC Chinook Model.

|  |  | Canadian ISBM Indices |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | 2009 Model <br> (clb0907) <br> Indices <br> for 2009 | 2011 Model <br> (clb1106) <br> Indices <br> for 2009 | CWT <br> Indices for $2009$ | 2011 Model <br> (clb1106) <br> Indices <br> for 2011 |
| Lower Strait of Georgia | Cowichan Nanaimo | $0.495{ }^{10}$ | $0.468{ }^{6}$ | $\begin{gathered} 0.400^{4} \\ \text { NA }^{1,5} \end{gathered}$ | $0.367{ }^{6}$ |
| Fraser Late | Harrison River ${ }^{2}$ | 0.245 | 0.211 | $0.058{ }^{7}$ | 0.193 |
| North Puget Sound Natural Springs | Nooksack <br> Skagit | $\begin{aligned} & 0.988 \\ & 0.988 \end{aligned}$ | $\begin{array}{r} 0.15 \\ 0.150 \end{array}$ | $\begin{gathered} 0.106 \\ \text { NA } \end{gathered}$ | $\begin{aligned} & 0.732 \\ & 0.731 \end{aligned}$ |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.128 | 0.187 | 0.247 | 0.578 |
| Fraser Early (spring and summers) | Upper Fraser, Mid <br> Fraser, Thompson | 0.094 | 0.115 | NA | 0.222 |
| West Coast Vancouver Island Falls | WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble) | 0.137 | 0.52 | $0.464{ }^{8}$ | 0.491 |
| Puget Sound Natural Summer / Falls | $\begin{aligned} & \text { Skagit } \\ & \text { Stillaguamish } \\ & \text { Snohomish } \\ & \text { Lake Washington } \\ & \text { Green River } \\ & \hline \end{aligned}$ | $\begin{gathered} 1.097 \\ 1.123 \\ 1.098 \\ 0.918^{9} \\ 0.919^{9} \end{gathered}$ | $\begin{aligned} & 0.177 \\ & 0.315 \\ & 0.711 \\ & 0.217 \\ & 0.217 \end{aligned}$ | $\begin{gathered} \text { NA } \\ 0.252 \\ \text { NA } \\ \text { NA } \\ 0.208 \end{gathered}$ | $\begin{gathered} 0.745 \\ 0.793 \\ 0.744 \\ 0.752^{9} \\ 0.756^{9} \end{gathered}$ |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | 0.224 | 0.152 | NA | 0.598 |
| Washington Coastal Fall Naturals ${ }^{3}$ | Hoko, Grays Harbor, Queets ${ }^{2}$, Hoh ${ }^{2}$, Quillayute ${ }^{2}$ | 0.328 | 0.15 | NA | 0.332 |
| Columbia River Falls ${ }^{3}$ | Upriver Brights ${ }^{2}$ <br> Deschutes <br> Lewis ${ }^{2}$ | $\begin{aligned} & \hline 0.517 \\ & 0.517 \\ & 0.832 \end{aligned}$ | $\begin{aligned} & \hline 0.107 \\ & 0.108 \\ & 0.044 \end{aligned}$ | NA <br> NA <br> NA | $\begin{aligned} & \hline 0.620 \\ & 0.620 \\ & 0.994 \end{aligned}$ |
| Columbia R Summers ${ }^{3}$ | Mid-Columbia Summers 2 | 0.285 | 0.102 | NA | 0.359 |
| Far North Migrating OR Coastal Falls ${ }^{3}$ | $\begin{aligned} & \text { Nehalem }^{2} \text {, Siletz }{ }^{2} \text {, } \\ & \text { Siuslaw }^{2} \end{aligned}$ | 0.543 | 0.047 | NA | 0.529 |

${ }^{1}$ 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 group listed in Annex 4, Chapter 3, Attachment V.
${ }^{4}$ 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 salmon.
${ }^{5}$ Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook salmon. 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 salmon, the indicator stock, were removed from the calculation for the Harrison River naturals because sport harvest has been essentially zero on the natural population.
${ }^{8}$ 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. A more extended review of the indices for WCVI Chinook salmon will be carried out to determine whether they adequately represent impacts on the WCVI wild aggregate.
${ }^{9}$ For Canadian ISBM fisheries, Lake Washington and Green the same distribution and index value are assumed.

Table 3-7. U.S. 2009 ISBM indices based on 2009 and 2011 PSC Chinook Model, 2011 CWT analysis and the 2011 indices predicted from the 2011 PSC Chinook Model.

|  |  | U.S. ISBM Indices |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock Group | Escapement Indicator Stock | 2009 Model (clb0907) Indices for 2009 | $\begin{gathered} \hline 2011 \\ \text { Model } \\ \text { (clb1106) } \\ \text { Indices } \\ \text { for } 2009 \end{gathered}$ | CWT <br> Indices <br> for 2009 | $\begin{gathered} \hline 2011 \\ \text { Model } \\ \text { (clb1106) } \\ \text { Indices } \\ \text { for } 2011 \end{gathered}$ |
| Washington Coastal Fall Naturals | Hoko | 0.284 | 0.330 | NA ${ }^{1}$ | 0.419 |
|  | Grays Harbor | 0.404 | 0.651 | 0.7 | 0.549 |
|  | Queets ${ }^{4}$ | 0.508 | 0.314 | 0.45 | 0.327 |
|  | Hoh ${ }^{4}$ | 0.981 | 1.014 | 1.22 | 0.760 |
|  | Quillayute ${ }^{4}$ | 0.881 | 1.615 | 1.97 | 1.058 |
| Columbia River Falls | Upriver Brights ${ }^{4}$ | 0.798 | 1.008 | 2.79 | 0.841 |
|  | Deschutes ${ }^{4}$ | 0.461 | 1.974 | 2.36 | 1.044 |
|  | Lewis ${ }^{4}$ | 0.47 | 0.523 | 0.14 | 0.426 |
| Puget Sound Natural Summer / Falls | Skagit | 0.292 | 0.216 | NA | 0.789 |
|  | Stillaguamish | 0.446 | 0.049 | 0.2 | 0.169 |
|  | Snohomish | 0.202 | 0.112 | NA | 0.211 |
|  | Lake Washington | 0.768 | 0.202 | NA | 0.387 |
|  | Green R | 0.555 | 0.334 | 0.29 | 0.236 |
| Fraser Late | Harrison River ${ }^{4}$ | 0.41 | 0.315 | $0.15{ }^{5}$ | 0.497 |
| Columbia R Summers | Mid-Columbia Summers ${ }^{4}$ | 1.236 | 1.567 | 1.310 | 1.398 |
| Far North Migrating OR Coastal Falls | Nehalem ${ }^{4}$ | 2.003 | 0.089 | 0.59 | 2.146 |
|  | Siletz ${ }^{4}$ | 1.217 | 0.548 | 0.73 | 0.643 |
|  | Siuslaw ${ }^{4}$ | 1.632 | 0.934 | 1.07 | 1.427 |
| North Puget Sound Natural Springs | Nooksack | 0.107 | 0.076 | 0.52 | 0.484 |
|  | Skagit | 0.143 | 0.195 | NA | 0.271 |
| Lower Strait of Georgia ${ }^{3}$ | Cowichan, | 0.367 | 0.339 | 5.14 | 0.367 |
|  | Nanaimo | 0. 367 | NA | NA | NA |
| Upper Strait of Georgia ${ }^{3}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NC ${ }^{2}$ | NC ${ }^{2}$ | NC ${ }^{2}$ | NC ${ }^{2}$ |
| Fraser Early (spring and summers) ${ }^{3}$ | Upper Fraser, Mid Fraser, Thompson | 0.156 | 0.053 | NA | 0.239 |
| West Coast Vancouver Island Falls ${ }^{3}$ | WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble) | 0.146 | 0.359 | NA | 0.378 |
| North / Central B. C. ${ }^{3}$ | Yakoun, Nass, Skeena, Area 8 | NC ${ }^{2}$ | NC ${ }^{2}$ | NC ${ }^{2}$ | NC ${ }^{2}$ |

${ }^{1}$ Not available (NA) because of insufficient data (lack of stock specific tag codes, base period CWT recoveries, etc).
${ }^{2}$ NC means that the current model assumes the stock is not caught in U.S. ISBM fisheries.
${ }^{3}$ Stock group listed in Annex 4, Chapter 3, Attachment IV.
${ }^{4}$ Stock with a CTC agreed escapement goal.
${ }^{5}$ 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.

### 3.5.1 CWT-based Indices in 2009

Figure 3-10 and Figure 3-11 show the historical ISBM indices based on CWT recoveries from 1999 to 2009. The ISBM fishery restrictions do not apply to stocks meeting the escapement goals, however should the escapement goal not be met, the general obligation needs to be achieved.
Canadian ISBM indices for 2009, estimated from the CWT data were reduced more than required under the agreement for the five indices that could be calculated.
We identified several inconsistencies in the way these indices had been computed in the past, as noted above (Table 3-6, footnotes 4-9). Most inconsistencies were between model versus CWT exploitation rate based methods of calculating ISBM indices. In the case of Lower Georgia Strait, Nanaimo was dropped from the CWT-based index because of concern about the method of estimating the terminal fishery rates. 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 3-10. CWT-based ISBM indices for Canadian fisheries for 1999-2009.
Seven of the 16 U.S. ISBM indices for the CWT-based estimates for 2009 were reduced more than required. The other nine U.S. CWT-based ISBM indices exceeded 0.60 . All of these stocks (except for Siletz) met or exceeded their respective escapement goals, and thus are exempted from the general obligation.


Figure 3-11. CWT-based ISBM indices for U.S. fisheries for 1999-2009.

### 3.5.2 Predicted ISBM Indices for 2011

Eight of the 19 ISBM indices for Canada are predicted to exceed the allowable value of 0.635 for Canadian ISBM fisheries in 2011 based on outputs from calibration 1106 (Table 3-6). Seven of these eight stocks are Puget Sound Natural Summer/Fall stocks, and do not have CTC-accepted management objectives, and the other stock, the Lewis River, exceeded its CTC escapement goal in 2010.

Nine of the 23 U.S. ISBM indices are predicted to be above the allowable limit of 0.60 for U.S. ISBM fisheries in 2011 based on calibration 1106 (Table 5). All but Skagit (which has exploitation rate objectives) have CTC agreed escapement goals: Hoh, Quillayute, Upriver Brights, Deschutes, Mid-Columbia Summers, Nehalem, Siletz, and Siuslaw. Of the stocks with goals, all but Nehalem were above their goals in 2010.

### 3.6 General Forecast Methods

For those stocks with externally provided forecasts of abundance in 2011, 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 CY and the comparable abundance of age a+1 fish in year CY+1 are used to predict abundance in 2011 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 2011 (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 1999-2011 is shown in Table 3-8. The relationship between the model indicator stocks 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 salmon abundance in AABM fisheries is how well the model can predict the returns of Chinook salmon (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 agency forecasts used as inputs to the model, and the ability of the agency forecasts to accurately predict the actual return of Chinook salmon 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 $1.4 \%$. For all agency forecasts, the MAPE is $36.5 \%$ and the average percent error is $-7.8 \%$ with respect to the postseason estimate. For model forecasts, the MAPE is $36.9 \%$ with respect to the postseason estimate, whereas, the average percent error is $-8.8 \%$.

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 <br> Return | Model Fcst/ Agency Fcst | Agency Fcst/ Postseason | Model Fcst/ <br> 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 | n/a | 21,850 | n/a | n/a | 101\% |
|  | 2002 | 15,650 | n/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 | n/a | 16,102 | n/a | n/a | 157\% |
|  | 2006 | 17,988 | n/a | 20,866 | n/a | n/a | 86\% |
|  | 2007 | 25,653 | n/a | 15,095 | n/a | n/a | 170\% |
|  | 2008 | 14,626 | n/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 | 16,194 | n/a | n/a | 102\% |
|  | 2011 | 17,946 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | n/a | n/a | 114\% |
| $\mathrm{NTH}^{2}$ | 1999 | 149,593 | n/a | 154,294 | n/a | n/a | 97\% |
| (North/ | 2000 | 159,818 | n/a | 188,482 | n/a | n/a | 85\% |
| Central BC) | 2001 | 189,088 | n/a | 214,541 | n/a | n/a | 88\% |
|  | 2002 | 228,073 | n/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 | n/a | 108\% |
|  | 2005 | 154,552 | n/a | 139,303 | n/a | n/a | 111\% |
|  | 2006 | 133,627 | n/a | 159,959 | n/a | n/a | 84\% |
|  | 2007 | 156,017 | n/a | 126,159 | n/a | n/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 | 113,361 | n/a | n/a | 121\% |
|  | 2011 | 115,399 |  |  | n/a |  |  |
|  | AVG. |  |  |  | $\mathrm{n} / \mathrm{a}$ | n/a | 106\% |
| RBH+RBT ${ }^{2}$ | 1999 | 78,074 | 68,400 | 101,683 | 114\% | 67\% | 77\% |
| (WCVI | 2000 | 21,040 | 15,040 | 37,047 | 140\% | 41\% | 57\% |
| Hatchery + | 2001 | 33,702 | 30,633 | 87,004 | 110\% | 35\% | 39\% |
| Natural) | 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\% | 60\% | 67\% |
|  | 2009 | 63,200 | 58,382 | 88,429 | 108\% | 66\% | 71\% |
|  | 2010 | 75,748 | 61,586 | 92,534 | 123\% | 67\% | 82\% |
|  | 2011 | 86,660 | 74,708 |  | 116\% |  |  |
|  | AVG. |  |  |  | 116\% | 68\% | 79\% |

Table 3-8. Continued.

| Stock | Year | Model <br> Forecast | Agency <br> Forecast | Postseason <br> Return | Model Fcst/ <br> Agency Fcst | Agency Fcst/ Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l} \mathrm{GSQ}^{1} \\ \text { (Upper Strait } \\ \text { of Georgia) } \end{array}$ | 1999 | 16,472 | n/a | 16,140 | n/a | n/a | 102\% |
|  | 2000 | 19,452 | n/a | 22,603 | n/a | n/a | 86\% |
|  | 2001 | 25,828 | n/a | 30,219 | n/a | n/a | 85\% |
|  | 2002 | 41,492 | n/a | 30,675 | n/a | n/a | 135\% |
|  | 2003 | 36,882 | n/a | 31,059 | n/a | n/a | 119\% |
|  | 2004 | 39,766 | n/a | 25,061 | n/a | n/a | 159\% |
|  | 2005 | 38,798 | n/a | 25,309 | n/a | n/a | 153\% |
|  | 2006 | 39,577 | n/a | 29,663 | n/a | n/a | 133\% |
|  | 2007 | 41,711 | n/a | 23,790 | n/a | n/a | 175\% |
|  | 2008 | 30,065 | n/a | 17,274 | n/a | n/a | 174\% |
|  | 2009 | 26,131 | n/a | 19,923 | n/a | n/a | 131\% |
|  | 2010 | 26,624 | n/a | 18,523 | n/a | n/a | 144\% |
|  | 2011 | 14,585 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | n/a | n/a | 133\% |
| GSH $^{2}$ <br> (Lower Strait <br> of Georgia <br> Hatchery) | 1999 | 23,648 | n/a | 25,258 | n/a | n/a | 94\% |
|  | 2000 | 19,165 | n/a | 23,422 | n/a | n/a | 82\% |
|  | 2001 | 17,547 | n/a | 34,775 | n/a | n/a | 50\% |
|  | 2002 | 25,051 | n/a | 23,557 | n/a | n/a | 106\% |
|  | 2003 | 22,409 | n/a | 24,084 | n/a | n/a | 93\% |
|  | 2004 | 16,573 | n/a | 22,269 | n/a | n/a | 74\% |
|  | 2005 | 21,046 | n/a | 28,226 | n/a | n/a | 75\% |
|  | 2006 | 22,937 | n/a | 22,756 | n/a | n/a | 101\% |
|  | 2007 | 24,378 | n/a | 13,155 | n/a | n/a | 185\% |
|  | 2008 | 11,765 | n/a | 13,410 | n/a | n/a | 88\% |
|  | 2009 | 7,371 | n/a | 14,398 | n/a | n/a | 51\% |
|  | 2010 | 7,999 | n/a | 14,360 | n/a | n/a | 56\% |
|  | 2011 | 9,159 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | n/a | n/a | 88\% |
| $\begin{array}{\|l\|} \hline \text { GST }^{1} \\ \text { (Lower Strait } \\ \text { of Georgia Natural) } \end{array}$ | 1999 | 14,737 | n/a | 8,715 | n/a | $\mathrm{n} / \mathrm{a}$ | 169\% |
|  | 2000 | 11,094 | n/a | 8,223 | n/a | n/a | 135\% |
|  | 2001 | 7,955 | n/a | 8,569 | n/a | n/a | 93\% |
|  | 2002 | 8,833 | n/a | 7,812 | n/a | n/a | 113\% |
|  | 2003 | 8,088 | n/a | 5,903 | n/a | n/a | 137\% |
|  | 2004 | 5,157 | n/a | 3,642 | n/a | n/a | 142\% |
|  | 2005 | 4,459 | n/a | 4,870 | n/a | n/a | 92\% |
|  | 2006 | 4,945 | n/a | 4,880 | n/a | n/a | 101\% |
|  | 2007 | 7,782 | n/a | 4,778 | n/a | n/a | 163\% |
|  | 2008 | 6,823 | n/a | 4,926 | n/a | n/a | 139\% |
|  | 2009 | 5,691 | n/a | 2,966 | n/a | n/a | 192\% |
|  | 2010 | 2,972 | n/a | 5,676 | n/a | n/a | 52\% |
|  | 2011 | 6,222 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | n/a | n/a | 127\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{FRE}^{2}$ | 1999 | 163,342 | n/a | 105,473 | n/a | n/a | 155\% |
| (Fraser Early) | 2000 | 118,058 | n/a | 116,233 | n/a | n/a | 102\% |
|  | 2001 | 122,333 | n/a | 154,175 | n/a | n/a | 79\% |
|  | 2002 | 170,232 | n/a | 186,827 | n/a | n/a | 91\% |
|  | 2003 | 175,919 | n/a | 188,183 | n/a | n/a | 93\% |
|  | 2004 | 185,450 | n/a | 141,029 | n/a | n/a | 131\% |
|  | 2005 | 151,591 | n/a | 134,641 | n/a | n/a | 113\% |
|  | 2006 | 186,279 | n/a | 203,212 | n/a | n/a | 92\% |
|  | 2007 | 196,060 | n/a | 110,884 | n/a | n/a | 177\% |
|  | 2008 | 128,347 | n/a | 148,284 | n/a | n/a | 87\% |
|  | 2009 | 129,707 | n/a | 134,307 | n/a | n/a | 97\% |
|  | 2010 | 144,214 | n/a | 171,819 | n/a | n/a | 84\% |
|  | 2011 | 148,766 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | n/a | n/a | 108\% |
| FRL ${ }^{1}$ | 1999 | 144,316 | 82,650 | 184,099 | 175\% | 45\% | 78\% |
| (Fraser Late) | 2000 | 187,970 | 222,400 | 120,744 | 85\% | 184\% | 156\% |
|  | 2001 | 141,745 | 131,800 | 141,196 | 108\% | 93\% | 100\% |
|  | 2002 | 132,946 | 160,100 | 165,245 | 83\% | 97\% | 80\% |
|  | 2003 | 127,144 | 114,780 | 313,929 | 111\% | 37\% | 41\% |
|  | 2004 | 104,597 | 97,227 | 196,396 | 108\% | 50\% | 53\% |
|  | 2005 | 121,315 | 108,061 | 124,704 | 112\% | 87\% | 97\% |
|  | 2006 | 116,263 | 116,682 | 108,639 | 100\% | 107\% | 107\% |
|  | 2007 | 122,402 | 107,311 | 105,385 | 114\% | 102\% | 116\% |
|  | 2008 | 125,100 | 116,038 | 88,012 | 108\% | 132\% | 142\% |
|  | 2009 | 119,886 | 91,391 | 87,365 | 131\% | 105\% | 137\% |
|  | 2010 | 119,953 | 118,891 | 201,334 | 101\% | 59\% | 60\% |
|  | 2011 | 179,875 | 284,604 |  | 63\% |  |  |
|  | AVG. |  |  |  | 108\% | 91\% | 97\% |
| NKS ${ }^{1}$ | 1999 | 1068 | n/a | 251 | n/a | n/a | 425\% |
| (Nooksack | 2000 | 834 | n/a | 444 | n/a | n/a | 188\% |
| Spring) | 2001 | 982 | n/a | 531 | n/a | n/a | 185\% |
|  | 2002 | 1216 | n/a | 513 | n/a | n/a | 237\% |
|  | 2003 | 1301 | n/a | 414 | n/a | n/a | 314\% |
|  | 2004 | 1708 | n/a | 448 | n/a | n/a | 381\% |
|  | 2005 | 1549 | n/a | 330 | n/a | n/a | 469\% |
|  | 2006 | 485 | 677 | 630 | 72\% | 107\% | 77\% |
|  | 2007 | 582 | 575 | 334 | 101\% | 172\% | 174\% |
|  | 2008 | 371 | 378 | 351 | 98\% | 108\% | 106\% |
|  | 2009 | 336 | 315 | 291 | 107\% | 108\% | 115\% |
|  | 2010 | 374 | 390 | 228 | 96\% | 171\% | 164\% |
|  | 2011 | 259 | 309 |  | 84\% |  |  |
|  | AVG. |  |  |  | 92\% | 133\% | 236\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ <br> Agency Fcst | Agency Fcst/ Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{NKF}^{2}$ | 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 | n/a | 98\% | n/a | n/a |
|  | 2011 | 30,839 | 37,902 |  | 81\% |  |  |
|  | AVG. |  |  |  | 102\% | 100\% | 103\% |
| $\mathrm{SNO}^{2}$ | 1999 | 5,823 | 5,600 | 4,832 | 104\% | 116\% | 121\% |
| (Snohomish | 2000 | 5,997 | 6,000 | 6,116 | 100\% | 98\% | 98\% |
| Wild) | 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 | 4,691 | 82\% | 210\% | 171\% |
|  | 2011 | 7,437 | 7,600 |  | 98\% |  |  |
|  | AVG. |  |  |  | 96\% | 155\% | 150\% |
| SKG ${ }^{2}$ | 1999 | 9,107 | 7,600 | 5,139 | 120\% | 148\% | 177\% |
| (Skagit | 2000 | 6,988 | 7,300 | 16,266 | 96\% | 45\% | 43\% |
| Summer/ | 2001 | 9,064 | 9,184 | 14,193 | 99\% | 65\% | 64\% |
| Fall Wild) | 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 | 9,060 | 83\% | 131\% | 109\% |
|  | 2011 | 11,210 | 13,044 |  | 86\% |  |  |
|  | AVG. |  |  |  | 97\% | 106\% | 104\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{PSN}^{2}$ | 1999 | 28,800 | 28,400 | 22,974 | 101\% | 124\% | 125\% |
| (Puget Sound | 2000 | 15,364 | 10,000 | 20,701 | 154\% | 48\% | 74\% |
| Natural) | 2001 | 19,938 | 18,900 | 38,387 | 105\% | 49\% | 52\% |
|  | 2002 | 20,008 | 19,801 | 30,166 | 101\% | 66\% | 66\% |
|  | 2003 | 25,743 | 26,600 | 19,445 | 97\% | 137\% | 132\% |
|  | 2004 | 24,616 | 23,200 | 34,052 | 106\% | 68\% | 72\% |
|  | 2005 | 22,208 | 17,715 | 13,659 | 125\% | 130\% | 163\% |
|  | 2006 | 20,207 | 21,301 | 26,048 | 95\% | 82\% | 78\% |
|  | 2007 | 18,964 | 17,014 | 22,788 | 111\% | 75\% | 83\% |
|  | 2008 | 23,118 | 21,100 | 23,182 | 110\% | 91\% | 100\% |
|  | 2009 | 20,287 | 23,073 | 8,305 | 88\% | 278\% | 244\% |
|  | 2010 | 14,734 | 15,128 | n/a | 97\% | n/a | n/a |
|  | 2011 | 14,314 | 15,997 |  | 89\% |  |  |
|  | AVG. |  |  |  | 107\% | 104\% | 108\% |
| STL ${ }^{1}$ | 1999 | 1,332 | n/a | 1,098 | n/a | n/a | 121\% |
| (Stillaguamish | 2000 | 1,370 | 1,500 | 1,645 | 91\% | 91\% | 83\% |
| Summer/Fall | 2001 | 1,328 | 1,360 | 1,386 | 98\% | 98\% | 96\% |
| Wild) | 2002 | 1,372 | 1,449 | 1,588 | 95\% | 91\% | 86\% |
|  | 2003 | 1,860 | 2,050 | 988 | 91\% | 207\% | 188\% |
|  | 2004 | 1,795 | n/a | 1,506 | n/a | n/a | 119\% |
|  | 2005 | 1,377 | n/a | 990 | n/a | n/a | 139\% |
|  | 2006 | 1,116 | 1,169 | 1,273 | 95\% | 92\% | 88\% |
|  | 2007 | 1,424 | 1,510 | 785 | 94\% | 192\% | 181\% |
|  | 2008 | 689 | 637 | 1,800 | 108\% | 35\% | 38\% |
|  | 2009 | 1,268 | 1,086 | 1,001 | 117\% | 108\% | 127\% |
|  | 2010 | 898 | 817 | 785 | 110\% | 104\% | 114\% |
|  | 2011 | 718 | 783 |  | 92\% |  |  |
|  | AVG. |  |  |  | 98\% | 113\% | 115\% |
| PSF+PSY ${ }^{2}$ | 1999 | 66,876 | 69,285 | 134,603 | 97\% | 51\% | 50\% |
| (Puget Sound | 2000 | 67,306 | 69,800 | 99,451 | 96\% | 70\% | 68\% |
| Fingerling + | 2001 | 102,899 | 105,955 | 131,547 | 97\% | 81\% | 78\% |
| Yearling) | 2002 | 114,889 | 124,608 | 143,642 | 92\% | 87\% | 80\% |
|  | 2003 | 114,275 | 133,850 | 132,282 | 85\% | 101\% | 86\% |
|  | 2004 | 127,902 | 132,300 | 128,510 | 97\% | 103\% | 100\% |
|  | 2005 | 104,084 | 110,542 | 158,824 | 94\% | 70\% | 66\% |
|  | 2006 | 107,452 | 113,486 | 174,554 | 95\% | 65\% | 62\% |
|  | 2007 | 127,115 | 135,714 | 192,591 | 94\% | 70\% | 66\% |
|  | 2008 | 166,071 | 159,200 | 137,921 | 104\% | 115\% | 120\% |
|  | 2009 | 110,373 | 133,187 | 112,827 | 83\% | 118\% | 98\% |
|  | 2010 | 138,238 | 140,074 | n/a | 99\% | n/a | n/a |
|  | 2011 | 131,361 | 168,642 |  | 78\% |  |  |
|  | AVG. |  |  |  | 93\% | 85\% | 79\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WCN ${ }^{2}$ | 1999 | 42,129 | 43,780 | 25,065 | 96\% | 175\% | 168\% |
| (Washington | 2000 | 34,741 | n/a | 27,528 | n/a | n/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 | n/a | 60,101 | n/a | n/a | 47\% |
|  | 2005 | 34,857 | n/a | 44,319 | n/a | n/a | 79\% |
|  | 2006 | 45,084 | n/a | 38,761 | n/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 | 31,783 | n/a | n/a | 123\% |
|  | 2011 | 28,079 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | 103\% | 109\% | 103\% |
| $\mathrm{WCH}^{2}$ | 1999 | 35,239 | 42,752 | 14,664 | 82\% | 292\% | 240\% |
| (Washington | 2000 | 16,244 | n/a | 22,545 | n/a | n/a | 72\% |
| Coastal | 2001 | 15,792 | n/a | 23,156 | n/a | n/a | 68\% |
| Hatchery) | 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 | n/a | n/a | 72\% |
|  | 2005 | 28,626 | n/a | 42,656 | n/a | n/a | 67\% |
|  | 2006 | 37,879 | n/a | 52,403 | n/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 | 35,638 | n/a | n/a | 108\% |
|  | 2011 | 33,728 | n/a |  | n/a |  |  |
|  | AVG. |  |  |  | 99\% | 146\% | 101\% |
| CWS ${ }^{2}$ | 1999 | 3,363 | 3,950 | 4,799 | 85\% | 82\% | 70\% |
| (Cowlitz | 2000 | 4,922 | 6,050 | 6,132 | 81\% | 99\% | 80\% |
| Spring) | 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 | 12,410 | 98\% | 156\% | 153\% |
|  | 2011 | 8,427 | 10,602 |  | 79\% |  |  |
|  | AVG. |  |  |  | 77\% | 106\% | 79\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ <br> Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{WSH}^{2}$ | 1999 | 46,187 | 49,875 | 56,159 | 93\% | 89\% | 82\% |
| (Willamette | 2000 | 57,202 | 61,211 | 59,563 | 93\% | 103\% | 96\% |
| Spring) | 2001 | 59,207 | 59,600 | 83,831 | 99\% | 71\% | 71\% |
|  | 2002 | 73,151 | 77,434 | 126,600 | 94\% | 61\% | 58\% |
|  | 2003 | 108,530 | 112,521 | 128,971 | 96\% | 87\% | 84\% |
|  | 2004 | 113,708 | 112,701 | 152,920 | 101\% | 74\% | 74\% |
|  | 2005 | 105,111 | 122,280 | 67,137 | 86\% | 182\% | 157\% |
|  | 2006 | 48,879 | 52,388 | 63,693 | 93\% | 82\% | 77\% |
|  | 2007 | 44,542 | 61,071 | 42,776 | 73\% | 143\% | 104\% |
|  | 2008 | 20,185 | 40,851 | 31,917 | 49\% | 128\% | 63\% |
|  | 2009 | 41,793 | 41,205 | 38,110 | 101\% | 108\% | 110\% |
|  | 2010 | 70,960 | 66,360 | 119,114 | 107\% | 56\% | 60\% |
|  | 2011 | 113,667 | 109,600 |  | 104\% |  |  |
|  | AVG. |  |  |  | 90\% | 99\% | 86\% |
| $\mathrm{SUM}^{2}$ | 1999 | 21,651 | 20,900 | 22,347 | 104\% | 94\% | 97\% |
| (Columbia | 2000 | 27,214 | 28,038 | 23,169 | 97\% | 121\% | 117\% |
| River Summer) | 2001 | 27,029 | 24,500 | 54,935 | 110\% | 45\% | 49\% |
|  | 2002 | 70,290 | 77,700 | 92,820 | 90\% | 84\% | 76\% |
|  | 2003 | 97,280 | 87,600 | 83,120 | 111\% | 105\% | 117\% |
|  | 2004 | 83,246 | 78,589 | 65,446 | 106\% | 120\% | 127\% |
|  | 2005 | 66,190 | 62,400 | 60,060 | 106\% | 104\% | 110\% |
|  | 2006 | 75,893 | 78,512 | 78,196 | 97\% | 100\% | 97\% |
|  | 2007 | 56,948 | 45,555 | 37,200 | 125\% | 122\% | 153\% |
|  | 2008 | 50,171 | 52,000 | 55,500 | 96\% | 94\% | 90\% |
|  | 2009 | 59,367 | 70,700 | 53,878 | 84\% | 131\% | 110\% |
|  | 2010 | 81,403 | 88,800 | 72,364 | 92\% | 123\% | 112\% |
|  | 2011 | 80,607 | 91,900 |  | 88\% |  |  |
|  | AVG. |  |  |  | 101\% | 104\% | 105\% |
| $\overline{\mathrm{BON}+\mathrm{CWF}^{2}}$ | 1999 | 26,651 | 34,800 | 39,881 | 77\% | 87\% | 67\% |
| (Bonneville + | 2000 | 17,095 | 23,700 | 26,971 | 72\% | 88\% | 63\% |
| Cowlitz | 2001 | 28,732 | 32,200 | 94,240 | 89\% | 34\% | 30\% |
| Hatcheries) | 2002 | 100,401 | 137,600 | 156,411 | 73\% | 88\% | 64\% |
|  | 2003 | 100,196 | 115,900 | 154,960 | 86\% | 75\% | 65\% |
|  | 2004 | 64,696 | 77,100 | 108,308 | 84\% | 71\% | 60\% |
|  | 2005 | 65,971 | 74,100 | 73,861 | 89\% | 100\% | 89\% |
|  | 2006 | 49,302 | 55,800 | 58,317 | 88\% | 96\% | 85\% |
|  | 2007 | 49,219 | 54,900 | 32,689 | 90\% | 168\% | 151\% |
|  | 2008 | 58,557 | 59,000 | 60,268 | 99\% | 98\% | 97\% |
|  | 2009 | 66,704 | 88,800 | 76,738 | 75\% | 116\% | 87\% |
|  | 2010 | 95,581 | 90,600 | 103,055 | 105\% | 88\% | 93\% |
|  | 2011 | 104,985 | 133,430 |  | 79\% |  |  |
|  | AVG. |  |  |  | 83\% | 92\% | 79\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason Return | Model Fcst/ Agency Fcst | Agency Fcst/ Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{SPR}^{2}$ | 1999 | 62,831 | 65,800 | 50,189 | 95\% | 131\% | 125\% |
| (Spring Creek | 2000 | 17,335 | 21,900 | 20,528 | 79\% | 107\% | 84\% |
| Hatchery) | 2001 | 56,089 | 56,600 | 124,954 | 99\% | 45\% | 45\% |
|  | 2002 | 153,070 | 144,400 | 160,836 | 106\% | 90\% | 95\% |
|  | 2003 | 89,116 | 96,900 | 180,592 | 92\% | 54\% | 49\% |
|  | 2004 | 124,820 | 138,000 | 175,245 | 90\% | 79\% | 71\% |
|  | 2005 | 92,021 | 114,100 | 93,145 | 81\% | 122\% | 99\% |
|  | 2006 | 43,624 | 50,000 | 27,918 | 87\% | 179\% | 156\% |
|  | 2007 | 19,421 | 21,800 | 14,583 | 89\% | 149\% | 133\% |
|  | 2008 | 87,109 | 87,200 | 79,433 | 100\% | 110\% | 110\% |
|  | 2009 | 32,585 | 59,300 | 48,970 | 55\% | 121\% | 67\% |
|  | 2010 | 167,251 | 169,000 | 130,768 | 99\% | 129\% | 128\% |
|  | 2011 | 70,478 | 116,400 |  | 61\% |  |  |
|  | AVG. |  |  |  | 86\% | 110\% | 97\% |
| URB ${ }^{2}$ | 1999 | 173,866 | 147,500 | 165,889 | 118\% | 89\% | 105\% |
| (Columbia | 2000 | 212,317 | 171,100 | 156,553 | 124\% | 109\% | 136\% |
| Upriver | 2001 | 150,973 | 127,200 | 232,491 | 119\% | 55\% | 65\% |
| Bright) | 2002 | 249,721 | 281,000 | 276,948 | 89\% | 101\% | 90\% |
|  | 2003 | 246,890 | 280,400 | 373,191 | 88\% | 75\% | 66\% |
|  | 2004 | 246,943 | 292,200 | 362,804 | 85\% | 81\% | 68\% |
|  | 2005 | 318,535 | 352,200 | 278,339 | 90\% | 127\% | 114\% |
|  | 2006 | 231,646 | 253,900 | 230,390 | 91\% | 110\% | 101\% |
|  | 2007 | 168,594 | 182,400 | 114,064 | 92\% | 160\% | 148\% |
|  | 2008 | 151,839 | 162,500 | 196,881 | 93\% | 83\% | 77\% |
|  | 2009 | 226,413 | 259,900 | 212,047 | 87\% | 123\% | 107\% |
|  | 2010 | 296,816 | 310,800 | 324,908 | 96\% | 96\% | 91\% |
|  | 2011 | 345,631 | 398,200 |  | 87\% |  |  |
|  | AVG. |  |  |  | 97\% | 101\% | 97\% |
| $\mathrm{LYF}^{1}$ | 1999 | 542 | n/a | 905 | n/a | n/a | 60\% |
| (Snake River | 2000 | 1,243 | n/a | 1,148 | n/a | n/a | 108\% |
| Wild) | 2001 | 733 | 734 | 5,163 | 100\% | 14\% | 14\% |
|  | 2002 | 2,066 | n/a | 2,116 | n/a | n/a | 98\% |
|  | 2003 | 2,493 | 2,185 | 3,856 | 114\% | 57\% | 65\% |
|  | 2004 | 4,323 | 3,725 | 2,983 | 116\% | 125\% | 145\% |
|  | 2005 | 4,453 | 4,000 | 2,602 | 111\% | 154\% | 171\% |
|  | 2006 | 8,310 | 3,500 | 2,483 | 237\% | 141\% | 335\% |
|  | 2007 | 3,128 | 2,700 | 2,016 | 116\% | 134\% | 155\% |
|  | 2008 | 2,718 | 2,534 | 2,222 | 107\% | 114\% | 122\% |
|  | 2009 | 5,742 | 6,952 | 1,430 | 83\% | 486\% | 402\% |
|  | 2010 | 2,609 | 2,610 | 9,583 | 100\% | 27\% | 27\% |
|  | 2011 | 7,591 | 8,006 |  | 95\% |  |  |
|  | AVG. |  |  |  | 120\% | 139\% | 142\% |

Table 3-8. Continued.

| Stock | Year | Model Forecast | Agency Forecast | Postseason <br> Return | Model Fcst/ <br> Agency <br> Fcst | Agency Fcst <br> Postseason | Model Fcst/ <br> Postseason |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{MCB}^{2}$ | 1999 | 37,997 | 38,300 | 50,800 | 99\% | 75\% | 75\% |
| (Mid-Columbia | 2000 | 53,460 | 50,600 | 37,200 | 106\% | 136\% | 144\% |
| Bright) | 2001 | 45,055 | 43,500 | 76,600 | 104\% | 57\% | 59\% |
|  | 2002 | 102,085 | 96,200 | 108,400 | 106\% | 89\% | 94\% |
|  | 2003 | 126,698 | 104,800 | 150,300 | 121\% | 70\% | 84\% |
|  | 2004 | 94,895 | 90,400 | 122,600 | 105\% | 74\% | 77\% |
|  | 2005 | 93,837 | 89,400 | 97,900 | 105\% | 91\% | 96\% |
|  | 2006 | 90,881 | 88,300 | 80,471 | 103\% | 110\% | 113\% |
|  | 2007 | 77,470 | 68,000 | 47,106 | 114\% | 144\% | 164\% |
|  | 2008 | 59,481 | 45,000 | 75,489 | 132\% | 60\% | 79\% |
|  | 2009 | 87,172 | 94,400 | 73,069 | 92\% | 129\% | 119\% |
|  | 2010 | 82,454 | 72,600 | 78,937 | 114\% | 92\% | 104\% |
|  | 2011 | 98,442 | 100,000 |  | 98\% |  |  |
|  | AVG. |  |  |  | 108\% | 94\% | 101\% |
| $\mathrm{LRW}^{2}$ | 1999 | 3,072 | 2,600 | 3,349 | 118\% | 78\% | 92\% |
| (Lewis River | 2000 | 4,053 | 3,500 | 10,234 | 116\% | 34\% | 40\% |
| Wild) | 2001 | 16,574 | 16,700 | 15,721 | 99\% | 106\% | 105\% |
|  | 2002 | 18,910 | 18,200 | 24,948 | 104\% | 73\% | 76\% |
|  | 2003 | 25,820 | 24,600 | 26,021 | 105\% | 95\% | 99\% |
|  | 2004 | 24,590 | 24,100 | 22,327 | 102\% | 108\% | 110\% |
|  | 2005 | 21,937 | 20,200 | 16,767 | 109\% | 120\% | 131\% |
|  | 2006 | 19,826 | 16,600 | 17,896 | 119\% | 93\% | 111\% |
|  | 2007 | 10,306 | 10,100 | 4,276 | 102\% | 236\% | 241\% |
|  | 2008 | 4,479 | 3,800 | 7,120 | 118\% | 53\% | 63\% |
|  | 2009 | 8,478 | 8,500 | 7,533 | 100\% | 113\% | 113\% |
|  | 2010 | 11,034 | 9,700 | 10,862 | 114\% | 89\% | 102\% |
|  | 2011 | 12,445 | 12,500 |  | 100\% |  |  |
|  | AVG. |  |  |  | 108\% | 100\% | 107\% |
| $\mathrm{ORC}^{1}$ | 1999 | 65,338 | 72,084 | 84,293 | 91\% | 86\% | 78\% |
| (Oregon | 2000 | 61,457 | 63,259 | 69,074 | 97\% | 92\% | 89\% |
| Coastal) | 2001 | 58,062 | 66,412 | 132,732 | 87\% | 50\% | 44\% |
|  | 2002 | 73,055 | 73,914 | 176,929 | 99\% | 42\% | 41\% |
|  | 2003 | 101,310 | 85,483 | 174,091 | 119\% | 49\% | 58\% |
|  | 2004 | 135,716 | 131,904 | 130,907 | 103\% | 101\% | 105\% |
|  | 2005 | 133,886 | 167,213 | 167,682 | 80\% | 100\% | 80\% |
|  | 2006 | 126,393 | 136,373 | 110,191 | 93\% | 124\% | 112\% |
|  | 2007 | 108,338 | 131,195 | 47,012 | 83\% | 279\% | 230\% |
|  | 2008 | 53,417 | 70,101 | 39,615 | 76\% | 177\% | 135\% |
|  | 2009 | 32,253 | 48,072 | 41,800 | 67\% | 115\% | 77\% |
|  | 2010 | 51,234 | 59,806 | 64,799 | 86\% | 92\% | 79\% |
|  | 2011 | 67,203 | 78,199 |  | 86\% |  |  |
|  | AVG. |  |  |  | 90\% | 109\% | 94\% |

[^0]
## 4 EVALUATION OF MARK-SELECTIVE FISHERIES

Chinook salmon released from Puget Sound hatcheries and spring run hatchery Chinook salmon in the Columbia River have been mass-marked since brood 1998. Mass marking of Columbia River fall Chinook salmon started with brood year 2005 and for brood year 2009 onwards most of the Chinook salmon 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 Strait of Juan de Fuca) since 2003, on the Columbia River since 2001, and in BC Juan de Fuca since 2008 (Table 4-1). Additionally, the first ocean mark-selective Chinook salmon fishery occurred off the Washington Coast (Areas 1-4) in 2010.

### 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) during the summer since 2003. 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). MSFs have continued to expand in Puget Sound marine areas to the extent that in 2010 all marine sport management areas have MSFs for at least some portion of the year. 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). Since 2007, catch in MSF fisheries in northern Puget Sound marine areas has nearly doubled, while MSF catches in other marine areas have remained about the same. 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 $4-1$ ) for 2009 is about $70 \%$ in PSN, $90 \%$ in PSO, and about $50 \%$ in freshwater (TERM S).

Chinook salmon MSFs have been in place in the Columbia and Willamette rivers since 2001 (Table 4-2). Most of the catch from MSFs has been directed on mass marked spring Chinook salmon 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 (Table 4-2). MSFs on fall Chinook salmon were first implemented in the Lower Columbia tributaries in 2008 (Grays River only) and have expanded to the other streams with significant numbers of hatchery origin fish (e.g. Elochoman, Cowlitz, Toutle, Lewis, Kalama, Washougal, Wind, White Salmon rivers and Drano Lake). The fishery in the Cowlitz River in 2009 had a mixed-bag, partial MSF limit allowing one unmarked adult Chinook salmon. Total catch in these MSF fisheries is smaller than the catches from the mainstem Columbia River that has not been under MSF regulations during the fall season (Table 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 salmon per day bag limit, however wild Chinook salmon could not be retained if they exceeded 67 cm Fork Length. This partial MSF has occurred in 2008-2009. The mixed-bag, partial MSF regulation was intended to protect Fraser River spring-run age 1.2 and age 1.3 stock groups as they returned to the Fraser River.

Table 4-1. Mark selective fisheries occurring from 2003-2010 ( $\sqrt{ }$ ). See SFEC (2009) for more detailed information on MSF proposals and fisheries

| .Fishery | Location | Period | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sport | BC Juan de Fuca, | March- <br> April |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA/OR Ocean Area 1-4 | June |  |  |  |  |  |  |  | $\checkmark$ |
| Sport | WA PS Area 5 | Summer | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 6 | Summer | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 7 | Winter |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 8.1 | Winter |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 8.2 | Winter |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 9 | Summer |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 9 | Winter |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 10 | Summer |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 10 | Winter |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 11 | Summer |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 11 | Winter |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Sport | WA PS <br> Area 12 | Winter |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Sport | WA PS Area 13 | Summer |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Nooksack | Sep-Dec |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Skykomish | Jun-July | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Carbon \& Puyallup R | Aug-Dec | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Upper Skagit | Jun-July |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Nisqually | Jul-Jan |  |  |  | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ |
| Sport | Skokomish | Aug-Dec |  |  |  |  |  |  |  | $\checkmark$ |
| Sport | Columbia | Summer | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |
| Sport | Lower Columbia | Spring | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Commercial (tangle net) | Lower Columbia | Spring | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Commercial, (large net) | Lower Columbia | Spring | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Willamette | Spring | $\sqrt{ }$ | $\checkmark$ | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sport | Lower <br> Columbia <br> Tributaries | Fall |  |  |  |  |  | $\checkmark$ (Grays R.) | $\checkmark$ | $\checkmark$ |
| Sport | Yakima R | Spring |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | Lower Snake | Fall |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ |
| Sport | Oregon terminal | Spring |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |



Figure 4-1. Estimated total number of Chinook salmon landed in Selective and Non-Selective fisheries (left y-axis) and \% of catch in MSFs (right y-axis) in Puget Sound for catch years 20032010.


Figure 4-2. Estimated total catch (left y-axis) in Columbia River mark selective and non selective sport fisheries and catches during spring (May-June) and summer-fall seasons (Jul-Dec) and \% of catch in MSFs (right y-axis) for catch years 2003-2010.

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 and the Washington-Oregon ocean sport fishery in 2010.

|  |  | $\underset{\text { च }}{\text { च }}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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\% | $152^{2}$ | $41^{2}$ | $24^{2}$ | $16^{2}$ |
|  | Area 19,20 | 2010 | Mar-May | 827 | 347 | $827^{1}$ | $704{ }^{1}$ | 54\% | $827^{2}$ | $135^{2}$ | NA | NA |
| WA/OR Ocean | Area 1-4 | 2010 | Jun | 5,018 | 19 | 7,565 | 3,791 | 67\% | 5,123 | 384 | 252 | 164 |
| PugetSound <br> North <br> (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 5 | 2010 | Jul-Aug | 5,703 | 14 | 9,682 | 9,114 | 52\% | -- | -- | -- | -- |
|  | Area 6 | 2009 | Jul-Aug | 2,293 | -- | -- | -- | 66\% | -- | -- | -- | -- |
|  | Area 6 | 2010 | Jul-Aug | -- | -- | -- | -- | 52\% | -- | -- | -- | -- |
|  | 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 |
|  | Area 7 | 2009-10 | Dec-Apr | 1,418 | 0 | 2,340 | 585 | 70\% | 1,449 | 66 | 143 | 29 |
| Puget <br> Sound <br> Other <br> (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 | 27 | 4,045 | 1,467 | 73\% | 932 | 37 | 620 | 276 |
|  | Area 8-1,2 | 2009-10 | Nov-Apr | 1,109 | 4 | 3,167 | 969 | 76\% | 1,133 | 36 | 379 | 151 |
|  | 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 9 | 2009-10 | Nov-Apr | 1,557 | 27 | 3,940 | 995 | 80\% | 1590 | 80 | 433 | 123 |
|  | Area 9 | 2010 | Jul-Aug | 5,292 | 39 | 6,782 | 2,413 | 74\% | -- | -- | -- | -- |
|  | 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 |


|  |  | $\begin{aligned} & \text { च } \\ & \end{aligned}$ | 믈 0 0 0 $\sum$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 10 | 2009-10 | Oct-Jan | 395 | 2 | 2,979 | 983 | 75\% | 403 | 14 | 506 | 180 |
|  | Area 10 | 2010 | Jul-Aug | 2,987 | 42 | 4,443 | 2,733 | 62\% | -- | -- | -- |  |
|  | 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 |
| Puget | Area 11 | 2009 | Jun-Sep | 3,277 | 37 | 7,582 | 4,623 | 62\% | 3,348 | 228 | 767 | 663 |
| Sound | Area 11 | 2010 | Feb-Apr | 326 | 3 | 487 | 93 | 84\% | 333 | 15 | 23 | 2 |
| (PSO) | Area 11 | 2010 | Jun-Sep | 3,910 | 64 | 5,390 | 1,574 | 77\% | -- | -- | -- | -- |
|  | Area 12 | 2010 | Feb-Apr | 300 | -- | -- | -- | 50\% | -- | -- | -- | -- |
|  | Area 13 | 2009 | May-Sep | 1,340 | -- | -- | -- | 86\% | -- | -- | -- | -- |
|  | Area 13 | 2010 | May-Sep | -- | -- | -- | -- | 82\% | -- | -- | -- | -- |

${ }^{1}$ Legal sized Chinook salmon
${ }^{2}$ 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 Terminal Sport for Chinook salmon 2003-2009. 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 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sport | Nooksack River | -- | $5^{\text {b }}$ | $186{ }^{\text {b }}$ | $119{ }^{\text {b }}$ | $162{ }^{\text {b }}$ | $14^{\text {b }}$ | $42^{\text {b }}$ | $56^{\text {b }}$ |
| Sport | Skykomish <br> River | $177^{\text {b }}$ | $85^{\text {b }}$ | $76^{\text {b }}$ | $78^{\text {b }}$ | $6^{25 b}$ | $432^{\text {b }}$ | $227^{\text {b }}$ | $238{ }^{\text {b }}$ |
| Sport | Carbon \& Puyallup River | $1,287^{\text {a,s }}$ | $1,019^{\text {a, }}$ | $1,590^{\text {a,s }}$ | 1,736 ${ }^{\text {a,s }}$ | 2,525 ${ }^{\text {a,s }}$ | $1,665^{\text {b }}$ | 2,919 ${ }^{\text {b }}$ | $509{ }^{\text {b }}$ |
| Sport | Upper Skagit \&Cascade River | -- | -- | $173^{\text {a,s }}$ | $458{ }^{\text {a,s }}$ | $724^{\text {a,s }}$ | $277^{\text {b }}$ | $343{ }^{\text {b }}$ | $250{ }^{\text {b }}$ |
| Sport | Nisqually River | -- | -- | -- | $3,711{ }^{\text {b }}$ | 4,302 ${ }^{\text {b }}$ | 2,132 ${ }^{\text {b }}$ | $2,789^{\text {b }}$ | 2,728 ${ }^{\text {b }}$ |
| Sport | Skokomish | -- | -- | -- | -- | -- | -- | -- | 6,243 ${ }^{\text {b }}$ |

### 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 in MSFs (Table 4-4). MSFs were first implemented in Puget Sound and on spring stocks in the Columbia River. In Puget Sound a MSF occurred in the summer of 2003 in the Strait of Juan de Fuca and by 2009 has expanded to all areas in Puget Sound with the exception of Hood Canal (Table 4-1). In 2008, MSFs were implemented in the Grays River
(tributary of the Columbia River) on fall Chinook salmon, in BC in the Strait of Juan de Fuca, and in terminal areas of the Oregon coast. The percentage of the total landed tagged and marked catch that occurs in MSFs increased over this period for stocks in Puget Sound and the Columbia River, and in 2009 the percentage of marked landed impacts that occurred in MSFs was substantial for some of the Columbia River stocks (Table 4-4). In Puget Sound in 2009, the percentage of the impacts in MSFs was over $15 \%$ for most of the marked and tagged indicator stocks.

### 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 hypothesis test of no difference in proportional return from release to escapement provides a measure for evaluation the impact of MSFs on a stock with DIT representation. This was not significant for brood years before 2002 as MSFs did not start until 2003 (Table 4-5). A negative test statistic occurs when a higher proportion of marked fish return, which could indicate either mark mortality or sampling problems in the hatchery. This would be of concern if this occurred consistently for a stock or hatchery.

The ratio of these unmarked to marked ratios, or the odds ratio, $\frac{\lambda^{\text {Escapement }}}{\lambda^{\text {Release }}}$ (Agresti 1984) is another measure comparing the DIT groups, where an odds ratio of one indicates that the ratio did not change from release to escapement while an odds 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 4-3). For Puget Sound DIT stocks, 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, as the odds ratio is significantly larger than one in most broods after 2002. All of these DIT stocks are subject to terminal sport MSFs which target the hatchery production including the DIT returns.

[^1]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 2003-2009 and $\%$ of total tagged and marked catch that was landed in MSFs

| Region | Stock | 2003 |  | 2004 |  | 2005 |  | 2006 |  | 2007 |  | 2008 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \text { \% } \\ \text { MSF } \end{gathered}$ | Total | $\begin{gathered} \% \\ \text { MSF } \end{gathered}$ |
| AK | Alaska Spring | 2,340 |  | 3,245 |  | 5,782 |  | 5,527 |  | 4,920 |  | 4,164 |  | 2,817 |  |
| BC | Atnarko |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Summer | 148 |  | 160 |  | 312 |  | 300 |  | 96 |  | 50 |  | 395 |  |
|  | Big Qualicum Chehalis | 89 |  | 113 |  | 221 |  | 140 |  | 211 |  | 140 | 6\% | 155 | 3\% |
|  | (Harrison Fall) Chilliwack | 140 | 5\% | 293 | 3\% | 260 |  | 226 |  | 78 |  | 509 | 2\% | 170 | 4\% |
|  | (Harrison Fall) | 1,273 | 2\% | 1,419 | 2\% | 1,195 | 1\% | 594 | 1\% | 365 | 2\% | 1,027 | 4\% | 581 | 6\% |
|  | Cowichan Fall Dome Creek | 230 | 1\% | 274 | 1\% | 184 | 2\% | 174 |  | 49 |  | 140 |  | 283 |  |
|  | Spring Kitsumkalum | 126 |  | 1 |  | 161 |  | 14 |  | 10 |  | 93 |  | 6 |  |
|  | Summer <br> Lower <br> Shuswap R | 196 |  | 559 |  | 434 |  | 299 |  | 439 |  | 698 |  | 321 |  |
|  | Sum | 617 |  | 600 |  | 457 |  | 715 |  | 127 |  | 569 |  | 676 | 1\% |
|  | Fall <br> Nicola River | 259 | 3\% | 253 |  | 141 | 3\% | 49 |  | 438 | 1\% | 44 |  | 6 |  |
|  | Spring <br> Puntledge | 240 |  | 138 |  | 101 |  | 69 |  | 43 |  | 68 |  | 88 | 4\% |
|  | Summer | 21 |  | 26 |  | 78 |  | 64 |  | 56 |  | 50 |  | 115 |  |
|  | Quinsam Fall Robertson | 203 |  | 318 |  | 388 |  | 287 |  | 265 |  | 99 |  | 146 |  |
|  | Creek | 1,167 |  | 2,666 |  | 2,328 |  | 1,758 |  | 1,628 |  | 827 |  | 764 |  |
| COL R | Cowlitz Fall Tule | 304 |  | 116 | 4\% | 98 |  | 54 |  | 50 |  | 64 | 6\% | 105 | 6\% |
|  | Hanford Wild Columbia | 642 |  | 840 |  | 359 |  | 325 |  | 175 |  | 141 |  | 209 |  |
|  | Lower R Hat Lewis River | 1,076 | 2\% | 915 | 0\% | 348 |  | 45 |  | 40 |  | 228 |  | 344 | 9\% |
|  | Wild | 205 | 3\% | 351 |  | 190 |  | 352 |  | 112 |  | 41 |  | 75 |  |
|  | Lyons Ferry | 117 |  | 191 | 2\% | 145 | 5\% | 116 |  | 247 | 1\% | 1,335 | 0\% | 1,035 |  |


|  | Spring Creek <br> Tule <br> Columbia <br> Summers <br> Upriver Brights <br> Willamette <br> Spring | $\begin{gathered} 3,286 \\ 4,270 \\ 1,052 \\ \\ \text { NA } \\ \hline \end{gathered}$ | $0 \%$ $0 \%$ | $\begin{array}{r} 3,065 \\ 3,864 \\ 996 \\ \text { NA } \\ \hline \end{array}$ | $\begin{aligned} & 1 \% \\ & 0 \% \\ & 0 \% \end{aligned}$ | $\begin{array}{r} 1,408 \\ 4,217 \\ 1,499 \\ \text { NA } \\ \hline \end{array}$ | 0\% | $\begin{array}{r} 472 \\ 2,531 \\ 932 \\ \text { NA } \end{array}$ | $\begin{aligned} & 1 \% \\ & 0 \% \\ & 0 \% \end{aligned}$ | $\begin{array}{r} 574 \\ 2,145 \\ 309 \\ \text { NA } \\ \hline \end{array}$ | $\begin{aligned} & 2 \% \\ & 0 \% \\ & 2 \% \end{aligned}$ | $\begin{array}{r} 1,462 \\ 878 \\ 418 \\ \text { NA } \\ \hline \end{array}$ | $3 \%$ $1 \%$ | $\begin{array}{r} 1,104 \\ 445 \\ 716 \\ \text { NA } \\ \hline \end{array}$ | $\begin{aligned} & 5 \% \\ & 2 \% \\ & 2 \% \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OR CST | Elk River Salmon River | $\begin{aligned} & 2,418 \\ & 2,716 \end{aligned}$ |  | $\begin{aligned} & 2,525 \\ & 2,891 \end{aligned}$ |  | $\begin{aligned} & 1,257 \\ & 3,144 \end{aligned}$ |  | $\begin{aligned} & 1,384 \\ & 1,435 \end{aligned}$ |  | $\begin{array}{r} 1,320 \\ 425 \\ \hline \end{array}$ |  | $\begin{array}{r} 1,424 \\ 278 \\ \hline \end{array}$ |  | 989 458 |  |
| WA PS | George Adams Fall Finger Green River | 547 | 3\% | 625 | 6\% | 909 | 5\% | 551 | 4\% | 863 | 17\% | 462 | 14\% | 545 | 25\% |
|  | Fall Finger Grovers Creek | 459 | 7\% | 466 | 3\% | 305 | 3\% | 661 | 3\% | 884 | 7\% | 715 | 13\% | 637 | 11\% |
|  | Fall Finger Nisqually Fall | 787 | 7\% | 743 | 5\% | 732 | 3\% | 878 | 6\% | 810 | 16\% | 360 | 32\% | 568 | 24\% |
|  | Finger Nooksack | 1,154 | 3\% | 921 | 1\% | 446 | 4\% | 1,830 | 2\% | 1,906 | 11\% | 723 | 14\% | 798 | 15\% |
|  | Spring Finger Samish Fall | 219 |  | 449 |  | 366 | 2\% | 326 | 2\% | 290 | 2\% | 625 | 5\% | 310 | 7\% |
|  | Fingerling Skagit Spring | 524 | 1\% | 354 | 2\% | 525 | 4\% | 1,306 | 2\% | 1,361 | 3\% | 1,226 | 9\% | 871 | 10\% |
|  | Fingerling Skagit Spring | 224 | 1\% | 348 | 1\% | 400 | 11\% | 728 | 48\% | 1,207 | 36\% | 520 | 8\% | 482 | 27\% |
|  | Yearling Skykomish Fall | 436 | 2\% | 446 | 2\% | 470 | 19\% | 459 | 57\% | 449 | 51\% | 229 | 16\% | 217 | 33\% |
|  | Fingerling South Puget Sd | 84 | 6\% | 234 | 6\% | 202 | 2\% | 272 | 9\% | 435 | 5\% | 135 | 17\% | 88 | 38\% |
|  | Fall Year Skagit Summer | 5 |  | 21 |  | 226 | 7\% | 208 | 5\% | 227 | 24\% | 61 | 53\% | 117 | 58\% |
|  | Fingerling Stillaguamish | 314 | 1\% | 184 | 2\% | 311 | 2\% | 292 | 3\% | 395 | 1\% | 449 | 2\% | 496 | 4\% |
|  | Fall Finger | 6 |  | 0 |  | 122 | 5\% | 158 | 3\% | 322 | 2\% | 369 | 22\% | 262 | 14\% |
| WA CST | Hoko Fall Fingerling Queets Fall | 219 |  | 279 | 2\% | 234 | 2\% | 232 | 2\% | 272 | 2\% | 127 |  | 85 | 5\% |
|  | Fingerling | 930 |  | 1,250 |  | 1,313 |  | 694 |  | 488 |  | 511 |  | 912 |  |
|  | Sooes Fall Fingerling | 356 | 1\% | 362 | 1\% | 344 |  | 156 | 2\% | 37 |  | 51 |  | 159 |  |

Table 4-5. Results for hypothesis test ( $\mathrm{H}_{0}$ : No difference in proportion marked and unmarked DIT groups returning to hatchery) for stocks and brood years where test was significant.

| Stock | Brood <br> Year | Unmarked <br> Escapement | Release | Marked <br> Escapement | Release | Unmarked to marked ratio |  | Ages in MSFs |  | Z-statistic for $\mathrm{H}_{0}$ of no impact | $\mathrm{p}(\mathrm{Z})$ <br> two tailed | Significant? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\lambda$ rel | $\lambda$ esc | Preterminal | Terminal |  |  |  |
| Green River | 2001 | 108 | 162,160 | 88 | 178,119 | 0.910 | 1.227 | 2-5 |  | 2.08 | 0.04 | Y |
|  | 2002 | 493 | 198,321 | 550 | 192,443 | 1.031 | 0.896 | 2-5 |  | (2.26) | 0.02 | Y |
|  | 2004 | 578 | 204,269 | 507 | 204,698 | 0.998 | 1.140 | 2-5 |  | 2.14 | 0.03 | Y |
|  | 2005 | 938 | 198,542 | 807 | 196,353 | 1.011 | 1.162 | 2-4 |  | 2.87 | 0.00 | Y |
|  | 2006 | 229 | 204,385 | 165 | 204,795 | 0.998 | 1.388 | 2-3 |  | 3.19 | 0.00 | Y |
| Grovers Creek | 2003 | 1,431 | 151,492 | 1,348 | 163,799 | 0.925 | 1.062 | 2-5 |  | 3.65 | 0.00 | Y |
|  | 2004 | 1,133 | 133,455 | 872 | 118,197 | 1.129 | 1.299 | 2-5 |  | 3.06 | 0.00 | Y |
|  | 2005 | 1,115 | 169,954 | 1,076 | 136,519 | 1.245 | 1.036 | 2-4 |  | (3.94) | 0.00 | Y |
| Nisqually | 1998 | 668 | 192,165 | 485 | 202,103 | 0.951 | 1.377 | 4-5 |  | 6.00 | 0.00 | Y |
|  | $2002{ }^{1}$ | 572 | 99,688 | 426 | 88,909 | 1.121 | 1.343 | 2-5 | 4-5 | 2.79 | 0.01 | Y |
|  | $2002{ }^{1}$ | 500 | 92,560 | 382 | 91,385 | 1.013 | 1.309 | 2-5 | 4-5 | 3.71 | 0.00 | Y |
|  | 2003 | 1,235 | 203,624 | 1,096 | 207,975 | 0.979 | 1.127 | 2-5 | 3-5 | 3.30 | 0.00 | Y |
|  | 2004 | 1,102 | 209,905 | 924 | 208,724 | 1.006 | 1.193 | 2-5 | 2-5 | 3.71 | 0.00 | Y |
|  | 2005 | 674 | 127,293 | 510 | 120,154 | 1.059 | 1.322 | 2-4 | 2-4 | 3.62 | 0.00 | Y |
|  | 2006 | 334 | 204,613 | 268 | 204,221 | 1.002 | 1.246 | 2-3 | 2-3 | 2.41 | 0.02 | Y |
| Skagit Spring | 2002 | 561 | 60,000 | 436 | 59,777 | 1.004 | 1.287 | 2-5 | 3-5 | 3.92 | 0.00 | Y |
|  | 2003 | 338 | 75,418 | 242 | 74,590 | 1.011 | 1.397 | 2-5 | 2-5 | 3.87 | 0.00 | Y |
|  | 2004 | 718 | 71,942 | 465 | 73,668 | 0.977 | 1.544 | 2-5 | 2-5 | 7.71 | 0.00 | Y |
| Skykomish | 2002 | 408 | 197,105 | 325 | 195,075 | 1.010 | 1.255 | 2-5 | 2-5 | 2.83 | 0.00 | Y |
|  | 2003 | 469 | 173,116 | 416 | 176,427 | 0.981 | 1.127 | 2-5 | 2-5 | 1.99 | 0.05 | Y |
|  | 2004 | 966 | 199,529 | 807 | 200,398 | 0.996 | 1.197 | 2-5 | 2-5 | 3.70 | 0.00 | Y |
|  | 2006 | 103 | 206,362 | 75 | 205,344 | 1.005 | 1.373 | 2-3 | 2-3 | 2.01 | 0.04 | Y |

${ }^{1}$ Nisqually brood year 2002 had two experimental groups released as DIT groups.


Figure 4-3. Estimated odds ratios (+/- 95\% CI) for Chinook salmon DIT stocks for Nisqually, Skagit, Skykomish and Skokomish Rivers where in-river MSFs have been in place. Nisqually brood years 2000 through 2002 had two experimental groups released as DITs. These two groups were combined for this figure.

## 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 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) 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. The CWTIT is tasked with making recommendations regarding projects to improve the CWT system, including CWT reporting systems, data quality, tagging levels, sampling levels, and the precision and accuracy of statistics such as abundance, exploitation rates, survival estimates, etc. for Chinook salmon. Canada implemented the program in 2009, and the U.S. in 2010 due to differences in the timing of fiscal years. The results for the 2009 funding for Canada were reported in CTC (2011). In this report, the results for funding of 2010 projects are reported along with a list of projects approved for funding in 2011.

### 5.1 Canadian Projects Undertaken in Fiscal Year 2010

A total of 12 Canadian projects were funded in FY 2010, representing a total expenditure of $\$ 1,500,000$. These projects are described below and each description includes the CWT issue listed in the PSC CWT Workgroup Tech Report 25 (Table 5-3, PSC 2008) that the program is intended to address.

## 1) Increased CWT Marking Indicators (2009: \$842,000 including \$650,000 tags purchased for 5 years, 2010: \$465,000 including \$143,000 tag purchase) TR 25 Issue (Primary): 2

The objective of this project was to increase the tagging, recovery, accuracy, and precision of CWT expansions. Progress: Application of CWTs was increased at four indicator stocks in 2009 and 12 stocks in 2010. In 2010 the planned incremental tag application was achieved at all facilities except the Cowichan Hatchery. Due to very poor escapement and broodstock availability Cowichan Hatchery released only 250,000 of the total 400,000 planned incremental tagged Chinook salmon. Improvement: Tagging rates have been doubled or tripled for all Chinook salmon indicators. Success: Yes.

## 2) Atnarko Chinook CWT Indicator Stock <br> (2009: \$135,500, 2010: \$99,500) <br> TR 25 Issue (Primary): 1, 4, 6, 10

Objectives: To expand the Atnarko assessment program to a Central Coast Chinook salmon exploitation rate indicator by improving estimates of escapement and terminal fishery catch. Technical Report 25 noted Central BC was lacking a Chinook salmon indicator. The only northern indicator, Kitsumkalum, is a stream-type yearling stock, whereas Atnarko is an oceantype stock. Progress: in 2009 and 2010, 250,000 incremental CWTs were applied, terminal
commercial, sport (2009 only), and First Nations fisheries were sampled, and a mark-recapture program was used to estimate escapement. Improvement: The 2010 escapement mark-recapture program was impacted by a major flood event at the end of September. Prior to the flooding event, 1,008 Chinook salmon were tagged, 1,025 carcasses examined, and 87 tags recovered. The preliminary escapement estimate is $10,900-11,760$ (CV 10-11\%). 86 CWTs were recovered. The Bella Coola River First Nation fishery caught 3,200 fish (preliminary): 775 were examined for fin clips, and 76 heads collected for CWT dissection. The creel survey program did not proceed in 2010 due to staffing issues. Success: Yes.

## 3) Increased CWT Recovery in Indicator Escapement Programs

(2009: \$83,500, 2010: \$66,500)
TR 25 Issue (Primary): 5, 6
The objective of this project was to improve the quantity and quality of CWT data (low sampling rates in escapement (5) and uncertainty in escapement estimates (6)) at spawning grounds and hatcheries. The strategy varied by location. Progress: At Quinsam, a new study design was implemented to estimate river spawners as the previous methodology was determined to be biased low by $2 \%$ to $11 \%$. At Nicola, two additional samplers helped recover carcasses before predators could remove them and 191 CWTs were recovered in 2010. At Harrison in 2010 sampling was again hampered by poor water visibility due to a landslide, however 91 CWTs were collected. At Chilliwack, two additional staff achieved a $10 \%$ higher sampling rate and approximately 3,650 heads were collected from every available carcass. At Cowichan River, an additional crew was used to expand the survey area, and extend the survey period by four weeks. Since 2009, recovery of carcasses has increased by $5 \%$ and recovery of heads from ad-clipped Chinook salmon has increased more than 600\% (confounded with increased tagging). At Big Qualicum in 2010 planned sampling of spawners below the fence was not implemented, so escapement CWTs are biased low. At Robertson hatchery, heads were systematically re-sampled to improve the quality assurance and quality control (QA/QC) on CWT recoveries. At
Kitsumkalum, since 2009 all live fish with clipped adipose fins were sacrificed during the tag application phase of the mark-recapture program. The average CWT sampling rate since 2009 increased to $18 \%$ versus $13 \%$. Improvement: Increased recovery, accuracy and precision of CWT expansions in dead pitch. Success: Yes.

## 4) CWT Head Processing and Data Management

 (2009: \$95,000, 2010: \$135,000), TR 25 Issue (Primary): 1, 2, 4, 5, 7, 9, 10This project addresses incremental costs in CDFO head recovery, lab operations and data entry resulting from increased tagging and sampling in all CDFO programs. Progress: Increased head recoveries from increased sampling rates at spawning grounds and in commercial, sport, and First Nation fisheries, increased sampling due to the development of the Atnarko indicator program, and increases in US mass-marked Chinook salmon in Canadian fisheries have resulted in increases to CWT dissection and lab data entry activities. Significant progress has been made in improving representative sampling of the troll fisheries through the introduction of conditions of license for $50 \%$ of the troll fleet to retain heads for all kept Chinook salmon. Improvement: Increased sampling rate in Canadian troll, and improved timeliness of reporting in general. Success: Yes.

## 5) CWT Reporting System - Modifications to CDFO Mark Recovery Program (MRP) System (2009: \$90,000, 2010: \$90,000) TR 25 Issue (Primary): 14, 15, 17, 18

The objective was to improve the CDFO CWT Mark Recovery Data system including: data quality, processing, and accessibility of CWT data. Progress: A full time programmer has been in place since 2009. Improvements: (1) Rewrite of programs that handle data from 1990-1996 resulting in the completion of reviews and improvements to data and CWT estimates from 1990 to present, (2) Increased functionality to provide more flexibility for stratification of CWT estimates by species, fisheries, locations and periods, (3) improvements resulting in interrelationship and with other Canadian Systems (escapement, catch, creel) resulting in improved data and improvements in timeliness for CWT calculations, and (4) improvements in access by Canadian Users to CWT information. These improvements are reflected in the improvements in quality, completeness (version 4.1) and timeliness of submissions to the United States Regional Mark Information System (RMIS) through data sharing commitments. Success: Yes.
6) Regional CWT and Catch Estimation QA/QC (2010: $\$ 75,000$ ) TR 25 Issue (Primary): 6, 8

The objective was to provide QA/QC of all catch data associated with CWT recoveries and ensure proper stratification for tag expansions. Progress: A Catch QA/QC Analyst has been in place since 2009. Improvements: Logbook data for years 2007 through 2010 have been reviewed. Success: Yes.

## 7) Sport and First Nation CWT Recovery Coordinator (2009: \$85,000, 2010: \$85,000)

 TR 25 Issue (Primary): 6, 8The objective was to increase the sampling and recoveries from terminal fisheries currently under sampled. Progress: Since 2009, a full time senior technician has been in place to coordinate the sampling and processing of CWT recoveries in all sport and First Nations fisheries and to implement improvements in sampling procedures across these fishery sectors. Improvements: Improved participation in CWT submission from all sectors, improved coordination with fisheries monitoring programs and increased recoveries of CWTs from terminal sport and First Nations fisheries. Success: Yes.

## 8) Feasibility and Design of Regulations Database

 (2010: \$20,000), TR 25 Issue (Primary): 9This project was a feasibility study to review / identify changes in CDFO business processes and design a database to capture salmon regulations according to Regional data standards and maintained in a Pacific Region Oracle database. This regulation database would be available as records of management actions and for use in generating catch estimates and CWT expansions relative to regulations, and provide more timely and accurate reporting on effects of management actions. Progress: A consultant was employed to scope design, data requirements and linkages between agency data systems. Expected Improvements: if implemented include reduced
uncertainty in catch estimates and CWT expansions, and improved data management. Success: Yes.

## 9) Historic CWT Data Recovery for Fraser River Chinook Salmon (2010: \$20,000), TR 25 Issue (Primary): 1, 6

The objective was to recover historical (pre-1990’s) Fraser River Chinook salmon mark and recapture data (including CWT data) from hardcopy and $5 \frac{1}{4}$ inch floppy disks. These data are invaluable to correct for known biases in the index methods for escapement estimation used prior to the 1990's throughout the Fraser watershed. Progress: This dataset was recovered and transferred to Pacific Region Oracle database according to Regional data standards.
Improvements: These data improve the estimates of escapement and CWT expansions and are available for use in the Chinook salmon model and will improve the accuracy of data used to evaluate stock status and planning fisheries. Success: Yes.

## 10) Regional Sport and First Nations Fishery CWT Recovery Improvements (2009: \$140,000, 2010: \$182,000), TR 25 Issue (Primary): 4, 7, 9, 10, 11

The objective was to increase the head submission rates, improve the data associated with the Sport Head Recovery Program, and improve CWT sampling in First Nations fisheries. Progress: Measures implemented in the recreational fishery include: public outreach initiatives, expansion of south coast region creel program to include opportunistic direct visual sampling of CWTs and increased communication with recreational anglers, and implementation of various projects to expand or improve sport head recovery program depots. DFO provided support to Lower Fraser First Nations to collect CWT samples from commercial and FSC fisheries as an integrated process in the Lower Fraser First Nations catch monitoring program. The Mid-Fraser, BC Interior, Cowichan, Big Qualicum, Somass and Bella Coola First Nations have expanded catch monitoring programs to collect CWT samples and improve the precision of the catch estimate. Sampling procedures, forms, data entry and programming has been modified to support these new data sources. Improvements: improved CWT recoveries in remote areas (North Western Vancouver Island, North Island, Central Coast, Northern BC, and BC interior). Results from the voluntary Sport Head Recovery program indicate increased Chinook salmon heads recovered in 2010 (6,210 heads) versus 2009 (4,072 heads). Average 2010 Chinook salmon sport submission rates for 7 ocean and 6 freshwater sport fisheries were above $20 \%$ with the exception of Central Sport (9\%) and Lower Fraser (12.5\%). Success: Generally yes.

## 11) Expansion of Catch Monitoring and Sampling Southern BC Sport Fishery (2010: \$80,000), TR 25 Issue (Primary): 4, 6

The objective was to conduct or increase recreational creel survey activity in southern BC marine waters in areas and times currently unmonitored or with low survey effort and to verify assumptions regarding fishing effort. Progress: Creel surveys in key WCVI areas were expanded and extended mid-August through September 2011. Creel survey in Juan de Fuca extended October to March; extending survey to full-year in this area; Improvement: Increased sampling for CWTs will improve estimates of CWT expansions and resulting statistics (i.e. stock specific impacts, cohort size, ERs) and model outputs. Success: Very likely.

## 12) Tagging Increased size at release Harrison, (2010: $\mathbf{\$ 8 0 , 0 0 0 )}$

TR 25 Issue (Primary): 2
The objective is to investigate an alternative release strategy, increased smolt size at release, of Harrison Chinook salmon indicator smolts to improve survival to return. This is incremental tagging to the standard release. Progress: This is the second year of this alternate release strategy. Improvement: If successful this program would replace the more costly indicator program at Chilliwack Hatchery and allow the increased tagging level to be sustained after the CWT Improvement Program has ended. Success: To be determined when brood year / CWT returns are complete.

## 13) Computer Programming and Sampling Protocols: Barcodes (2010: \$50,000) TR 25 Issue (Primary): 13

The objective was a feasibility study to investigate the implementation of automated technology for labeling and processing head recoveries to improve the efficiency and accuracy of reporting while reducing the cost of data capture and processing. This system is currently being used by US agencies. Progress: CDFO staff have consulted with US agencies using similar equipment, and toured ADF\&G and WDFW labs to view their procedures and application to Canadian programs. Improvement expected: Automating data entry for head labels in field and lab will facilitate improved data quality (for example, reduce data entry errors, improve timeliness of reporting recoveries, improve DFO management of shipping heads from sampling locations to lab). Success: Yes.

## 14) Programming Support: GIS Mapping Sport Locations (2010: \$40,000) TR 25 Issue (Primary):

The objective is to digitally capture spatial information on recreational catch and CWT recovery locations so that catch estimates and CWT recoveries can be accurately assigned to management regulations. This project includes coordination with area staff to collect spatial information. Progress: Spatial referencing information for Southern BC sport locations were captured in a DFO database. A web-based GIS tool is under development to allow analysts to review head recoveries from anglers in the context of catch and regulations. Improvement: This system will improve DFO's ability to review representative and completeness of the sport sampling program. Success: Yes.

## 15) Bella Coola River FN Net Fishery CWT Sampling (2010: \$10,000)TR 25 Issue

 (Primary): 4,10The objective was to improve the sampling rate in the terminal First Nations fishery. Progress: the Bella Coola First Nations have expanded catch monitoring programs to collect CWT samples and improve the precision of the catch estimate. Improvements: The Bella Coola River First Nation fishery caught 3,200 fish, 775 were examined for fin clips, and 76 heads collected for CWT dissection. Success: Yes.

## 16) Atnarko River Sport Fishery Catch Estimation and CWT sampling (2010: $\mathbf{\$ 5 , 0 0 0 )}$ TR 25 Issue (Primary): 4,6

The objective was to improve the sampling rate in the terminal sport fishery. Progress: Unfortunately, the creel survey program did not proceed in 2010 due to staffing issues. CDFO recognizes this is a gap for improvement in 2011. Success: No.
17) Cowichan River First Nation Fishery CWT Sampling (2010: \$2,000) TR 25 Issue (Primary): 4,10

The objective was to improve monitoring of Food, Social and Ceremonial (FSC) fishery and increase the return rate of heads from adipose clipped Chinook salmon in that fishery.
Progress: An information session was held by Cowichan Tribes Biological Group to provide information on the FSC monitoring, CWT head recovery program, and Chinook salmon stock management. Improvements: the Cowichan First Nations have expanded catch monitoring programs to collect CWT samples from First Nations fisheries. Head Recovery depots were installed in the community, at the Cowichan River Hatchery and the Cowichan Tribes Office in Duncan. Success: Yes.

## 18) CWT Placement Study (2010: $\mathbf{\$ 1 0 , 0 0 0 )}$

TR 25 Issue (Primary): 1, 6
The objective was to compare the retention of CWTs using manual and automated tagging methodology of Chinook salmon indicator stocks. Progress: Data on the accuracy of tag placement and on the presence/absence of mechanical scratches on CWTs obtained from Canadian escapement samples, 1988-2010, were summarized and entered into the Tag Placement database. Improvements: This database will assist CDFO in the evaluation of potential benefits in the quality of tag application through use of automated tagging trailers.
Success: Yes.

Table 5-1. Canadian CWT Improvement Projects approved for FY2011.

| Project Category | TR25 Issue | Project Title | Cost (\$Can) |
| :---: | :---: | :---: | :---: |
| Increased CWT Marking of CN Indicators | 2 | Incremental tagging of 12 Indicator Stocks (Robertson Creek, Cowichan, Big Qualicum, Quinsam, Lower Shuswap, Nicola,Chilliwack, Harrison, Taku, Stikine, Kitsumkalum, and Atnarko)* | \$342,000 |
| Increased Deadpitch CWT Recovery Effort, all Indicators | 5 | Increased effort in CWT recovery in indicator escapement programs (Quinsam, Cowichan, Big Qualicum, Chilliwack, Harrison, and Nicola)* | \$80,500 |
| Agency Staffing (Programmer, Catch QA/QC Analyst, CWT Recovery Coordinator) | $\begin{aligned} & \text { 4,7,8,9,10, } \\ & 11,14,15,17 \\ & \text { \&18 } \end{aligned}$ | Regional CWT Datasystem Programming, Regional CWT and Catch Estimation QA/QC, and Regional Sport \& FN Fishery CWT Recovery Coordination * | \$250,000 |
| Increased Head Recovery Costs | 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 | $\begin{aligned} & \hline 4,7,9,10 \& \\ & 11 \end{aligned}$ | Regional Commercial, Sport \& FN Fishery CWT Recovery Improvements* | \$130,000 |
| Low Sample Rates in Terminal Fisheries, FN Fishery CWT recovery improvements | 4 \& 10 | Improvements in CWT Recovery in Terminal First Nations Fisheries ( Fraser River, Georgia Strait, WCVI, Bella Coola, and Cowichan)* | \$72,000 |
| Uncertainty in Estimates of Escapement or Terminal Fishery Catch | 1\& 6 | Atnarko Chinook salmon CWT Indicator Stock* | \$84,500 |
| Increased CWT Marking of CN Indicators | 2 | CWT Placement Evaluation, Comparison of Manual versus Automated Tagging | \$10,000 |
| Increased CWT Marking of CN Indicators | 2 | Automated Tagging Trailer purchase | \$436,000 |
|  |  | Canada Total | \$1,500,000 |
| Total Contingency Projects -Canada |  |  | \$267,100 |

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

A total of 12 U.S. projects were funded in FY 2010, representing a total expenditure 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 5-3). The verbiage reflects progress through 30 November, 2011.

## 1) Oregon CWT Data Reporting System (\$410,000 USD) TR 25 Issue (Primary): 13, 14, 15, 17, 18

The objective for this project was to replace the antiquated ODFW CWT reporting system to increase accuracy, timeliness and accessibility to CWT data for Oregon fisheries, escapements and hatcheries. Purchase of new data loggers was included, coordinated to match those purchased by WDFW. This is an 18-month grant. Progress: the project is on target to finish by Oct., 2011 and is about $80-90 \%$ 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 5-6 months earlier. Success: Likely. No future request is anticipated for this project.

## 2) Washington CWT Data Reporting System (\$235,519 USD) TR 25 Issue (Primary): 13

The 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 was a 12-month grant, which has been extended to September, 2012. Progress: the project is about $50 \%$ complete. Replacement of the old method of reading CWTs via bioscopes (the first third of the project) has been completed successfully and is 2 x faster and more accurate. The web-based system front end, which eliminates versioning, updating and access problems is in progress. The re-designed back end DB system will utilize standard agency lookup tables and integrate with WDFW's salmon conservation reporting engine (SCoRE). 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 (\$28,845 USD) TR 25 Issue (Primary): 7

The objectives were to redo the reporting strata for the seine fishery in SEAK in order to be able to use samples from mixed districts, raise the sampling rate, reduce strata with few or no fish sampled, and provide more accurate CWT data for this fishery. This was a 12 -month grant. Progress: the project is 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 salmon 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) TR 25 Issue (Primary): 7

The objective was to provide funds to cover a portion of cost the associated with the increased number of "NO TAGS" (heads from ad-clipped Chinook salmon in mass marking programs, but
without CWTs) in heads shipped to the SEAK CWT Lab, for freight and personnel. This was a 12 -month grant. Progress: the project is complete. The occurrence of heads from Chinook salmon 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 WA, OR and ID. Improvement: The project helped maintain the timeliness (inseason) and accuracy of CWT data from Chinook salmon caught in SEAK. Success: Yes. Future requests are anticipated for this project.

## 5) Stikine River Smolt Tagging (\$121,264 USD) TR 25 Issue (Primary): 1, 2

The objective was to tag wild Chinook salmon smolts in the Stikine River in spring 2011 (1st US funding, 3rd year Canada), to subsequently estimate total adult and smolt production, exploitation, survival and provide run reconstruction in future years for TBR and CTC work. This stock is a PSC escapement indicator stock, produces 30,000 to 70,000 adults annually and the terminal run is jointly managed. 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: This project is complete for this funding year. Over 32,000 wild smolts were tagged with CWTs in 2011, compared to 35,000 in 2010 and 42,000 in 2009; the minimum tagging goal is 30,000 . This level was exceed all 3 years due to improvements in capture methodology with beach seines and night sets. 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) TR 25 Issue (Primary): 1, 2

The objective was to tag wild Chinook salmon smolt in the Chilkat River in fall 2010, to subsequently estimate total adult and smolt production, exploitation, survival and provide run reconstruction in future years for the CTC and ADF\&G. The Chilkat River is a PSC escapement and exploitation rate indicator stock for northern inside SEAK and produces 4,000 to 10,000 adults annually. No surrogate hatchery exists. Progress: This project is complete for this funding year. About 38,000 wild Chinook salmon 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. Success: Yes. Future requests are anticipated for this project.

## 7) Elk River Tagging, Creel and Escapement (\$112,565 USD) TR 25 Issue (Primary): 1, 3

The objectives were to tag Chinook salmon from the Elk River Hatchery, the proposed midOregon CWT indicator stock, to estimate freshwater harvest and escapement and sample them for CWTs and other biological data. A creel project was used to estimate harvest. Progress: The smolt tagging goal $(325,000)$ was met, the harvest estimate is 560 ( 501 sampled) and the spawner surveys and sampling were still in progress. Completion of the inriver work will likely provide precise estimates of inriver 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 exploitation rate analysis stock. Success: Likely. Future requests are anticipated for this project.

## 8) Lower Columbia River Esc. CWT Expansions (\$20,112 USD) TR 25 Issue (Primary): 6

The objective was to develop sampling designs to produce unbiased expansions for CWT recoveries in the lower Columbia River escapements for Tule Chinook salmon stocks and to estimate hatchery and wild components within stocks. Improved escapement estimation and bias is sex, age and origin examination were also part of this process. Progress: This project was completed in 2011. Significant improvements in escapement enumeration, standardization of methodology, accurate and unbiased CWT expansions and associated variance estimates were made. Improvement: This project provides substantially improved and unbiased expansions of CWTs from LCR Tule stocks on the spawning grounds. Success: Yes. Future requests are unknown.

## 9) SEAK—Wanding to Reduce the Number of NO TAGs Shipped (\$42,580 USD) TR 25 Issue (Primary): 7

The objective was to purchase 6 hand-held wands to reduce the number of heads shipped to the Alaska Tag Lab from ad-clipped Chinook salmon, but without CWTs, i.e. "NO TAGs", in the SEAK winter troll fishery, after training and quality control tests were completed. A pilot study was conducted on a portion of the winter troll fishery to detect CWTs in Chinook salmon with adipose fins (from DIT groups). Progress: This project is complete; 2,663 fish were sampled, and of 384 fish with ad-clips, 195 signaled positive. Validation is complete. Improvement: This project will keep sampling rates higher by improving sampling efficiency by reducing the manpower associated with recording, processing and shipping NO TAGs. Success: Yes. Future requests are unknown.

## 10) SEAK—Increased Sampling in Net and Terminal Fisheries (\$43,408 USD) TR 25 Issue (Primary): 4,7

The objectives was to increase the sampling rates in commercial net (seine and drift gillnet) and terminal commercial fisheries, by funding additional port samplers in 3 ports. The terminal fisheries had been sampled at rates $>20 \%$ in the 1980s, which showed these areas to be mostly Alaskan hatchery stocks. Due to the presence of some other PSC ERA stocks, this project was implemented as noted in PSC (2008). Progress: Sampling for this project was completed during 2010 and rates were increased in most fisheries; however, low catches of Chinook salmon in purse seine fisheries hampered some efforts. Improvement: Higher sampling rates were achieved in SEAK net and terminal commercial fisheries. Success: Yes. Future requests are likely.

## 11) Puget Sound Freshwater Sport Sampling (\$182,455 USD) TR 25 Issue (Primary): 4, 6

The 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 were successful for the direct creel and sampling efforts conducted. Improvement: Higher sampling rates were achieved in these Puget Sound freshwater fisheries in 2010. This project will likely be fruitful for developing the indirect and less costly methods of estimating CWTs in these fisheries. Success: Yes for direct sampling. Future requests are anticipated.

## 12) Decision Theoretic Tool for Sampling and Marking (\$141,586 USD) TR 25 Issue (Primary): Chapter 6

The objective was to develop a Decision-theoretic tool (DTT) to evaluate the effects of CWT improvement projects on Coefficients of Variation (CVs) about estimates of exploitation rates for Chinook salmon. The DTT provides the capacity to simultaneously evaluate projects proposed by multiple jurisdictions which involve changes in fishery and escapement sampling rates, estimates of catch or escapement, and tagging levels. Progress: This project was started late due to contracting startup difficulties, but is now $60-70 \%$ complete. The tool, largely based on the guidance provided in Appendix B of PSC TR25, would consist of four primary components: (1) a menu driven user interface (UI); (2) a simple, steady-state forward cohort model to approximate CWT recoveries resulting from changes in survival and fishery harvest rates; (3) a module to estimate CVs about exploitation rates based on sampling rates, tagging levels, and uncertainty relating to fishery catch/escapement estimates for projects individually or collectively; (4) a query system to determine required tagging and sampling rates to achieve a desired CVs about estimates of exploitation rates; and (5) a module that identifies the projects that provide the greatest improvement in selected CVs at least cost. The DTT is being coded in Microsoft Visual Basic. Approximately two-thirds of the coding has been completed. The DTT algorithms and code are undergoing refinement, testing and validation. A macro-level code description of the user interface under development is attached. Development of support programs and methods descriptions for preparation of data sets for testing and is nearly complete. A sample data set, based on CWT release groups undergoing evaluation for a new base period calibration of the Pacific Salmon Commission's (PSC) Chinook Model, and a set of CWT project descriptions has been prepared for testing. Improvement: DTT will provide a means to guide funding decisions regionally and in PST area; for single-stocks and multiple stock/multiple fisheries. Success: likely. Future funding requests are not anticipated.

### 5.3 U.S. Projects Undertaken in Fiscal Year 2011

Projects were solicited through a request for proposals released for 3 months in late 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 5-1 provides a summary of the recommended projects by project category. Project categories are based on the themes specified
in PSC Technical Report 25 (PSC 2008). Projects were scored and ranked individually by U.S. CWTIT members and consensus was subsequently reached to develop draft recommendations. These were deliberated by the bilateral CWTIT. The U.S. PSC approved the following list of recommendations. The projects recommended by the U.S. represent a complete expenditure of the $\$ 1.5$ million available under this program for 2011. 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 salmon under jurisdiction of the PST.

Table 5-2. U.S. CWT Improvement Projects approved for FY2011.

| Project Category | TR25 Issue(2) | Project Title | Cost (\$USD) |
| :--- | :--- | :--- | :--- |
| Hatchery Stock tagging, Creel <br> and Esc. estimation and <br> sampling | 1,3 | Elk River Tagging, Creel and Esc <br> CWT Recovery | $\$ 140,118$ |
| Wild Stock tagging with no <br> hatchery indicator | 1,2 | Stikine River Smolt Tagging | $\$ 113,818$ |
| Wild Stock tagging with no <br> hatchery indicator | 1,2 | Chilkat River Smolt Tagging | $\$ 97.715$ |
| Indicator stock tagging | 1 | CWT of Nisqually River Chinook New <br> Integrated Hatchery Program | $\$ 48,282$ |
| Indicator stock tagging of wild <br> vs. hatchery stock | 1,3 | Evaluation of Salmon River Hatchery <br> Stock to Represent Natural Stocks of <br> North Oregon Coast | $\$ 144,494$ |
| Sampling in fisheries with low <br> sampling rates | 4,6 | Puget Sound Freshwater Sport <br> Sampling | $\$ 182,824$ |
| Sampling in fisheries with low <br> sampling rates | 4,7 | SEAK-Increased Sampling in Net and <br> Terminal Fisheries | $\$ 69,650$ |
| Increased head recovery cost <br> in fisheries | 7 | SEAK Tag Lab Increased Head Cost <br> Due to NO TAGs | $\$ 69,773$ |
| Low sampling rates in mixed <br> stock fisheries | 7 | SEAK Marine Sport Catch Sampling <br> Increase | $\$ 79,725$ |
| Sampling efficiency, data <br> timeliness and accuracy | 7,13 | SEAK Commercial Chinook CWT <br> Sampling Data Loggers | $\$ 49,590$ |
| Low sample rates in mixed- <br> stock fisheries | 7 | Sampling Washington Ocean Salmon <br> Fisheries | $\$ 353,100$ |
| Low sample rates in mixed- <br> stock fisheries | 7 | Improvements to Oregon Ocean Troll <br> and Columbia River Recreational CWT <br> Sampling | $\$ 100,136$ |
| PSC - CWTIT Workshop and <br> future CWT Improvement <br> Project | TBD | Support Costs to Hold Annual Bilateral <br> Workshop and fund U.S. CWT Project | $\$ 50,775$ |
|  | GRAND TOTAL | $\$ 1,500,000$ |  |

Table 5-3. 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 CWT processing |
| 13 | Timeliness of reporting |
| 14 | Incomplete/no exchange of CWT data |
| 15 | Inter/intra-agency coordination |
| 16 | Unclear authority to establish and enforce standards |
| 17 | Updating data is difficult and updates cannot be tracked |
| 18 | Validation is inadequate |
| Chapter 6 | Decision Theoretic Tool |

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## 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.

$1 \quad$ SEAK fisheries will be managed to achieve escapement objectives for Southeast Alaska and Transboundary River Chinook salmon 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 | 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, <br> Kakweikan, <br> Wakeman, <br> 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 | 5,318 | Puntledge | PPS |
|  |  |  |  |  |  |  |  | Big Qualicum | BQR |
|  |  |  | Fall | Lower Strait of Georgia (Cowichan / Nanaimo) | Escapement goal range for aggregate | Lower Strait of Georgia Natural | 21,935 |  |  |
|  |  |  |  |  |  |  |  | Cowichan | COW |
|  |  |  |  |  |  |  |  | Nanaimo | NAN |
| Fraser River | Fraser Early | Upper Fraser <br> Mid Fraser <br> Thompson | Spring | $\begin{aligned} & \text { Fraser Spring-run Age } \\ & 1.2 \end{aligned}$ | 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 <br> 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 <br> Stocks | Run <br> Type | Escapement Indicator Stock | Escapement Objective | Model Stock | Escapement Goal in Model | Exploitation Rate Indicator Stock | CWT <br> Acronym |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North/ <br> Central <br> Puget Sound | North Puget <br> Sound <br> Natural <br> Springs | Nooksack | Spring | Nooksack | Escapement goal range by stock | Nooksack Spring | 4,000 | Nooksack Spring Fingerling Nooksack Spring Yearling | $\begin{aligned} & \text { NSF } \\ & \text { NKS } \end{aligned}$ |
|  |  | Skagit |  | Skagit spring |  |  |  | Skagit Spring Fingerling Skagit Spring Yearling | $\begin{aligned} & \hline \text { SKF } \\ & \text { SKS } \end{aligned}$ |
|  | North Puget <br> Sound <br> Natural <br> 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 Natural | 16,966 | NA |  |
|  |  | Green River |  | Green River |  | Fingerling |  |  |  |
|  |  | 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 Puget Sound | Not an annex stock |  | Fall |  |  | Puget Sound Hatchery Fingerling | 24,769 | South Puget Sound Fall Fingerling | SPS |
|  |  |  |  |  |  | Puget Sound Hatchery Yearling | 9,136 | South Puget Sound Fall Yearling | SPY |
|  |  |  |  |  |  |  |  | Squaxin Pens Fall Yearling | SQP |
|  |  |  | Spring |  |  |  |  | White River Spring Yearling | WRY |

NA = not available

Appendix A. 4 Indicator stocks for the Washington Coast.

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

NA = not available

Appendix A.5. Indicator stocks for Columbia River and Oregon Coast.

| Area | Annex Stock Group | Annex <br> Indicator <br> Stocks | Run 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 |  | 45,000 | Cowlitz Spring Hatchery | 2,500 | NA |  |
|  |  |  |  |  |  | Willamette River Hatchery | 13,500 | Willamette Spring | WSH |
|  | Columbia <br> River <br> Summers | Mid- <br> Columbia <br> Summers | Summer | Mid Columbia Summer | 17,8571 | 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 <br> Brights |  | Columbia Upriver Bright | 45,000 | 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 Oregon Coast | Far North <br> Migrating <br> Oregon <br> 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 based on CWT-based exploitation rate analysis (1999-2008).

|  | Escapement Indicator | CWT Indices ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stocks | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Lower Strait of Georgia | Cowichan Nanaimo ${ }^{\text {b }}$ | $\begin{aligned} & \hline 0.517 \\ & 0.163 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.196 \\ & 0.154 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.260 \\ & 0.260 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.247 \\ & 0.247 \end{aligned}$ | $\begin{gathered} 0.363^{6} \\ \text { NA }^{\prime} \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.284 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.132 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.191 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.043 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} 0.242 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.400 \\ \text { NA } \\ \hline \end{gathered}$ |
| Fraser Late | Harrison <br> River ${ }^{3}$ | 0.112 | 0.073 | 0.090 | 0.105 | $0.055^{9}$ | 0.032 | 0.058 | 0.032 | 0.035 | 0.031 | 0.058 |
| North Puget <br> Sound <br> Natural <br> Springs | Nooksack, Skagit | $\begin{aligned} & 0.183 \\ & \text { NA }^{2} \end{aligned}$ | $\begin{aligned} & 1.176 \\ & \text { NA } \end{aligned}$ | $\begin{gathered} 0.040 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.023 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.046 \\ \text { NA } \end{gathered}$ | NA <br> NA | NA <br> NA | NA NA | NA NA | NA NA | $\begin{gathered} 0.106 \\ \text { NA } \end{gathered}$ |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.021 | 0.123 | 0.040 | 0.063 | 0.006 | 0.018 | 0.028 | 0.079 | 0.268 | 0.073 | 0.247 |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| West Coast Vancouver Island Falls | WCVI <br> (Artlish, Burman, Kauok, Tahsis, Tashish, Marble) | 0.431 | 0.083 | 0.060 | 0.248 | $0.496{ }^{10}$ | 0.488 | 0.267 | 0.267 | 0.906 | 0.652 | 0.464 |
| Puget Sound <br> Natural <br> Summer / <br> Falls | Skagit <br> Stillaguamish <br> Snohomish <br> Washington <br> Green River | $\begin{aligned} & \mathrm{NA}^{2} \\ & 0.194 \\ & \mathrm{NA}^{2} \\ & \mathrm{NA}^{2} \\ & \\ & 0.171 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { NA } \\ 0.111 \\ \text { NA } \\ \text { NA } \\ 0.154 \end{gathered}$ | $\begin{gathered} \hline \text { NA } \\ 0.145 \\ \text { NA } \\ \text { NA } \\ 0.350 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { NA } \\ \text { NA } \\ \text { NA } \\ \text { NA } \\ 0.323 \\ \hline \end{gathered}$ | $\begin{gathered} \text { NA } \\ \text { NA } \\ \text { NA } \\ \text { NA } \\ 0.328 \end{gathered}$ | $\begin{gathered} \hline \text { NA } \\ 0.027 \\ \text { NA } \\ \text { NA } \\ 0.162 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { NA } \\ 0.057 \\ \text { NA } \\ \text { NA } \\ 0.085 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.074 \\ \text { NA } \\ \text { NA } \\ 0.109 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.192 \\ \text { NA } \\ \text { NA } \\ 0.076 \end{gathered}$ | $\begin{gathered} \text { NA } \\ \text { NA } \\ \text { NA } \\ \text { NA } \\ 0.106 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.252 \\ \text { NA } \\ \text { NA } \\ 0.208 \end{gathered}$ |
| North / <br> Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA ${ }^{2}$ | NA | 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 | NA |
| Columbia <br> River Falls ${ }^{4}$ | Upriver <br> Brights <br> Deschutes <br> Lewis ${ }^{3}$ | $\begin{aligned} & \mathrm{NA}^{2} \\ & \mathrm{NA}^{2} \\ & \mathrm{NA}^{2} \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \text { NA } \end{aligned}$ |
| Columbia R Summers ${ }^{4}$ | Mid-Columbia Summers ${ }^{3}$ | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Far North <br> Migrating OR <br> Coastal Falls ${ }^{4}$ | Nehalem ${ }^{3}$, <br> Siletz ${ }^{3}$, <br> Siuslaw $^{3}$ | NA ${ }^{2}$ | NA | 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.
6An 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 salmon.
7 Several problems have been identified in the approach previously used to calculate the CWT-based indices for Nanaimo Chinook salmon; indices for this stock will not be reported as their utility is questionable.

8Although model-based indices were previously calculated separately for Cowichan and Nanaimo Chinook salmon; these did not adequately represent impacts on either LGS stock. This is because the model-based data represent an aggregate of the 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 salmon, 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.
11For 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 based on CWT-based exploitation rate analysis

| (1999-2009) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Escapement <br> Indicator | CWT Indices ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
|  | Stocks | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|  | Hoko | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Washington Coastal Fall Naturals | Grays Harbor <br> Queets <br> Hoh <br> Quillayute | $\begin{aligned} & 0.430 \\ & 1.000 \\ & 1.540 \\ & 1.300 \end{aligned}$ | $\begin{aligned} & 1.630 \\ & 0.850 \\ & 2.750 \\ & 2.470 \end{aligned}$ | $\begin{aligned} & 0.860 \\ & 1.440 \\ & 1.660 \\ & 1.480 \end{aligned}$ | $\begin{aligned} & 0.540 \\ & 0.840 \\ & 0.950 \\ & 1.420 \end{aligned}$ | $\begin{aligned} & 0.150 \\ & 0.850 \\ & 1.340 \\ & 0.990 \end{aligned}$ | $\begin{aligned} & 0.530 \\ & 0.840 \\ & 1.220 \\ & 1.150 \end{aligned}$ | $\begin{aligned} & 0.560 \\ & 2.050 \\ & 1.030 \\ & 1.030 \end{aligned}$ | $\begin{aligned} & 0.520 \\ & 0.600 \\ & 1.290 \\ & 1.180 \end{aligned}$ | $\begin{aligned} & 0.790 \\ & 1.050 \\ & 2.230 \\ & 1.470 \end{aligned}$ | $\begin{aligned} & 0.390 \\ & 0.610 \\ & 0.950 \\ & 1.160 \end{aligned}$ | $\begin{aligned} & 0.700 \\ & 0.450 \\ & 1.220 \\ & 1.970 \end{aligned}$ |
| Columbia <br> River Falls | Upriver Brights Deschutes Lewis ${ }^{3}$ | $\begin{aligned} & 1.370 \\ & 0.510 \\ & 0.000 \end{aligned}$ | $\begin{aligned} & 2.530 \\ & 0.710 \\ & 0.360 \end{aligned}$ | $\begin{aligned} & 1.350 \\ & 0.520 \\ & 0.580 \end{aligned}$ | $\begin{aligned} & 1.320 \\ & 0.590 \\ & 0.560 \end{aligned}$ | $\begin{aligned} & 1.430 \\ & 0.049 \\ & 1.030 \end{aligned}$ | $\begin{aligned} & 1.740 \\ & 0.510 \\ & 0.170 \end{aligned}$ | $\begin{aligned} & 1.780 \\ & 0.670 \\ & 0.980 \end{aligned}$ | $\begin{aligned} & 3.080 \\ & 0.580 \\ & 1.330 \end{aligned}$ | $\begin{aligned} & 3.100 \\ & 0.510 \\ & 0.790 \end{aligned}$ | $\begin{aligned} & 1.830 \\ & 1.860 \\ & 0.630 \end{aligned}$ | $\begin{aligned} & 2.790 \\ & 2.360 \\ & 0.140 \end{aligned}$ |
| Puget Sound <br> Natural <br> Summer / Falls | Skagit <br> Stillaguamish <br> Snohomish <br> Lake <br> Washington <br> Green R | $\begin{aligned} & \mathrm{NA}^{2} \\ & 0.120 \\ & \mathrm{NA}^{2} \\ & \\ & \mathrm{NA}^{2} \\ & 0.500 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { NA } \\ 0.040 \\ \text { NA } \\ \text { NA } \\ 0.700 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.890 \\ \text { NA } \\ \text { NA } \\ 1.180 \end{gathered}$ | $\begin{gathered} \text { NA } \\ \text { NA } \\ \text { NA } \\ \text { NA } \\ 1.070 \end{gathered}$ | $\begin{gathered} \text { NA } \\ \text { NA } \\ \text { NA } \\ \text { NA } \\ 1.030 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.010 \\ \text { NA } \\ \text { NA } \\ 1.010 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.220 \\ \text { NA } \\ \text { NA } \\ 0.170 \\ \hline \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.080 \\ \text { NA } \\ \text { NA } \\ 0.370 \\ \hline \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.120 \\ \text { NA } \\ \text { NA } \\ 0.380 \end{gathered}$ | $\begin{gathered} \text { NA } \\ \text { NA }^{2} \\ \text { NA } \\ \text { NA } \\ 0.280 \end{gathered}$ | $\begin{gathered} \text { NA } \\ 0.200 \\ \text { NA } \\ \text { NA } \\ 0.290 \\ \hline \end{gathered}$ |
| Fraser Late | Harrison River ${ }^{3}$ | 0.470 | 0.130 | 0.310 | 0.410 | 0.640 | 0.320 | NA ${ }^{13}$ | NA | NA | 0.260 | 0.150 |
| 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 | 1.310 |
| Far North <br> Migrating OR <br> Coastal Falls | Nehalem ${ }^{3}$ <br> Siletz ${ }^{3}$ <br> Siuslaw $^{3}$ | $\begin{aligned} & 1.960 \\ & 0.820 \\ & 1.220 \end{aligned}$ | $\begin{aligned} & 1.970 \\ & 1.160 \\ & 2.450 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.940 \\ & 1.190 \\ & 2.180 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.170 \\ & 1.310 \\ & 2.560 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.110 \\ & 1.590 \\ & 3.820 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.800 \\ & 2.290 \\ & 1.030 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.000 \\ & 1.190 \\ & 1.630 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.480 \\ & 2.340 \\ & 2.230 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.010 \\ & 1.600 \\ & 1.000 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.920 \\ & 0.670 \\ & 0.640 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.590 \\ & 0.730 \\ & 1.070 \\ & \hline \end{aligned}$ |
| North Puget Sound Natural Springs | Nooksack Skagit | $\begin{gathered} 0.440 \\ \text { NA }^{2} \\ \hline \end{gathered}$ | $\begin{gathered} 0.000 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{gathered} 0.040 \\ \text { NA } \\ \hline \end{gathered}$ | $\begin{aligned} & \mathrm{NA}^{2} \\ & 1.120 \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \end{aligned}$ | $\begin{gathered} 0.210 \\ \text { NA } \end{gathered}$ | $\begin{gathered} 0.520 \\ \text { NA } \\ \hline \end{gathered}$ |
| Lower Strait of Georgia ${ }^{4}$ | Cowichan, Nanaimo ${ }^{5,}$ | $\begin{aligned} & N^{2} \\ & N^{2} \end{aligned}$ | $\begin{aligned} & 0.690 \\ & 0.690 \\ & \hline \end{aligned}$ | $\begin{aligned} & 11.350 \\ & 11.350 \end{aligned}$ | $\begin{aligned} & 5.780 \\ & 5.780 \end{aligned}$ | $\begin{aligned} & 4.990 \\ & 4.990 \end{aligned}$ | 7.250 | 10.230 | 15.070 | 1.550 | 4.040 | 5.140 |
| Upper Strait of Georgia ${ }^{4}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NA ${ }^{2}$ | NA | 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 | NA |
| West Coast <br> Vancouver <br> Island Falls ${ }^{4}$ | WCVI (Artlish, Burman, Kauok, Tahsis, Tashish, Marble) | NA ${ }^{2}$ | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | NA ${ }^{2}$ | NA | 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 2008 Revised Annexes.

|  | Escapement |  |  |  |  |  |  | Model Inc | ces |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indicator Stocks | $\begin{gathered} 1999 \\ \text { CLB0107 } \end{gathered}$ | $\begin{array}{\|c\|} \hline 2000 \\ \text { CLB0107 } \end{array}$ | $\begin{array}{c\|} \hline 2001 \\ \text { CLB0107 } \end{array}$ | $\begin{gathered} 2002 \\ \text { CLB0206 } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { CLB0308 } \end{gathered}$ | $\begin{array}{\|c\|} \hline 2004 \\ \text { CLB0404 } \end{array}$ | $\begin{gathered} 2005 \\ \text { CLB0506 } \end{gathered}$ | $\begin{gathered} 2006 \\ \text { CLB0604 } \end{gathered}$ | $\begin{gathered} 2007 \\ \text { CLB0705 } \end{gathered}$ | $\begin{gathered} 2008 \\ \text { CLB0807 } \end{gathered}$ | $\begin{gathered} 2009 \\ \text { CLB0907 } \end{gathered}$ | $\begin{gathered} 2010 \\ \text { CLB1007 } \end{gathered}$ | $\begin{gathered} 2011 \\ \text { CLB1106 } \end{gathered}$ |
| Lower Strait of Georgia | Cowichan Nanaimo | $\begin{aligned} & \hline 0.304 \\ & 0.209 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.232 \\ & 0.113 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.325 \\ & 0.246 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.541 \\ & 0.190 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.490 \\ & 0.498 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.593 \\ & 0.695 \\ & \hline \end{aligned}$ | $0.381{ }^{8}$ | $0.590{ }^{8}$ | $0.240{ }^{8}$ | $0.315^{8}$ | $0.494{ }^{8}$ | $0.203{ }^{8}$ | $0.367{ }^{8}$ |
| 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 | 0.193 |
|  |  | 0.233 | 0.156 | 0.241 | 0.195 | 0.251 | 0.273 | 0.314 | 0.993 | 0.563 | 0.470 | 0.988 | 0.568 | 0.732 |
| Sound Natural Springs | Nooksack, Skagit | NA ${ }^{2}$ | NA | NA | NA | 0.251 | 0.273 | 0.314 | 0.993 | 0.563 | 0.470 | 0.988 | 0.568 | 0.731 |
| Upper Strait of Georgia | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | 0.174 | 0.118 | 0.314 | 0.272 | 0.649 | 0.971 | 0.649 | 0.584 | 0.146 | 0.622 | 0.128 | 0.122 | 0.578 |
| Fraser Early (spring and summers) | Upper Fraser, Mid Fraser, Thompson | 0.125 | 0.124 | 0.210 | 0.145 | 0.661 | 0.718 | 0.654 | 0.610 | 0.159 | 0.128 | 0.094 | 0.121 | 0.222 |
| West Coast <br> Vancouver Island <br> Falls | WCVI (Artlish, <br> Burman, <br> Kauok, Tahsis, <br> Tashish, <br> Marble) | 0.365 | 0.327 | 0.244 | 0.342 | 0.744 | 0.927 | 0.728 | 1.082 | 0.133 | 1.490 | 0.137 | 0.122 | 0.491 |
|  | Skagit | 0.197 | 0.119 | 0.217 | 0.172 | 0.436 | 0.438 | 0.465 | 1.092 | 0.718 | 0.724 | 1.097 | 0.709 | 0.745 |
|  | Stillaguamish | 0.355 | 0.234 | 0.469 | 0.375 | 0. 513 | 0.567 | 0.587 | 1.166 | 0.821 | 0.796 | 1.123 | 0.791 | 0.793 |
|  | Snohomish | 0.185 | 0.116 | 0.222 | 0.176 | 0.435 | 0.445 | 0.457 | 1.101 | 0.736 | 0.721 | 1.098 | 0.718 | 0.744 |
| Puget Sound | Washington | 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 | 0.752 |
| 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 | 0.756 |
| 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 | 0.598 |
| Washington Coastal Fall Naturals ${ }^{4}$ | Hoko, Grays <br> Harbor, Queets, <br> Hoh, <br> 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 | 0.332 |
| Columbia River Falls ${ }^{4}$ | Upriver Brights Deschutes Lewis ${ }^{3}$ | $\begin{aligned} & 0.124 \\ & 0.124 \\ & 0.056 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.104 \\ & 0.104 \\ & 0.180 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.377 \\ & 0.377 \\ & 0.180 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.429 \\ & 0.429 \\ & 0.171 \\ & \hline \end{aligned}$ | 0.686 0.686 0.515 | $\begin{aligned} & 0.663 \\ & 0.663 \\ & 0.480 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.640 \\ & 0.640 \\ & 0.546 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.523 \\ & 0.523 \\ & 0.315 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.129 \\ & 0.129 \\ & 0.030 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.612 \\ & 0.612 \\ & 0.432 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.517 \\ & 0.517 \\ & 0.832 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.110 \\ & 0.110 \\ & 0.920 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.620 \\ & 0.620 \\ & 0.994 \\ & \hline \end{aligned}$ |
| Columbia R Summers ${ }^{4}$ | Mid-Columbia <br> 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 | 0.359 |
| Far North <br> Migrating OR Coastal Falls ${ }^{4}$ | Nehalem ${ }^{3}$, Siletz ${ }^{3}$, Siuslaw ${ }^{3}$ | 0.094 | 0.110 | 0.505 | 0.514 | 0.689 | 0.672 | 0.674 | 0.515 | 0.078 | 0.088 | 0.543 | NA | 0.529 |

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 2008 Revised Annexes.

|  | Escapement <br> Indicator Stocks | Model Indices |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1999 CLB0107 | 2000 CLB0107 | 2001 CLB0107 | $\begin{gathered} 2002 \\ \text { CLB0206 } \end{gathered}$ | 2003 CLB0308 | $\begin{gathered} 2004 \\ \text { CLB0404 } \end{gathered}$ | 2005 CLB0506 | $\begin{gathered} 2006 \\ \text { CLB0604 } \end{gathered}$ | $\begin{gathered} 2007 \\ \text { CLB0705 } \end{gathered}$ | 2008 CLB0807 | $\begin{gathered} 2009 \\ \text { CLB0907 } \end{gathered}$ | $\begin{gathered} 2010 \\ \text { CLB1007 } \end{gathered}$ | $\begin{gathered} 2011 \\ \text { CLB1106 } \end{gathered}$ |
| Washington Coastal Fall Naturals | Hoko Grays Harbor Queets Hoh Quillayute | $\begin{gathered} \hline 0.39 \\ 0.440 \\ 0.880 \\ 1.390 \\ 1.140 \end{gathered}$ | $\begin{gathered} \hline 0.34 \\ 0.430 \\ 0.420 \\ 0.730 \\ 0.720 \end{gathered}$ | $\begin{gathered} \hline 0.56 \\ 0.450 \\ 0.440 \\ 0.760 \\ 0.750 \end{gathered}$ | $\begin{gathered} \hline 0.48 \\ 0.840 \\ 1.050 \\ 1.260 \\ 1.310 \end{gathered}$ | 0.682 0.494 1.063 1.208 1.292 | $\begin{aligned} & \hline 0.966 \\ & 0.573 \\ & 0.932 \\ & 1.214 \\ & 1.139 \end{aligned}$ | $\begin{aligned} & \hline 0.444 \\ & 0.222 \\ & 1.023 \\ & 1.499 \\ & 1.133 \end{aligned}$ | $\begin{aligned} & \hline 0.442 \\ & 0.544 \\ & 1.022 \\ & 1.493 \\ & 0.673 \end{aligned}$ | $\begin{aligned} & \hline 0.401 \\ & 0.504 \\ & 1.014 \\ & 1.111 \\ & 0.883 \end{aligned}$ | $\begin{gathered} \hline 0.305 \\ 0.45 \\ 1.007 \\ 1.457 \\ 0.851 \end{gathered}$ | 0.284 0.404 0.508 0.981 0.881 | 0.130 0.382 0.285 0.987 0.963 | 0.419 0.549 0.327 0.760 1.058 |
| Columbia River Falls | Upriver Brights Deschutes Lewis ${ }^{3}$ | $\begin{aligned} & 1.020 \\ & 1.020 \\ & 0.110 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.090 \\ & 0.880 \\ & 0.160 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.990 \\ & 0.740 \\ & 1.700 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.910 \\ & 0.550 \\ & 0.930 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.022 \\ & 0.561 \\ & 0.851 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.906 \\ & 0.475 \\ & 1.008 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.734 \\ & 0.483 \\ & 1.058 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.814 \\ & 0.437 \\ & 1.861 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.726 \\ & 0.493 \\ & 1.466 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.701 \\ & 0.428 \\ & 0.436 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.798 \\ & 0.461 \\ & 0.470 \end{aligned}$ | $\begin{aligned} & 0.801 \\ & 1.004 \\ & 0.505 \end{aligned}$ | $\begin{aligned} & 0.841 \\ & 1.044 \\ & 0.426 \end{aligned}$ |
| Puget Sound Natural Summer Falls | Skagit Stillaguamish Snohomish <br> Lake Washington Green R | $\begin{aligned} & \hline 0.170 \\ & 0.140 \\ & 0.040 \\ & \\ & 0.500 \\ & 0.500 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.210 \\ & 0.140 \\ & 0.050 \\ & \\ & 0.480 \\ & 0.480 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.780 \\ & 0.400 \\ & 0.600 \\ & \\ & 0.590 \\ & 0.600 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.270 \\ & 0.200 \\ & 0.150 \\ & \\ & 1.250 \\ & 0.350 \\ & \hline \end{aligned}$ | 0.406 0.184 0.072 0.768 0.263 | 0.157 0.224 0.110 0.411 0.260 | 0.195 0.185 0.891 0.373 0.202 | $\begin{aligned} & \hline 0.258 \\ & 0.493 \\ & 0.199 \\ & \\ & 0.613 \\ & 0.361 \\ & \hline \end{aligned}$ | 0.325 0.152 0.138 0.391 0.278 | 0.321 0.137 0.165 0.392 0.380 | $\begin{aligned} & 0.292 \\ & 0.446 \\ & 0.202 \\ & \\ & 0.768 \\ & 0.555 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.261 \\ & 0.117 \\ & 0.125 \\ & \\ & 0.517 \\ & 0.520 \\ & \hline \end{aligned}$ | 0.789 0.169 0.211 0.387 0.236 |
| Fraser Late | 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 | 0.497 |
| $\begin{gathered} \hline \text { Columbia R } \\ \text { Summers } \\ \hline \end{gathered}$ | 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 | 1.398 |
| Far North Migrating OR Coastal Falls |  | $\begin{aligned} & 2.670 \\ & 1.810 \\ & 0.940 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.660 \\ & 1.790 \\ & 0.930 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.750 \\ & 1.870 \\ & 0.950 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.610 \\ & 1.330 \\ & 3.340 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.346 \\ & 1.302 \\ & 2.856 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.230 \\ & 1.288 \\ & 2.816 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.090 \\ & 1.233 \\ & 2.643 \end{aligned}$ | $\begin{aligned} & 1.912 \\ & 1.237 \\ & 1.095 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.183 \\ & 1.399 \\ & 1.241 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.968 \\ & 1.592 \\ & 0.971 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.003 \\ & 1.217 \\ & 1.632 \end{aligned}$ | $\begin{aligned} & 0.916 \\ & 0.698 \\ & 2.028 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.146 \\ & 0.643 \\ & 1.427 \end{aligned}$ |
| North Puget Sound Natural Springs | $\begin{gathered} \text { Nooksack } \\ \text { Skagit } \\ \hline \end{gathered}$ | $\begin{gathered} 0.150 \\ \text { ID } \\ \hline \end{gathered}$ | $\begin{gathered} 0.200 \\ \text { ID } \\ \hline \end{gathered}$ | $\begin{aligned} & 0.010 \\ & 0.070 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.000 \\ & 0.060 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.121 \\ & 0.119 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.974 \\ & 0.663 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.222 \\ & 0.213 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.121 \\ & 0.161 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { NA } \\ & \text { NA } \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.107 \\ & 0.143 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.181 \\ & 0.245 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.484 \\ & 0.271 \\ & \hline \end{aligned}$ |
| Lower Strait of Georgia ${ }^{4}$ | Cowichan, <br> Nanaimo ${ }^{5}$ | $\begin{aligned} & 0.170 \\ & 0.170 \end{aligned}$ | $\begin{aligned} & 0.210 \\ & 0.210 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.480 \\ & 0.480 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.220 \\ & 0.220 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.452 \\ & 0.452 \end{aligned}$ | $\begin{aligned} & 0.915 \\ & 0.915 \\ & \hline \end{aligned}$ | $0.407^{8}$ | $0.271{ }^{\text {8 }}$ | $0.288{ }^{\text {8 }}$ | $0.333{ }^{8}$ | $0.367{ }^{8}$ | $0.216{ }^{8}$ | $0.367{ }^{8}$ |
| Upper Strait of Georgia ${ }^{4}$ | Klinaklini, Kakweikan, Wakeman, Kingcome, Nimpkish | NC ${ }^{13}$ | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC |
| Fraser Early (spring and 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 | 0.239 |
| West Coast Vancouver Island Falls ${ }^{4}$ | WCVI (Artlish, Burman, Kauok, 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 | 0.378 |
| North / Central B. C. | Yakoun, Nass, Skeena, Area 8 | NC ${ }^{13}$ | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC | NC |

> Appendix C $\quad$ Percent distribution of landed catch and total mortality among fisheries and escapement for exploitation rate indicator stocks by calendar year with analogous model stocks listed in parentheses.

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. Data is not reported for a particular calendar year if there are less than 3 age classes present in the calendar year or if there are less than 10 estimated CWTs in the reported catch and escapement.

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Appendix C.1. Percent distribution of Alaska Spring (Alaska South SE) reported catch among fisheries and escapement.

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 49 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 1544 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |
| 1981 | 824 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 5371 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 6314 | 3,4,5,6 | 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\% | 50.6\% |
| 2001 | 6754 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 8472 | 3,4,5,6 | 15.3\% | 5.1\% | 5.3\% | 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\% | 9.3\% | 63.7\% |
| 2005 | 7858 | 3,4,5,6 | 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 | 10278 | 3,4,5,6 | 32.3\% | 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\% | 45.4\% |
| 2007 | 9976 | 3,4,5,6 | 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\% | 9.7\% | 50.2\% |
| 2008 | 9880 | 3,4,5,6 | 18.9\% | 3.4\% | 3.8\% | 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\% | 1.1\% | 14.2\% | 58.3\% |
| 2009 | 7451 | 3,4,5,6 | 14.1\% | 3.2\% | 3.7\% | 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\% | 5.0\% | 8.2\% | 65.1\% |
| 1979-2009 | 8478 |  | 22.8\% | 4.0\% | 9.2\% | 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\% | 1.8\% | 9.6\% | 51.6\% |
| 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\% |
| 1999-2009 | 7688 |  | 19.3\% | 3.2\% | 7.9\% | 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\% | 1.7\% | 11.3\% | 55.9\% |

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

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 313 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 1852 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |
| 1981 | 1080 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 12593 | 3,4,5,6 | 29.7\% | 2.4\% | 15.9\% | 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\% | 1.9\% | 48.9\% |
| 1985 | 19489 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 16662 | 3,4,5,6 | 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 | 14237 | 3,4,5,6 | 24.2\% | 13.8\% | 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\% | 42.0\% |
| 1990 | 17311 | 3,4,5,6 | 37.7\% | 5.4\% | 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 | 16147 | 3,4,5,6 | 37.5\% | 6.5\% | 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\% | 33.9\% |
| 1992 | 10311 | 3,4,5,6 | 19.2\% | 31.6\% | 8.8\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 8.6\% | 31.2\% |
| 1993 | 6793 | 3,4,5,6 | 22.3\% | 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 | 7789 | 3,4,5,6 | 15.9\% | 29.7\% | 11.1\% | 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\% | 3.0\% | 36.6\% |
| 1995 | 7185 | 3,4,5,6 | 28.7\% | 8.6\% | 11.6\% | 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\% | 7.4\% | 34.1\% |
| 1996 | 6890 | 3,4,5,6 | 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 | 6119 | 3,4,5,6 | 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 | 4299 | 3,4,5,6 | 25.9\% | 10.5\% | 13.9\% | 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 | 3,4,5,6 | 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 | 7202 | 3,4,5,6 | 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\% | 11.5\% | 44.4\% |
| 2001 | 7308 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 6346 | 3,4,5,6 | 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 | 9388 | 3,4,5,6 | 17.9\% | 7.1\% | 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\% | 0.5\% | 9.1\% | 57.5\% |
| 2005 | 9285 | 3,4,5,6 | 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 | 11776 | 3,4,5,6 | 36.5\% | 4.6\% | 6.8\% | 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\% | 39.7\% |
| 2007 | 11512 | 3,4,5,6 | 32.7\% | 5.6\% | 6.9\% | 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\% | 43.5\% |
| 2008 | 10767 | 3,4,5,6 | 22.3\% | 4.0\% | 4.7\% | 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\% | 1.1\% | 13.9\% | 53.5\% |
| 2009 | 8309 | 3,4,5,6 | 17.6\% | 4.5\% | 4.5\% | 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\% | 5.9\% | 8.1\% | 58.4\% |
| 1979-2009 | 10011 |  | 26.5\% | 7.3\% | 10.4\% | 0.6\% | 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\% | 0.0\% | 1.8\% | 8.9\% | 44.0\% |
| 1979-1984 | 5919 |  | 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 | 14026 |  | 27.7\% | 11.8\% | 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\% | 40.3\% |
| 1996-1998 | 5769 |  | 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\% | 15.1\% | 32.6\% |
| 1999-2009 | 8641 |  | 22.5\% | 4.4\% | 9.3\% | 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\% | 1.9\% | 11.0\% | 50.1\% |

Appendix C.3. Percent distribution of Big Qualicum River Fall (Lower Strait of Georgia Hatchery and Natural) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 559 | 2,3,4,5 | 10.7\% | 0.2\% | 0.7\% | 5.0\% | 7.3\% | 0.7\% | 2.1\% | 0.0\% | 5.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 61.7\% |
| 2008 | 377 | 2,3,4,5 | 4.2\% | 0.8\% | 0.3\% | 1.6\% | 6.9\% | 0.8\% | 6.6\% | 0.0\% | 6.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 1.9\% | 0.0\% | 0.0\% | 2.1\% | 66.3\% |
| 2009 | 499 | 2,3,4,5 | 3.6\% | 3.8\% | 0.0\% | 1.8\% | 3.2\% | 1.6\% | 4.6\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 2.4\% | 69.7\% |
| 1979-2009 | 711 |  | 5.0\% | 0.9\% | 0.5\% | 2.5\% | 3.8\% | 1.9\% | 1.0\% | 4.2\% | 17.2\% | 2.8\% | 7.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.8\% | 0.3\% | 0.0\% | 0.0\% | 5.4\% | 46.5\% |
| 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\% |
| 1999-2009 | 399 |  | 7.3\% | 1.5\% | 0.7\% | 2.1\% | 6.3\% | 1.5\% | 2.1\% | 0.0\% | 6.6\% | 0.3\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 1.4\% | 0.2\% | 0.0\% | 0.0\% | 2.4\% | 66.9\% |

Appendix C.4. Percent distribution of Big Qualicum River Fall (Lower Strait of Georgia Hatchery and Natural) total fishing mortalities among fisheries and
escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 604 | 2,3,4,5 | 4.3\% | 5.1\% | 0.8\% | 3.6\% | 1.8\% | 5.1\% | 0.0\% | 2.0\% | 20.9\% | 0.5\% | 8.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 18.2\% | 28.0\% |
| 1990 | 741 | 2,3,4,5 | 5.3\% | 3.8\% | 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\% | 32.3\% |
| 1991 | 741 | 2,3,4,5 | 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 | 2,3,4,5 | 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\% | 21.2\% |
| 1993 | 492 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 613 | 2,3,4,5 | 12.7\% | 0.2\% | 1.0\% | 5.4\% | 9.0\% | 0.7\% | 2.3\% | 0.0\% | 5.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 56.3\% |
| 2008 | 418 | 2,3,4,5 | 5.7\% | 1.0\% | 0.5\% | 1.9\% | 7.9\% | 1.0\% | 7.2\% | 0.0\% | 7.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 2.9\% | 0.0\% | 0.0\% | 2.4\% | 59.8\% |
| 2009 | 538 | 2,3,4,5 | 4.6\% | 4.8\% | 0.0\% | 2.0\% | 3.9\% | 1.5\% | 5.0\% | 0.0\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.9\% | 1.1\% | 0.0\% | 0.0\% | 2.6\% | 64.7\% |
| 1979-2009 | 791 |  | 5.9\% | 1.6\% | 0.6\% | 2.8\% | 4.4\% | 2.1\% | 1.1\% | 4.5\% | 18.1\% | 3.1\% | 7.1\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.9\% | 0.4\% | 0.0\% | 0.0\% | 5.6\% | 41.7\% |
| 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\% | 25.1\% | 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\% |
| 1999-2009 | 439 |  | 8.6\% | 2.4\% | 0.9\% | 2.4\% | 7.8\% | 1.5\% | 2.2\% | 0.0\% | 7.5\% | 0.3\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 1.6\% | 0.4\% | 0.0\% | 0.0\% | 2.5\% | 60.9\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 2728 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 4861 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 2226 | 2,3,4 | 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 | 1816 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 19.5\% | 0.0\% | 7.8\% | 19.3\% | 2.5\% | 14.1\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 4.0\% | 5.6\% | 0.0\% | 0.0\% | 1.1\% | 22.2\% |
| 1987 | 2366 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.3\% | 16.2\% | 0.5\% | 14.6\% | 19.5\% | 0.4\% | 2.6\% | 0.0\% | 3.8\% | 0.0\% | 0.2\% | 3.8\% | 2.5\% | 0.0\% | 0.0\% | 1.3\% | 33.5\% |
| 1988 | 2167 | 2,3,4,5 | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 17.9\% | 0.0\% | 6.6\% | 10.6\% | 0.0\% | 2.4\% | 0.0\% | 4.2\% | 0.0\% | 0.1\% | 3.0\% | 1.7\% | 0.0\% | 0.0\% | 2.6\% | 50.3\% |
| 1989 | 1036 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.5\% | 0.0\% | 1.4\% | 15.3\% | 0.0\% | 4.2\% | 0.0\% | 5.3\% | 0.0\% | 0.2\% | 3.8\% | 1.2\% | 0.0\% | 0.0\% | 0.7\% | 48.3\% |
| 1990 | 1291 | 2,3,4,5 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 9.5\% | 2.4\% | 3.6\% | 10.5\% | 0.2\% | 5.7\% | 0.0\% | 6.2\% | 0.0\% | 0.5\% | 12.1\% | 5.0\% | 0.0\% | 0.0\% | 1.2\% | 42.0\% |
| 1991 | 2472 | 2,3,4,5 | 0.2\% | 0.1\% | 0.0\% | 0.4\% | 0.2\% | 18.3\% | 0.7\% | 7.8\% | 12.4\% | 0.2\% | 5.1\% | 0.0\% | 13.4\% | 0.0\% | 0.1\% | 5.3\% | 4.5\% | 0.0\% | 0.0\% | 1.7\% | 29.5\% |
| 1992 | 3710 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 18.1\% | 0.1\% | 5.3\% | 9.6\% | 0.6\% | 1.3\% | 0.0\% | 8.2\% | 0.0\% | 0.1\% | 0.9\% | 3.2\% | 0.0\% | 0.0\% | 1.2\% | 50.7\% |
| 1993 | 1845 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 11.8\% | 0.4\% | 6.6\% | 6.6\% | 0.0\% | 1.5\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.6\% | 63.0\% |
| 1994 | 615 | 2,3,4,5 | 0.3\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 6.8\% | 2.4\% | 2.8\% | 5.2\% | 0.3\% | 6.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 3.7\% | 3.6\% | 0.0\% | 0.0\% | 5.5\% | 60.8\% |
| 1995 | 1979 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 8.7\% | 0.5\% | 0.0\% | 5.4\% | 0.0\% | 2.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 1.1\% | 1.7\% | 0.0\% | 0.0\% | 1.1\% | 78.3\% |
| 1996 | 1477 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 13.3\% | 0.0\% | 2.2\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.9\% | 2.7\% | 0.0\% | 0.0\% | 2.4\% | 73.4\% |
| 1997 | 2164 | 2,3,4,5 | 0.6\% | 0.0\% | 0.0\% | 0.1\% | 0.5\% | 9.9\% | 2.8\% | 0.0\% | 11.8\% | 0.5\% | 2.7\% | 0.0\% | 4.9\% | 0.0\% | 0.1\% | 2.3\% | 3.2\% | 0.0\% | 0.0\% | 3.0\% | 57.6\% |
| 1998 | 3110 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.3\% | 0.0\% | 2.7\% | 0.0\% | 0.5\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.0\% | 0.0\% | 1.2\% | 90.8\% |
| 1999 | 3173 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.3\% | 1.9\% | 0.0\% | 8.7\% | 0.0\% | 0.4\% | 0.0\% | 11.6\% | 0.0\% | 0.5\% | 0.7\% | 0.4\% | 0.0\% | 0.0\% | 1.6\% | 73.6\% |
| 2000 | 2572 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 5.4\% | 2.4\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.5\% | 0.4\% | 0.0\% | 0.0\% | 2.4\% | 81.3\% |
| 2001 | 3734 | 2,3,4,5 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 3.6\% | 1.4\% | 0.0\% | 5.6\% | 0.0\% | 0.5\% | 0.0\% | 5.7\% | 0.0\% | 0.3\% | 0.9\% | 2.2\% | 0.0\% | 0.0\% | 11.1\% | 68.3\% |
| 2002 | 4843 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 8.4\% | 4.5\% | 0.0\% | 3.0\% | 0.0\% | 0.6\% | 0.0\% | 7.0\% | 0.0\% | 1.1\% | 0.3\% | 1.3\% | 0.0\% | 0.0\% | 4.8\% | 68.6\% |
| 2003 | 4481 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 5.7\% | 2.3\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 0.0\% | 7.5\% | 0.0\% | 0.4\% | 0.3\% | 0.8\% | 0.0\% | 0.0\% | 6.2\% | 73.6\% |
| 2004 | 6578 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 5.0\% | 2.1\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 6.0\% | 0.0\% | 0.2\% | 0.1\% | 0.7\% | 0.0\% | 0.0\% | 4.6\% | 79.8\% |
| 2005 | 3909 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 7.4\% | 3.8\% | 0.0\% | 3.0\% | 0.0\% | 3.4\% | 0.0\% | 3.4\% | 0.0\% | 0.8\% | 0.8\% | 0.5\% | 0.0\% | 0.0\% | 5.8\% | 70.8\% |
| 2006 | 2918 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 7.2\% | 1.9\% | 0.0\% | 2.0\% | 0.0\% | 0.6\% | 0.0\% | 2.3\% | 0.0\% | 0.3\% | 0.2\% | 1.1\% | 0.0\% | 0.0\% | 4.3\% | 79.9\% |
| 2007 | 1671 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.4\% | 2.7\% | 0.0\% | 0.8\% | 0.0\% | 2.8\% | 0.0\% | 2.2\% | 0.0\% | 0.1\% | 0.4\% | 0.5\% | 0.0\% | 0.2\% | 5.7\% | 77.0\% |
| 2008 | 2675 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 4.3\% | 0.0\% | 1.5\% | 0.0\% | 0.9\% | 0.0\% | 3.7\% | 0.0\% | 1.5\% | 0.7\% | 1.3\% | 0.0\% | 0.0\% | 9.7\% | 65.6\% |
| 2009 | 2677 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 2.8\% | 0.0\% | 2.1\% | 0.0\% | 2.4\% | 0.0\% | 0.6\% | 0.0\% | 0.3\% | 0.9\% | 1.3\% | 0.0\% | 0.0\% | 12.9\% | 75.2\% |
| 1979-2009 | 2700 |  | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 10.1\% | 1.6\% | 2.5\% | 7.9\% | 0.3\% | 2.8\% | 0.0\% | 4.9\% | 0.0\% | 0.3\% | 2.1\% | 2.0\% | 0.0\% | 0.0\% | 3.8\% | 61.1\% |
| 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 | 1957 |  | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 16.4\% | 0.6\% | 5.6\% | 12.5\% | 0.6\% | 4.8\% | 0.0\% | 5.2\% | 0.0\% | 0.2\% | 3.9\% | 3.1\% | 0.0\% | 0.0\% | 1.7\% | 44.7\% |
| 1996-1998 | 2250 |  | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 3.4\% | 1.1\% | 0.0\% | 9.3\% | 0.2\% | 1.8\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 1.2\% | 2.1\% | 0.0\% | 0.0\% | 2.2\% | 73.9\% |
| 1999-2009 | 3566 |  | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 5.7\% | 2.7\% | 0.0\% | 3.0\% | 0.0\% | 1.2\% | 0.0\% | 4.9\% | 0.0\% | 0.5\% | 0.5\% | 1.0\% | 0.0\% | 0.0\% | 6.3\% | 74.0\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 3672 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 5326 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 2571 | 2,3,4 | 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 | 2130 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 20.5\% | 0.0\% | 9.5\% | 17.8\% | 2.6\% | 13.1\% | 0.0\% | 2.8\% | 0.0\% | 0.2\% | 5.0\% | 7.6\% | 0.0\% | 0.0\% | 1.0\% | 18.9\% |
| 1987 | 2651 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.3\% | 19.0\% | 0.5\% | 16.0\% | 18.6\% | 0.5\% | 2.3\% | 0.0\% | 4.0\% | 0.0\% | 0.2\% | 3.9\% | 2.7\% | 0.0\% | 0.0\% | 1.2\% | 29.9\% |
| 1988 | 2333 | 2,3,4,5 | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 18.6\% | 0.0\% | 6.6\% | 11.1\% | 0.0\% | 2.3\% | 0.0\% | 4.3\% | 0.0\% | 0.1\% | 4.1\% | 2.8\% | 0.0\% | 0.0\% | 2.6\% | 46.7\% |
| 1989 | 1260 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.0\% | 0.0\% | 1.8\% | 18.4\% | 0.0\% | 3.7\% | 0.0\% | 6.0\% | 0.0\% | 0.2\% | 3.8\% | 1.3\% | 0.0\% | 0.0\% | 0.6\% | 39.7\% |
| 1990 | 1667 | 2,3,4,5 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 11.3\% | 2.2\% | 3.7\% | 11.2\% | 0.1\% | 5.0\% | 0.0\% | 6.5\% | 0.0\% | 0.5\% | 16.7\% | 7.9\% | 0.0\% | 0.0\% | 1.0\% | 32.5\% |
| 1991 | 3006 | 2,3,4,5 | 0.2\% | 0.1\% | 0.0\% | 0.4\% | 0.2\% | 20.0\% | 0.7\% | 9.3\% | 13.3\% | 0.2\% | 4.5\% | 0.0\% | 13.8\% | 0.0\% | 0.1\% | 6.0\% | 5.2\% | 0.0\% | 0.0\% | 1.6\% | 24.3\% |
| 1992 | 4131 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 20.3\% | 0.1\% | 6.7\% | 10.4\% | 0.7\% | 1.2\% | 0.0\% | 8.7\% | 0.0\% | 0.1\% | 0.9\% | 3.5\% | 0.0\% | 0.0\% | 1.2\% | 45.6\% |
| 1993 | 1983 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 13.3\% | 0.4\% | 8.2\% | 7.3\% | 0.0\% | 1.4\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 1.6\% | 58.6\% |
| 1994 | 712 | 2,3,4,5 | 0.4\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 8.4\% | 2.7\% | 3.4\% | 6.2\% | 0.4\% | 6.6\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 5.5\% | 6.0\% | 0.0\% | 0.0\% | 5.2\% | 52.5\% |
| 1995 | 2168 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 13.0\% | 0.5\% | 0.0\% | 6.4\% | 0.0\% | 2.4\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 1.4\% | 2.4\% | 0.0\% | 0.0\% | 1.1\% | 71.5\% |
| 1996 | 1635 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 2.1\% | 0.4\% | 0.0\% | 15.8\% | 0.0\% | 2.6\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 1.2\% | 4.6\% | 0.0\% | 0.0\% | 2.4\% | 66.3\% |
| 1997 | 2421 | 2,3,4,5 | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 12.4\% | 2.7\% | 0.0\% | 13.6\% | 0.5\% | 3.0\% | 0.0\% | 5.4\% | 0.0\% | 0.1\% | 2.5\% | 4.0\% | 0.0\% | 0.0\% | 2.9\% | 51.5\% |
| 1998 | 3176 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.3\% | 0.0\% | 3.3\% | 0.0\% | 0.6\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.3\% | 0.9\% | 0.0\% | 0.0\% | 1.3\% | 88.9\% |
| 1999 | 3365 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.3\% | 1.9\% | 0.0\% | 10.6\% | 0.0\% | 0.4\% | 0.0\% | 13.6\% | 0.0\% | 0.5\% | 0.7\% | 0.6\% | 0.0\% | 0.0\% | 1.6\% | 69.4\% |
| 2000 | 2684 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 5.9\% | 2.8\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.1\% | 0.7\% | 1.0\% | 0.0\% | 0.0\% | 2.5\% | 77.9\% |
| 2001 | 4056 | 2,3,4,5 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 3.7\% | 1.6\% | 0.0\% | 6.8\% | 0.0\% | 0.5\% | 0.0\% | 6.5\% | 0.0\% | 0.4\% | 1.1\% | 4.9\% | 0.0\% | 0.0\% | 11.2\% | 62.9\% |
| 2002 | 5128 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 8.6\% | 5.1\% | 0.0\% | 3.6\% | 0.0\% | 0.7\% | 0.0\% | 8.1\% | 0.0\% | 1.2\% | 0.4\% | 2.0\% | 0.0\% | 0.0\% | 4.9\% | 64.8\% |
| 2003 | 4664 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 5.9\% | 2.8\% | 0.0\% | 2.9\% | 0.0\% | 0.3\% | 0.0\% | 8.5\% | 0.0\% | 0.5\% | 0.3\% | 1.3\% | 0.0\% | 0.0\% | 6.4\% | 70.7\% |
| 2004 | 6761 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 5.2\% | 2.4\% | 0.0\% | 0.8\% | 0.0\% | 0.7\% | 0.0\% | 6.8\% | 0.0\% | 0.2\% | 0.1\% | 1.1\% | 0.0\% | 0.0\% | 4.8\% | 77.6\% |
| 2005 | 4043 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 7.5\% | 4.2\% | 0.0\% | 3.5\% | 0.0\% | 3.5\% | 0.0\% | 3.8\% | 0.0\% | 0.9\% | 0.9\% | 1.0\% | 0.0\% | 0.0\% | 6.0\% | 68.4\% |
| 2006 | 3008 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 7.4\% | 2.2\% | 0.0\% | 2.3\% | 0.0\% | 0.6\% | 0.0\% | 2.8\% | 0.0\% | 0.3\% | 0.3\% | 1.7\% | 0.0\% | 0.0\% | 4.5\% | 77.5\% |
| 2007 | 1765 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 8.5\% | 3.2\% | 0.0\% | 1.1\% | 0.0\% | 3.0\% | 0.0\% | 2.5\% | 0.0\% | 0.1\% | 0.7\% | 1.6\% | 0.0\% | 0.2\% | 5.9\% | 72.9\% |
| 2008 | 2785 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 4.7\% | 0.0\% | 1.9\% | 0.0\% | 0.9\% | 0.0\% | 4.6\% | 0.0\% | 1.6\% | 0.9\% | 1.7\% | 0.0\% | 0.0\% | 10.0\% | 63.0\% |
| 2009 | 2922 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 3.3\% | 0.0\% | 2.6\% | 0.0\% | 2.6\% | 0.0\% | 0.7\% | 0.0\% | 0.3\% | 1.3\% | 5.4\% | 0.0\% | 0.0\% | 13.2\% | 68.9\% |
| 1979-2009 | 2921 |  | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 11.3\% | 1.8\% | 2.9\% | 8.6\% | 0.3\% | 2.8\% | 0.0\% | 5.4\% | 0.0\% | 0.3\% | 2.6\% | 3.1\% | 0.0\% | 0.0\% | 3.8\% | 56.5\% |
| 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 | 2237 |  | 0.4\% | 0.1\% | 0.0\% | 0.3\% | 0.2\% | 18.4\% | 0.6\% | 6.5\% | 12.9\% | 0.6\% | 4.5\% | 0.0\% | 5.5\% | 0.0\% | 0.2\% | 4.8\% | 4.2\% | 0.0\% | 0.0\% | 1.6\% | 39.2\% |
| 1996-1998 | 2411 |  | 0.5\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 4.9\% | 1.1\% | 0.0\% | 10.9\% | 0.2\% | 2.0\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 1.3\% | 3.1\% | 0.0\% | 0.0\% | 2.2\% | 68.9\% |
| 1999-2009 | 3744 |  | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 5.9\% | 3.1\% | 0.0\% | 3.6\% | 0.0\% | 1.2\% | 0.0\% | 5.7\% | 0.0\% | 0.6\% | 0.7\% | 2.0\% | 0.0\% | 0.0\% | 6.5\% | 70.4\% |

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

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | SEAK |  |  |  |  | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 37 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 196 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 349 | 3,4,5 | 6.6\% | 10.0\% | 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\% | 75.4\% |
| 2005 | 346 | 3,4,5,6 | 6.6\% | 6.1\% | 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\% | 85.3\% |
| 2006 | 179 | 3,4,5,6 | 5.0\% | 2.2\% | 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\% | 90.5\% |
| 2007 | 154 | 3,4,5,6 | 7.1\% | 8.4\% | 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\% | 79.2\% |
| 2008 | 257 | 3,4,5,6 | 7.8\% | 7.8\% | 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\% | 83.3\% |
| 2009 | 331 | 4,5,6 | 5.4\% | 1.8\% | 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\% | 0.0\% | 0.0\% | 0.0\% | 92.4\% |
| 1979-2009 | 269 |  | 6.4\% | 6.1\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 84.3\% |
| 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 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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\% |
| 1999-2009 | 269 |  | 6.4\% | 6.1\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 84.3\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 49 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 218 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 367 | 3,4,5 | 7.4\% | 12.5\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 71.7\% |
| 2005 | 358 | 3,4,5,6 | 7.3\% | 8.1\% | 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\% | 82.4\% |
| 2006 | 184 | 3,4,5,6 | 6.0\% | 3.3\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.0\% |
| 2007 | 176 | 3,4,5,6 | 8.5\% | 15.9\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 69.3\% |
| 2008 | 266 | 3,4,5,6 | 8.6\% | 9.8\% | 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\% | 80.5\% |
| 2009 | 332 | 4,5,6 | 5.4\% | 2.1\% | 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\% | 92.2\% |
| 1979-2009 | 280 |  | 7.2\% | 8.6\% | 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\% | 80.7\% |
| 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 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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\% |
| 1999-2009 | 280 |  | 7.2\% | 8.6\% | 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\% | 80.7\% |

Appendix C.9. Percent distribution of Cowichan River Fall (Lower Strait of Georgia Natural) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 73 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 261 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 343 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1072 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 209 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.4\% | 12.9\% | 0.0\% | 22.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 36.8\% |
| 2009 | 358 | 2,3,4 | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 6.4\% | 10.9\% | 0.0\% | 33.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 4.7\% | 3.6\% | 0.0\% | 8.9\% | 0.0\% | 31.0\% |
| 1979-2009 | 970 |  | 0.6\% | 0.1\% | 0.0\% | 0.3\% | 1.0\% | 7.7\% | 3.7\% | 2.9\% | 26.5\% | 0.3\% | 2.3\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 4.9\% | 1.6\% | 0.0\% | 5.0\% | 2.8\% | 39.3\% |
| 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 | 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\% |
| 1999-2009 | 394 |  | 0.6\% | 0.1\% | 0.1\% | 0.5\% | 1.4\% | 11.0\% | 5.9\% | 0.0\% | 19.4\% | 0.3\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 6.9\% | 1.8\% | 0.0\% | 6.8\% | 3.2\% | 40.7\% |

Appendix C.10. Percent distribution of Cowichan River Fall (Lower Strait of Georgia Natural) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 107 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 287 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 491 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1545 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 251 | 2,4,5 | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 9.2\% | 2.4\% | 0.0\% | 7.6\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 9.2\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 62.5\% |
| 2008 | 243 | 2,3,5 | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 13.2\% | 13.6\% | 0.0\% | 25.9\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 6.2\% | 0.8\% | 0.0\% | 7.0\% | 0.0\% | 31.7\% |
| 2009 | 407 | 2,3,4 | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 5.7\% | 11.1\% | 0.0\% | 35.1\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 6.1\% | 5.4\% | 0.0\% | 8.1\% | 0.0\% | 27.3\% |
| 1979-2009 | 1175 |  | 0.7\% | 0.1\% | 0.1\% | 0.3\% | 1.2\% | 7.7\% | 3.9\% | 3.3\% | 29.3\% | 0.4\% | 2.2\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 6.0\% | 2.3\% | 0.0\% | 4.6\% | 3.1\% | 33.9\% |
| 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 | 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\% |
| 1999-2009 | 453 |  | 0.6\% | 0.1\% | 0.2\% | 0.5\% | 1.6\% | 10.5\% | 6.2\% | 0.0\% | 21.8\% | 0.4\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.3\% | 8.5\% | 2.8\% | 0.0\% | 6.3\% | 3.5\% | 35.5\% |

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

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 242 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 378 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1316 | 2,3,4,5 | 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\% | 0.2\% | 0.5\% | 0.0\% | 22.8\% | 8.4\% | 29.0\% |
| 1988 | 1447 | 2,3,4,5 | 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 | 574 | 2,3,4,5 | 3.3\% | 0.0\% | 0.7\% | 4.5\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 17.9\% | 0.0\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 7.1\% | 7.1\% | 47.7\% |
| 1990 | 274 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 456 | 2,3,4,5 | 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\% | 70.6\% |
| 2002 | 529 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 135 | 2,3,4,5 | 2.2\% | 1.5\% | 0.0\% | 5.2\% | 0.0\% | 10.4\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 60.0\% |
| 2008 | 192 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 5.2\% | 0.0\% | 1.6\% | 0.0\% | 2.6\% | 9.9\% | 70.3\% |
| 2009 | 330 | 3,4,5 | 2.7\% | 0.0\% | 1.5\% | 0.0\% | 2.1\% | 1.5\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 4.2\% | 0.0\% | 1.8\% | 0.0\% | 1.8\% | 3.0\% | 71.5\% |
| 1979-2009 | 424 |  | 3.6\% | 0.3\% | 0.5\% | 2.3\% | 0.6\% | 8.6\% | 1.2\% | 0.0\% | 0.3\% | 0.5\% | 0.9\% | 0.0\% | 10.6\% | 0.1\% | 5.6\% | 0.2\% | 0.3\% | 0.0\% | 6.6\% | 4.7\% | 53.0\% |
| 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\% | 4.3\% | 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\% |
| 1999-2009 | 270 |  | 3.4\% | 0.8\% | 0.5\% | 1.3\% | 0.7\% | 6.1\% | 2.5\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 0.0\% | 6.5\% | 0.0\% | 0.4\% | 0.0\% | 3.5\% | 5.5\% | 56.6\% |


| Appendix C.12. Percent distribution of Cowlitz Fall Tule (Fall Cowlitz Hatchery) total fishing mortalities among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 29 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 290 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 423 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1532 | 2,3,4,5 | 0.5\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 14.0\% | 0.0\% | 0.0\% | 0.3\% | 0.7\% | 1.8\% | 0.0\% | 14.6\% | 0.0\% | 5.5\% | 0.3\% | 0.5\% | 0.0\% | 29.8\% | 6.7\% | 24.9\% |
| 1987 | 1481 | 2,3,4,5 | 5.6\% | 0.6\% | 0.0\% | 4.6\% | 0.0\% | 11.3\% | 0.9\% | 0.0\% | 0.0\% | 1.4\% | 0.7\% | 0.0\% | 12.2\% | 0.0\% | 7.1\% | 0.1\% | 0.5\% | 0.0\% | 21.2\% | 8.0\% | 25.7\% |
| 1988 | 1557 | 2,3,4,5 | 1.8\% | 0.6\% | 0.0\% | 2.1\% | 0.0\% | 17.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 15.9\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 22.8\% | 10.5\% | 25.8\% |
| 1989 | 609 | 2,3,4,5 | 4.3\% | 0.0\% | 0.7\% | 4.8\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 18.9\% | 0.0\% | 3.3\% | 0.0\% | 0.3\% | 0.0\% | 6.9\% | 7.4\% | 45.0\% |
| 1990 | 297 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 479 | 2,3,4,5 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.1\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 2.9\% | 67.2\% |
| 2002 | 578 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 152 | 2,3,4,5 | 2.6\% | 3.3\% | 0.0\% | 5.3\% | 0.0\% | 9.9\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.1\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.3\% |
| 2008 | 204 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 5.9\% | 0.0\% | 3.4\% | 0.0\% | 2.5\% | 10.8\% | 66.2\% |
| 2009 | 340 | 3,4,5 | 2.9\% | 0.0\% | 1.5\% | 0.0\% | 2.4\% | 1.8\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 0.0\% | 4.4\% | 0.0\% | 2.1\% | 0.0\% | 1.8\% | 3.5\% | 69.4\% |
| 1979-2009 | 460 |  | 4.3\% | 0.5\% | 0.6\% | 2.6\% | 0.6\% | 9.3\% | 1.3\% | 0.0\% | 0.4\% | 0.6\% | 0.9\% | 0.0\% | 11.6\% | 0.1\% | 5.8\% | 0.2\% | 0.5\% | 0.0\% | 6.2\% | 5.0\% | 49.7\% |
| 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 | 665 |  | 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\% | 46.9\% |
| 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\% |
| 1999-2009 | 288 |  | 3.9\% | 1.1\% | 0.5\% | 1.3\% | 0.8\% | 6.0\% | 2.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 13.2\% | 0.0\% | 6.9\% | 0.0\% | 0.7\% | 0.0\% | 3.3\% | 6.0\% | 53.1\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | SEAK |  |  | NBC |  | WCVI |  | Geo St |  | Canada |  |  | WAIOR 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 61 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 212 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 280 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.4\% | 0.0\% | 6.8\% | 0.0\% | 31.1\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 58.2\% |
| 1998 | 516 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 73.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 19.8\% |
| 1999 | 21 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.3\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.6\% | 28.6\% |
| 2000 | 74 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.3\% | 0.0\% | 23.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 52.7\% |
| 2001 | 269 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 2.2\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 55.4\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 24.2\% |
| 2002 | 148 | 4,5,6 | 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 | 3,5,6 | 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 | 4 | 3,4,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 218 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 60.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 25.7\% |
| 2006 | 74 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 17.6\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 63.5\% |
| 2007 | 17 | 4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 0.0\% | 11.8\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 35.3\% | 0.0\% | 0.0\% | 0.0\% | 35.3\% |
| 2008 | 76 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 215 |  | 0.1\% | 0.0\% | 0.0\% | 1.6\% | 0.1\% | 2.2\% | 0.5\% | 0.0\% | 10.5\% | 0.0\% | 31.8\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 2.9\% | 0.0\% | 0.0\% | 3.9\% | 45.1\% |
| 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 | 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 | 385 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.1\% | 0.0\% | 5.0\% | 0.0\% | 48.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 2.4\% | 42.4\% |
| 1999-2009 | 121 |  | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.1\% | 3.0\% | 0.8\% | 0.0\% | 14.2\% | 0.0\% | 32.1\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 4.8\% | 36.3\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 3 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 66 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 221 | 3,4,5 | 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 | 3,4,5,6 | 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 | 381 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 1.0\% | 0.5\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 38.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 4.2\% | 46.2\% |
| 1997 | 292 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.3\% | 0.0\% | 8.6\% | 0.0\% | 31.2\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.8\% |
| 1998 | 584 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 76.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 17.5\% |
| 1999 | 24 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.5\% | 0.0\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.2\% | 25.0\% |
| 2000 | 81 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.5\% | 0.0\% | 24.7\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.1\% |
| 2001 | 287 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 2.1\% | 0.0\% | 0.0\% | 17.1\% | 0.0\% | 53.7\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 22.6\% |
| 2002 | 154 | 4,5,6 | 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 | 3,5,6 | 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 | 7 | 3,4,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 227 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 59.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 7.0\% | 24.7\% |
| 2006 | 76 | 3,4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 17.1\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 61.8\% |
| 2007 | 20 | 4,5,6 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.0\% | 0.0\% | 10.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 40.0\% | 0.0\% | 0.0\% | 0.0\% | 30.0\% |
| 2008 | 76 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | $-$ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 229 |  | 0.1\% | 0.0\% | 0.0\% | 1.7\% | 0.2\% | 2.4\% | 0.6\% | 0.0\% | 12.2\% | 0.0\% | 31.6\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.1\% | 3.5\% | 0.0\% | 0.0\% | 4.0\% | 42.5\% |
| 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 | 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 | 419 |  | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.6\% | 0.1\% | 0.0\% | 6.0\% | 0.0\% | 48.7\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 0.9\% | 0.0\% | 0.0\% | 2.4\% | 39.8\% |
| 1999-2009 | 128 |  | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.1\% | 3.1\% | 0.9\% | 0.0\% | 16.2\% | 0.0\% | 31.5\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 4.9\% | 33.9\% |


| Appendix C.15. Percent distribution of Elk River (Oregon Coast) reported catch among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | $\begin{aligned} & \text { Estimated } \\ & \text { \# of } \\ & \text { CWTs } \end{aligned}$ | Ages <br> Present | 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 | 7 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  |  |
| 1980 | 60 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - |  | - | - | - | - | - |  |  | - |
| 1981 | 117 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2071 | 2,3,4,5 | 7.8\% | 0.0\% | 0.8\% | 4.2\% | 0.9\% | 1.7\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 26.9\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 36.6\% |
| 2008 | 3974 | 2,3,4,5 | 3.9\% | 0.0\% | 0.0\% | 3.6\% | 1.6\% | 1.5\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 19.6\% | 64.2\% |
| 2009 | 1078 | 2,3,4,5 | 17.1\% | 0.0\% | 0.4\% | 12.2\% | 2.0\% | 5.1\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 0.8\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 45.9\% | 7.3\% |
| 1979-2009 | 3405 |  | 4.2\% | 0.1\% | 0.2\% | 3.5\% | 0.4\% | 4.2\% | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.6\% | 0.0\% | 20.2\% | 0.0\% | 0.7\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 55.3\% |
| 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\% |
| 1999-2009 | 6121 |  | 6.3\% | 0.0\% | 0.3\% | 3.8\% | 0.9\% | 2.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.6\% | 53.9\% |


| Appendix C.16. Percent distribution of Elk River (Oregon Coast) total fishing mortalities among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 26 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |  | - |
| 1980 | 83 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |  | - |
| 1981 | 298 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 498 | 2,3,4,5 | 4.4\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 11.2\% | 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\% | 50.8\% |
| 1993 | 880 | 2,3,4,5 | 3.4\% | 0.0\% | 0.0\% | 3.0\% | 0.6\% | 6.9\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 47.5\% |
| 1994 | 1398 | 2,3,4,5 | 4.5\% | 0.7\% | 0.0\% | 2.4\% | 0.6\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 0.0\% | 21.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.7\% | 45.5\% |
| 1995 | 2926 | 2,3,4,5 | 2.9\% | 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 | 2,3,4,5 | 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 | 4399 | 2,3,4,5 | 16.0\% | 0.1\% | 0.0\% | 1.8\% | 0.4\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 21.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 40.9\% |
| 1998 | 6252 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2978 | 2,3,4,5 | 6.7\% | 0.0\% | 0.0\% | 4.9\% | 1.8\% | 5.1\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 44.4\% |
| 2007 | 2385 | 2,3,4,5 | 9.9\% | 0.1\% | 0.9\% | 4.8\% | 1.0\% | 1.5\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 28.7\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 31.8\% |
| 2008 | 4153 | 2,3,4,5 | 4.7\% | 0.0\% | 0.0\% | 3.8\% | 1.9\% | 1.6\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 61.5\% |
| 2009 | 1258 | 2,3,4,5 | 18.4\% | 0.0\% | 0.4\% | 11.9\% | 2.1\% | 4.7\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 46.2\% | 6.3\% |
| 1979-2009 | 3669 |  | 5.4\% | 0.2\% | 0.2\% | 3.8\% | 0.5\% | 4.9\% | 0.4\% | 0.0\% | 0.0\% | 0.4\% | 0.4\% | 0.0\% | 22.2\% | 0.0\% | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 50.8\% |
| 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\% | 0.5\% | 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\% | 5.7\% | 55.6\% |
| 1996-1998 | 5156 |  | 8.9\% | 0.0\% | 0.0\% | 1.9\% | 0.3\% | 0.4\% | 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\% |
| 1999-2009 | 6559 |  | 7.7\% | 0.0\% | 0.3\% | 4.1\% | 1.0\% | 2.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 49.9\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 23 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 185 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 642 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 171 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 27 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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\% |
| 1999-2009 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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.

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 60 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 254 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 721 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 298 | 3,4,5 | 6.0\% | 5.4\% | 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\% | 14.1\% | 0.0\% | 2.0\% | 0.0\% | 45.3\% |
| 1990 | 41 | 2,4,5 | 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 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 173 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 27 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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\% | 0.9\% | 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\% |
| 1999-2009 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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 <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 69 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 256 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 611 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 796 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 348 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 17 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 83 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 733 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 1657 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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\% | 14.4\% |
| 1992 | 192 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 341 | 2,3,4,5 | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 1.8\% | 0.0\% | 3.2\% | 0.0\% | 0.3\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.9\% | 19.9\% | 0.0\% | 0.0\% | 0.0\% | 63.9\% |
| 1998 | 447 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1086 | 2,3,4,5 | 0.4\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 12.2\% | 1.8\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.4\% | 7.6\% | 8.0\% | 0.0\% | 6.3\% | 1.4\% | 51.4\% |
| 2007 | 1613 | 2,3,4,5 | 0.2\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 1.7\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.2\% | 2.5\% | 11.6\% | 0.0\% | 10.2\% | 10.9\% | 46.1\% |
| 2008 | 1116 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 4.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.4\% | 0.7\% | 6.1\% | 8.3\% | 0.0\% | 10.0\% | 0.0\% | 62.9\% |
| 2009 | 1365 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 5.6\% | 5.8\% | 0.0\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.4\% | 3.3\% | 10.0\% | 0.0\% | 3.1\% | 0.0\% | 64.6\% |
| 1979-2009 | 850 |  | 0.3\% | 0.1\% | 0.0\% | 0.1\% | 0.1\% | 11.6\% | 3.7\% | 0.4\% | 3.4\% | 0.2\% | 1.1\% | 0.0\% | 5.6\% | 0.0\% | 0.4\% | 7.9\% | 13.2\% | 0.0\% | 6.1\% | 2.3\% | 43.4\% |
| 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 | 376 |  | 0.9\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 2.5\% | 0.0\% | 5.5\% | 0.0\% | 0.8\% | 0.0\% | 3.6\% | 0.0\% | 0.2\% | 0.9\% | 13.5\% | 0.0\% | 0.0\% | 0.0\% | 70.4\% |
| 1999-2009 | 1126 |  | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.1\% | 10.5\% | 5.1\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.6\% | 4.5\% | 7.7\% | 0.0\% | 4.8\% | 4.8\% | 53.3\% |

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

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 70 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 403 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 715 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 859 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 363 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 18 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 221 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 913 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 1955 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 375 | 2,3,4,5 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 1.6\% | 0.0\% | 3.2\% | 0.0\% | 0.5\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.8\% | 25.6\% | 0.0\% | 0.0\% | 0.0\% | 58.1\% |
| 1998 | 585 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1043 | 2,3,4,5 | 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\% | 9.0\% | 0.0\% | 6.0\% | 12.5\% | 43.6\% |
| 2004 | 1449 | 2,3,4,5 | 0.6\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 3.3\% | 0.1\% | 2.6\% | 0.0\% | 0.6\% | 0.0\% | 6.7\% | 0.0\% | 0.6\% | 7.6\% | 8.6\% | 0.0\% | 4.5\% | 1.3\% | 48.7\% |
| 2005 | 1734 | 2,3,4,5 | 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 | 1189 | 2,3,4,5 | 0.4\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 11.9\% | 2.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 5.7\% | 0.0\% | 0.4\% | 7.9\% | 11.0\% | 0.0\% | 6.1\% | 1.5\% | 46.9\% |
| 2007 | 1868 | 2,3,4,5 | 0.3\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 1.8\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.2\% | 2.4\% | 18.9\% | 0.0\% | 9.3\% | 11.0\% | 39.8\% |
| 2008 | 1218 | 2,3,4,5 | 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\% | 0.5\% | 0.7\% | 6.4\% | 12.2\% | 0.0\% | 9.9\% | 0.0\% | 57.6\% |
| 2009 | 1679 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 5.3\% | 5.8\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.4\% | 3.5\% | 22.2\% | 0.0\% | 2.7\% | 0.0\% | 52.5\% |
| 1979-2009 | 973 |  | 0.4\% | 0.1\% | 0.0\% | 0.2\% | 0.1\% | 11.8\% | 3.7\% | 0.5\% | 3.7\% | 0.2\% | 1.0\% | 0.0\% | 5.7\% | 0.0\% | 0.4\% | 7.8\% | 18.4\% | 0.0\% | 5.6\% | 2.4\% | 37.9\% |
| 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 | 443 |  | 0.9\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 2.5\% | 0.0\% | 6.1\% | 0.0\% | 0.9\% | 0.0\% | 3.5\% | 0.0\% | 0.2\% | 1.0\% | 22.7\% | 0.0\% | 0.0\% | 0.0\% | 60.0\% |
| 1999-2009 | 1270 |  | 0.5\% | 0.1\% | 0.0\% | 0.2\% | 0.1\% | 10.2\% | 5.4\% | 0.0\% | 3.5\% | 0.0\% | 0.1\% | 0.0\% | 5.0\% | 0.0\% | 0.7\% | 4.5\% | 12.6\% | 0.0\% | 4.6\% | 5.0\% | 47.5\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 74 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 92 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 440 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 27.5\% | 0.0\% | 4.9\% | 1.6\% | 2.2\% | 3.8\% | 2.2\% | 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\% |
| 2009 | 228 | 2,3,4,5 | 17.1\% | 0.0\% | 0.9\% | 3.5\% | 2.6\% | 1.3\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.0\% | 0.9\% | 11.4\% |
| 1979-2009 | 561 |  | 14.1\% | 0.3\% | 1.4\% | 4.6\% | 1.2\% | 3.2\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 18.8\% | 8.0\% | 46.3\% |
| 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 | 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\% |
| 1999-2009 | 599 |  | 15.5\% | 0.2\% | 1.6\% | 4.4\% | 1.7\% | 1.9\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 19.4\% | 9.7\% | 43.7\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 99 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 119 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 470 | 2,3,4 | 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 | 2,3,4,5 | 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 | 345 | 2,3,4,5 | 17.4\% | 9.3\% | 1.4\% | 6.7\% | 0.0\% | 16.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 1.4\% | 30.1\% |
| 1993 | 424 | 2,3,4,5 | 19.3\% | 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\% | 14.6\% | 7.3\% | 37.5\% |
| 1994 | 781 | 2,3,4,5 | 17.0\% | 2.3\% | 0.0\% | 5.2\% | 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\% | 51.2\% |
| 1995 | 700 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 572 | 2,3,4,5 | 18.9\% | 0.0\% | 1.0\% | 5.2\% | 0.0\% | 2.6\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.7\% | 19.8\% | 34.6\% |
| 2007 | 290 | 2,3,4,5 | 24.8\% | 0.0\% | 1.4\% | 7.2\% | 8.3\% | 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\% | 6.9\% | 12.8\% | 33.4\% |
| 2008 | 212 | 2,3,4,5 | 34.4\% | 0.0\% | 5.2\% | 1.9\% | 2.4\% | 3.3\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.9\% | 8.0\% | 24.1\% |
| 2009 | 241 | 2,3,4,5 | 19.5\% | 0.0\% | 0.8\% | 3.7\% | 2.9\% | 1.2\% | 5.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 54.8\% | 0.8\% | 10.8\% |
| 1979-2009 | 598 |  | 16.6\% | 0.8\% | 1.5\% | 5.0\% | 1.4\% | 3.3\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 17.8\% | 8.2\% | 43.1\% |
| 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 | 558 |  | 14.4\% | 2.1\% | 1.6\% | 6.0\% | 0.3\% | 7.3\% | 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\% |
| 1999-2009 | 635 |  | 18.2\% | 0.3\% | 1.8\% | 4.6\% | 2.0\% | 1.8\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 18.5\% | 10.0\% | 40.8\% |

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

| CatchYear | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 74 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 248 | 2,3,4 | 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 | 3,4,5 | 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 | 2,4,5,6 | 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 | 2,3,5,6 | 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 | 2,3,4,6 | 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 | 2,3,4,5 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 319 | 2,3,4,5,6 | 18.8\% | 0.3\% | 4.4\% | 8.5\% | 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\% | 58.0\% |
| 2008 | 112 | 2,3,4,5,6 | 22.3\% | 0.0\% | 7.1\% | 9.8\% | 17.0\% | 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\% | 37.5\% |
| 2009 | 323 | 2,3,4,5,6 | 11.1\% | 0.0\% | 0.0\% | 9.0\% | 0.9\% | 0.0\% | 0.9\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 75.5\% |
| 1979-2009 | 631 |  | 11.5\% | 0.4\% | 1.8\% | 6.0\% | 1.9\% | 3.7\% | 0.6\% | 0.0\% | 1.5\% | 0.2\% | 1.7\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.1\% | 2.6\% | 0.0\% | 0.1\% | 0.0\% | 67.3\% |
| 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 | 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\% |
| 1999-2009 | 598 |  | 12.0\% | 0.2\% | 2.2\% | 6.1\% | 3.4\% | 0.3\% | 0.6\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 72.1\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 10 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 139 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 352 | 2,3,4 | 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 | 3,4,5 | 18.2\% | 3.7\% | 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 | 1326 | 2,4,5,6 | 18.1\% | 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\% | 56.0\% |
| 1992 | 658 | 2,3,5,6 | 8.4\% | 8.7\% | 1.5\% | 5.3\% | 0.6\% | 9.9\% | 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\% | 57.9\% |
| 1993 | 348 | 2,3,4,6 | 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 | 394 | 2,3,4,5 | 19.8\% | 5.6\% | 2.8\% | 13.5\% | 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\% | 40.4\% |
| 1995 | 831 | 2,3,4,5,6 | 16.2\% | 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\% | 64.6\% |
| 1996 | 686 | 2,3,4,5,6 | 13.7\% | 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\% | 79.4\% |
| 1997 | 921 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 639 | 2,3,4,5,6 | 12.8\% | 0.2\% | 1.3\% | 12.1\% | 6.4\% | 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\% | 58.7\% |
| 2006 | 807 | 2,3,4,5,6 | 10.9\% | 2.0\% | 2.4\% | 6.4\% | 3.8\% | 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\% | 71.1\% |
| 2007 | 335 | 2,3,4,5,6 | 19.7\% | 0.3\% | 4.8\% | 8.7\% | 6.6\% | 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\% | 55.2\% |
| 2008 | 130 | 2,3,4,5,6 | 23.1\% | 0.0\% | 9.2\% | 10.0\% | 19.2\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.3\% |
| 2009 | 366 | 2,3,4,5,6 | 15.0\% | 0.0\% | 0.0\% | 10.7\% | 1.4\% | 0.0\% | 1.1\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 66.7\% |
| 1979-2009 | 679 |  | 14.0\% | 1.2\% | 2.2\% | 6.6\% | 2.2\% | 4.0\% | 0.6\% | 0.0\% | 1.7\% | 0.2\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.1\% | 2.8\% | 0.0\% | 0.1\% | 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 | 655 |  | 14.8\% | 3.2\% | 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\% | 46.0\% |
| 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\% |
| 1999-2009 | 629 |  | 13.7\% | 0.2\% | 2.6\% | 6.6\% | 4.0\% | 0.3\% | 0.6\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 68.1\% |

Appendix C.25. Percent distribution of Kitsumkalum River Summer (North/Central BC) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 5 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 19 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 65 | 3,4,5 | 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 | 4,5,6 | 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 | 3,5,6 | 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 | 3,4,6 | 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 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 483 | 3,4,5,6 | 6.0\% | 0.2\% | 2.1\% | 2.3\% | 13.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 53.2\% |
| 2009 | 667 | 4,5,6 | 9.7\% | 2.1\% | 4.0\% | 1.0\% | 8.4\% | 0.3\% | 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\% | 1.2\% | 72.4\% |
| 1979-2009 | 446 |  | 13.3\% | 0.4\% | 3.5\% | 4.6\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 60.0\% |
| 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\% |
| 1999-2009 | 564 |  | 11.2\% | 0.7\% | 4.7\% | 1.7\% | 7.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 66.9\% |

Appendix C.26. Percent distribution of Kitsumkalum River Summer (North/Central BC) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 8 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 27 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 82 | 3,4,5 | 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 | 4,5,6 | 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 | 3,5,6 | 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 | 3,4,6 | 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 | 3,4,5 | 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 | 850 | 3,4,5,6 | 14.0\% | 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\% | 55.6\% |
| 1990 | 634 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 695 | 3,4,5,6 | 15.3\% | 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\% | 58.4\% |
| 1993 | 242 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 963 | 3,4,5,6 | 8.5\% | 3.4\% | 5.7\% | 0.9\% | 10.3\% | 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\% | 68.6\% |
| 2005 | 345 | 3,4,5,6 | 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 | 300 | 3,4,5,6 | 15.0\% | 2.0\% | 2.3\% | 3.0\% | 6.7\% | 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\% | 60.7\% |
| 2007 | 535 | 3,4,5,6 | 13.5\% | 0.7\% | 3.4\% | 1.7\% | 9.9\% | 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\% | 0.9\% | 69.2\% |
| 2008 | 548 | 3,4,5,6 | 6.9\% | 0.2\% | 3.6\% | 2.6\% | 17.9\% | 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\% | 11.3\% | 46.9\% |
| 2009 | 698 | 4,5,6 | 10.9\% | 2.7\% | 4.3\% | 1.1\% | 9.5\% | 0.3\% | 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\% | 1.3\% | 69.2\% |
| 1979-2009 | 482 |  | 15.4\% | 0.5\% | 4.2\% | 5.3\% | 6.0\% | 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\% | 3.2\% | 55.5\% |
| 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\% | 51.5\% |
| 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\% |
| 1999-2009 | 612 |  | 12.6\% | 0.9\% | 5.5\% | 1.8\% | 9.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 61.8\% |


| Append <br> Catch <br> Year | Estimated <br> \# of <br> CWTs | Percen |  |  |  |  |  |  |  |  |  |  |  |  | r |  |  |  |  |  | - | 位 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ages <br> Present | 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 | 129 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 396 | 2,3,4 | 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 | 2,3,4,5 | 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\% | 1.4\% | 0.3\% | 28.6\% |
| 1982 | 3176 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1438 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.9\% | 0.3\% | 0.5\% | 0.8\% | 3.3\% | 1.6\% | 0.0\% | 5.9\% | 0.0\% | 1.3\% | 0.7\% | 1.0\% | 0.0\% | 9.2\% | 1.6\% | 22.9\% |
| 1985 | 995 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 10.0\% | 86.7\% |
| 1996 | 62 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 85.5\% |
| 1997 | 211 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1659 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.6\% | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 144 | 2,3,4,5 | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 2.8\% | 68.1\% |
| 2008 | 353 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 24.6\% | 3.4\% | 40.2\% |
| 2009 | 654 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 6.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 5.0\% | 0.0\% | 3.1\% | 0.0\% | 25.8\% | 2.9\% | 44.8\% |
| 1979-2009 | 1104 |  | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 17.9\% | 3.8\% | 0.0\% | 1.1\% | 0.4\% | 1.0\% | 0.0\% | 11.2\% | 0.1\% | 3.7\% | 0.4\% | 1.4\% | 0.0\% | 7.9\% | 3.6\% | 47.3\% |
| 1979-1984 | 1914 |  | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 31.9\% | 0.6\% | 0.1\% | 1.6\% | 1.7\% | 2.6\% | 0.0\% | 15.2\% | 0.2\% | 6.7\% | 1.5\% | 4.0\% | 0.0\% | 7.2\% | 0.4\% | 26.2\% |
| 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\% |
| 1999-2009 | 744 |  | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 14.5\% | 7.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 3.8\% | 0.0\% | 0.5\% | 0.0\% | 11.1\% | 2.9\% | 50.6\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 169 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 709 | 2,3,4 | 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 | 3308 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2035 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 36.6\% | 0.4\% | 0.0\% | 1.3\% | 2.5\% | 0.8\% | 0.0\% | 12.4\% | 0.0\% | 4.4\% | 1.5\% | 5.3\% | 0.0\% | 5.2\% | 0.0\% | 29.6\% |
| 1984 | 1602 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 52.6\% | 0.2\% | 0.5\% | 0.8\% | 3.4\% | 1.6\% | 0.0\% | 6.4\% | 0.0\% | 1.2\% | 0.9\% | 1.4\% | 0.0\% | 8.9\% | 1.6\% | 20.6\% |
| 1985 | 1102 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.9\% | 0.7\% | 0.0\% | 1.1\% | 0.9\% | 1.5\% | 0.0\% | 17.8\% | 0.3\% | 3.8\% | 1.4\% | 1.5\% | 0.0\% | 2.5\% | 0.5\% | 38.0\% |
| 1986 | 1877 | 2,3,4,5 | 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\% | 21.4\% | 0.0\% | 7.6\% | 6.4\% | 34.1\% |
| 1987 | 8965 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 32.4\% | 2.3\% | 0.0\% | 0.4\% | 1.9\% | 0.2\% | 0.0\% | 17.5\% | 0.5\% | 3.7\% | 0.6\% | 1.5\% | 0.0\% | 17.5\% | 3.6\% | 17.8\% |
| 1988 | 2677 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 31.3\% | 2.4\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 0.0\% | 11.8\% | 0.5\% | 0.9\% | 0.3\% | 0.5\% | 0.0\% | 22.5\% | 1.9\% | 25.6\% |
| 1989 | 277 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 31 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.0\% | 0.0\% | 0.0\% | 12.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 58.1\% |
| 1995 | 31 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 12.9\% | 83.9\% |
| 1996 | 62 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 85.5\% |
| 1997 | 233 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.6\% | 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\% | 9.9\% | 49.4\% |
| 1998 | 115 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.9\% | 10.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 22.6\% | 54.8\% |
| 1999 | 323 | 2,3,4,5 | 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 | 246 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 14.2\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 2.4\% | 4.1\% | 53.3\% |
| 2001 | 1160 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 2.7\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 22.2\% | 0.0\% | 3.8\% | 0.1\% | 0.7\% | 0.0\% | 1.4\% | 5.8\% | 54.8\% |
| 2002 | 1817 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.5\% | 0.0\% | 8.1\% | 0.1\% | 0.0\% | 0.0\% | 8.3\% | 3.5\% | 41.7\% |
| 2003 | 1828 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 6.9\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 17.2\% | 0.0\% | 7.2\% | 0.0\% | 0.8\% | 0.0\% | 7.1\% | 2.5\% | 42.1\% |
| 2004 | 1509 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 22.6\% | 9.7\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 3.8\% | 0.0\% | 0.1\% | 0.0\% | 16.6\% | 1.3\% | 34.9\% |
| 2005 | 572 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 31.6\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 16.6\% | 0.2\% | 32.9\% |
| 2006 | 86 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.4\% | 17.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 1.2\% | 52.3\% |
| 2007 | 152 | 2,3,4,5 | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 3.3\% | 64.5\% |
| 2008 | 391 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 7.4\% | 0.0\% | 0.0\% | 0.0\% | 24.0\% | 4.1\% | 36.3\% |
| 2009 | 735 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 8.3\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 5.3\% | 0.0\% | 6.3\% | 0.0\% | 24.6\% | 3.1\% | 39.9\% |
| 1979-2009 | 1274 |  | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 19.7\% | 4.2\% | 0.0\% | 1.1\% | 0.5\% | 0.8\% | 0.0\% | 12.4\% | 0.1\% | 3.7\% | 0.4\% | 2.3\% | 0.0\% | 7.4\% | 4.0\% | 42.9\% |
| 1979-1984 | 2267 |  | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 37.0\% | 0.4\% | 0.1\% | 1.3\% | 1.9\% | 2.0\% | 0.0\% | 17.1\% | 0.2\% | 5.9\% | 1.6\% | 4.2\% | 0.0\% | 6.3\% | 0.4\% | 21.6\% |
| 1985-1995 | 1605 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.3\% | 1.5\% | 0.0\% | 1.7\% | 0.4\% | 1.4\% | 0.0\% | 14.5\% | 0.1\% | 2.9\% | 0.4\% | 3.5\% | 0.0\% | 5.8\% | 4.4\% | 43.0\% |
| 1996-1998 | 137 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 7.2\% | 4.9\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 10.8\% | 63.2\% |
| 1999-2009 | 802 |  | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 14.7\% | 8.3\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 9.9\% | 0.0\% | 4.0\% | 0.0\% | 1.0\% | 0.0\% | 10.8\% | 3.3\% | 47.1\% |

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

| Catch Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 148 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 262 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 1125 | 2,3,4 | 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 | 3,4,5 | 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 | 1020 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 348 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 307 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 635 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 4.6\% | 84.0\% |
| 1997 | 222 | 3,4,5 | 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 | 2,4,5 | 7.9\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 2.0\% | 83.2\% |
| 1999 | 53 | 2,3,5 | 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 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 0.0\% | 16.4\% | 3.0\% | 77.6\% |
| 2001 | 223 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 194 | 2,3,4,5 | 32.0\% | 0.0\% | 1.0\% | 6.2\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 45.9\% |
| 2008 | 172 | 2,3,4,5 | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 10.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.6\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 4.1\% | 70.9\% |
| 2009 | 160 | 3,4,5 | 18.8\% | 0.0\% | 0.0\% | 3.8\% | 3.8\% | 6.9\% | 18.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 45.6\% |
| 1979-2009 | 583 |  | 7.9\% | 0.1\% | 0.3\% | 3.5\% | 0.8\% | 5.4\% | 1.3\% | 0.0\% | 0.1\% | 0.4\% | 0.4\% | 0.0\% | 2.7\% | 0.1\% | 1.1\% | 0.0\% | 0.3\% | 0.0\% | 7.0\% | 7.2\% | 61.5\% |
| 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\% |
| 1999-2009 | 435 |  | 10.8\% | 0.0\% | 0.5\% | 3.9\% | 1.4\% | 4.9\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 1.1\% | 0.0\% | 0.2\% | 0.0\% | 4.9\% | 4.4\% | 61.9\% |


| Appendix C. 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 193 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 309 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 1221 | 2,3,4 | 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 | 3,4,5 | 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 | 1086 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 369 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 360 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 686 | 2,3,4 | 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 | 1179 | 2,3,4,5 | 5.6\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 9.4\% | 0.9\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 2.9\% | 0.4\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 24.6\% | 5.3\% | 42.8\% |
| 1988 | 1005 | 2,3,4,5 | 5.2\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 10.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 5.0\% | 0.0\% | 1.1\% | 0.0\% | 1.4\% | 0.0\% | 22.1\% | 15.3\% | 35.6\% |
| 1989 | 1352 | 2,3,4,5 | 2.4\% | 0.7\% | 0.3\% | 5.0\% | 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 | 1215 | 2,3,4,5 | 7.6\% | 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\% | 61.6\% |
| 1991 | 922 | 2,3,4,5 | 7.2\% | 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\% | 54.2\% |
| 1992 | 581 | 2,3,4,5 | 1.7\% | 0.0\% | 0.0\% | 4.1\% | 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\% | 52.3\% |
| 1993 | 405 | 2,3,4,5 | 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 | 2,3,4,5 | 9.1\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 78.5\% |
| 1995 | 560 | 2,3,4,5 | 7.7\% | 0.0\% | 2.3\% | 3.6\% | 0.0\% | 6.1\% | 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\% | 25.5\% | 54.3\% |
| 1996 | 331 | 2,3,4,5 | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 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\% | 82.2\% |
| 1997 | 227 | 3,4,5 | 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 | 2,4,5 | 7.9\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 2.0\% | 83.2\% |
| 1999 | 62 | 2,3,5 | 17.7\% | 0.0\% | 1.6\% | 8.1\% | 0.0\% | 1.6\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.7\% |
| 2000 | 73 | 2,3,4 | 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 | 238 | 2,3,4,5 | 5.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 8.8\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 3.4\% | 64.7\% |
| 2002 | 393 | 2,3,4,5 | 14.5\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 5.9\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 2.5\% | 56.0\% |
| 2003 | 478 | 2,3,4,5 | 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 | 2183 | 2,3,4,5 | 6.6\% | 0.0\% | 0.5\% | 3.3\% | 1.0\% | 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\% | 81.1\% |
| 2005 | 396 | 2,3,4,5 | 4.0\% | 0.0\% | 0.0\% | 12.9\% | 7.8\% | 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\% | 11.6\% | 9.1\% | 47.7\% |
| 2006 | 598 | 2,3,4,5 | 14.4\% | 0.0\% | 0.5\% | 6.5\% | 1.8\% | 8.4\% | 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\% | 38.3\% |
| 2007 | 214 | 2,3,4,5 | 36.4\% | 0.0\% | 0.9\% | 6.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 41.6\% |
| 2008 | 177 | 2,3,4,5 | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.6\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 4.5\% | 68.9\% |
| 2009 | 169 | 3,4,5 | 20.1\% | 0.0\% | 0.0\% | 3.6\% | 4.1\% | 6.5\% | 20.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 43.2\% |
| 1979-2009 | 616 |  | 9.4\% | 0.1\% | 0.5\% | 3.8\% | 0.9\% | 5.9\% | 1.5\% | 0.0\% | 0.1\% | 0.4\% | 0.4\% | 0.0\% | 3.1\% | 0.1\% | 1.2\% | 0.0\% | 0.3\% | 0.0\% | 6.7\% | 7.5\% | 58.1\% |
| 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 | 817 |  | 5.7\% | 0.1\% | 0.4\% | 4.0\% | 0.3\% | 7.8\% | 0.5\% | 0.0\% | 0.0\% | 0.7\% | 0.8\% | 0.0\% | 2.9\% | 0.1\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 11.3\% | 10.6\% | 53.7\% |
| 1996-1998 | 220 |  | 10.4\% | 0.0\% | 0.0\% | 2.7\% | 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\% |
| 1999-2009 | 453 |  | 13.0\% | 0.0\% | 0.8\% | 3.9\% | 1.7\% | 5.0\% | 3.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 3.9\% | 0.0\% | 1.1\% | 0.0\% | 0.3\% | 0.0\% | 4.7\% | 4.6\% | 57.9\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 214 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 759 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 797 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 169 | 2,3,4,5 | 1.2\% | 1.2\% | 0.0\% | 3.6\% | 0.0\% | 10.7\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 1.8\% | 62.1\% |
| 1993 | 252 | 3,4,5 | 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 | 2,4,5 | 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 | 806 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 583 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 78 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | 154 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 120 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | 704 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 1335 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 1346 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 398 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2374 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.3\% | 1.2\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 2.5\% | 2.1\% | 92.6\% |
| 2008 | 4630 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 5.3\% | 2.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 0.0\% | 7.5\% | 1.9\% | 76.6\% |
| 2009 | 1641 | 2,3,4,5 | 3.8\% | 0.1\% | 0.4\% | 3.0\% | 0.9\% | 3.5\% | 5.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 33.7\% | 4.1\% | 37.2\% |
| 1979-2009 | 999 |  | 3.2\% | 0.1\% | 0.2\% | 2.9\% | 0.5\% | 7.5\% | 1.0\% | 0.0\% | 0.1\% | 0.1\% | 0.8\% | 0.0\% | 5.6\% | 0.0\% | 1.6\% | 0.0\% | 0.2\% | 0.0\% | 15.2\% | 2.0\% | 58.8\% |
| 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\% | 0.5\% | 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\% | 47.0\% |
| 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\% |
| 1999-2009 | 1516 |  | 3.0\% | 0.0\% | 0.1\% | 1.2\% | 1.0\% | 2.5\% | 1.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 1.8\% | 0.0\% | 0.3\% | 0.0\% | 11.5\% | 2.3\% | 70.7\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 281 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 843 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 867 | 2,3,4 | 3.1\% | 0.0\% | 0.1\% | 3.8\% | 0.0\% | 20.8\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.9\% | 0.0\% | 11.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 28.0\% | 3.6\% | 27.1\% |
| 1989 | 756 | 2,3,4,5 | 3.8\% | 0.0\% | 0.0\% | 6.9\% | 0.0\% | 18.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 13.0\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 25.5\% | 3.2\% | 23.9\% |
| 1990 | 651 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 199 | 2,3,4,5 | 1.5\% | 9.0\% | 0.0\% | 4.0\% | 0.0\% | 11.6\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 2.0\% | 52.8\% |
| 1993 | 276 | 3,4,5 | 5.4\% | 0.7\% | 0.4\% | 5.4\% | 0.0\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.8\% | 0.0\% | 8.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 13.4\% | 0.0\% | 50.7\% |
| 1994 | 659 | 2,4,5 | 6.4\% | 1.4\% | 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\% | 58.7\% |
| 1995 | 827 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 594 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 81 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | 157 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 123 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | 766 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 1394 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 1375 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 423 | 2,3,5 | 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 | 813 | 2,3,4 | 2.7\% | 0.0\% | 0.0\% | 1.6\% | 2.0\% | 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\% | 75.3\% |
| 2005 | 457 | 2,3,4,5 | 3.9\% | 0.2\% | 0.0\% | 3.5\% | 2.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 2.6\% | 0.0\% | 2.4\% | 0.0\% | 13.1\% | 1.1\% | 63.0\% |
| 2006 | 364 | 2,3,4,5 | 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 | 2465 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.6\% | 1.8\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.9\% | 0.0\% | 2.8\% | 3.0\% | 89.2\% |
| 2008 | 4776 | 2,3,4,5 | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 5.3\% | 2.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 2.1\% | 0.0\% | 0.1\% | 0.0\% | 7.8\% | 2.4\% | 74.2\% |
| 2009 | 1770 | 2,3,4,5 | 4.2\% | 0.1\% | 0.6\% | 3.2\% | 1.1\% | 3.6\% | 6.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 2.9\% | 0.0\% | 0.6\% | 0.0\% | 32.9\% | 4.6\% | 34.5\% |
| 1979-2009 | 1051 |  | 3.8\% | 0.8\% | 0.3\% | 3.2\% | 0.7\% | 8.1\% | 1.1\% | 0.0\% | 0.1\% | 0.2\% | 0.8\% | 0.0\% | 6.1\% | 0.0\% | 1.7\% | 0.0\% | 0.5\% | 0.0\% | 14.8\% | 2.2\% | 55.4\% |
| 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 | 521 |  | 4.2\% | 1.6\% | 0.6\% | 5.0\% | 0.0\% | 13.7\% | 0.6\% | 0.0\% | 0.1\% | 0.3\% | 1.7\% | 0.0\% | 7.6\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 18.2\% | 1.7\% | 43.1\% |
| 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\% |
| 1999-2009 | 1581 |  | 3.5\% | 0.0\% | 0.1\% | 1.4\% | 1.4\% | 2.6\% | 1.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 1.9\% | 0.0\% | 0.6\% | 0.0\% | 11.5\% | 2.8\% | 67.6\% |

Appendix C.33. Percent distribution of Nanaimo River Fall (Lower Strait of Georgia Natural) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 251 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 1322 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 1784 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 515 | 2,4,5 | 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 | 54 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 24 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 8 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 227 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | 742 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 2.8\% | 0.7\% | 0.0\% | 0.3\% | 7.8\% | 30.3\% |
| 1992 | 1600 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 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 | 756 | 2,3,4 | 0.5\% | 0.3\% | 0.0\% | 0.0\% | 5.6\% | 3.8\% | 0.7\% | 0.0\% | 15.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 1.6\% | 0.0\% | 1.9\% | 0.3\% | 68.0\% |
| 2004 | 805 | 2,3,4,5 | 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 | 3,4,5 | 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 | 1221 | 2,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.9\% | 0.0\% | 4.8\% | 0.0\% | 92.1\% |
| 2007 | 992 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | 257 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | 6 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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\% | 3.2\% | 4.0\% | 51.7\% |
| 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\% |
| 1999-2009 | 593 |  | 0.5\% | 0.0\% | 0.1\% | 0.3\% | 3.0\% | 2.6\% | 1.7\% | 0.0\% | 14.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.9\% | 1.3\% | 0.0\% | 6.0\% | 2.8\% | 64.7\% |

Appendix C.34. Percent distribution of Nanaimo River Fall (Lower Strait of Georgia Natural) total fishing mortalities among fisheries and
escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 308 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 1607 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 1894 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 539 | 2,4,5 | 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 | 58 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 32 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 20 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 314 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | 978 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 3.3\% | 1.0\% | 0.0\% | 0.2\% | 7.4\% | 23.0\% |
| 1992 | 1942 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 227 | 2,3,4,5 | 1.3\% | 6.2\% | 0.0\% | 6.2\% | 4.4\% | 0.4\% | 0.0\% | 0.0\% | 20.7\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 15.4\% | 43.2\% |
| 1999 | 275 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 890 | 2,3,5 | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 1.9\% | 1.3\% | 0.0\% | 0.0\% | 35.5\% | 0.0\% | 2.7\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 2.7\% | 4.0\% | 0.0\% | 4.5\% | 0.3\% | 46.3\% |
| 2003 | 835 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 2.0\% | 3.0\% | 0.0\% | 2.2\% | 0.4\% | 61.6\% |
| 2004 | 865 | 2,3,4,5 | 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 | 3,4,5 | 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 | 1336 | 2,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.7\% | 0.5\% | 0.6\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.7\% | 1.9\% | 0.0\% | 5.0\% | 0.4\% | 84.2\% |
| 2007 | 1053 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | 261 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | 6 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 795 |  | 1.1\% | 0.5\% | 0.0\% | 1.1\% | 3.1\% | 2.5\% | 1.1\% | 1.6\% | 27.4\% | 1.1\% | 3.6\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.7\% | 2.5\% | 0.0\% | 3.1\% | 4.3\% | 45.0\% |
| 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\% | 2.5\% | 0.0\% | 3.4\% | 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\% | 33.6\% |
| 1999-2009 | 662 |  | 0.6\% | 0.1\% | 0.1\% | 0.3\% | 4.1\% | 2.7\% | 1.7\% | 0.0\% | 18.1\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 2.3\% | 3.3\% | 0.0\% | 5.9\% | 3.2\% | 57.2\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 99 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 1707 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.6\% | 0.5\% | 0.0\% | 3.7\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.2\% | 53.5\% |
| 1995 | 1790 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 1.1\% | 0.5\% | 0.0\% | 2.6\% | 0.0\% | 1.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 3.6\% | 89.1\% |
| 1996 | 69 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 81.2\% |
| 1997 | 202 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.0\% | 6.4\% | 78.2\% |
| 1998 | 973 | 2,3,4,5 | 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 | 2967 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 24.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 73.0\% |
| 2000 | 2158 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 27.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 63.7\% |
| 2001 | 2164 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 7.9\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 83.1\% |
| 2002 | 2110 | 2,3,4,5 | 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 | 2153 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.7\% | 0.4\% | 0.0\% | 1.9\% | 0.0\% | 18.9\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 70.5\% |
| 2004 | 436 | 2,3,4,5 | 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 | 457 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 25.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.5\% | 52.5\% |
| 2006 | 442 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 17.4\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 67.9\% |
| 2007 | 134 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.4\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.1\% | 46.3\% |
| 2008 | 712 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 24.0\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 2.9\% | 66.6\% |
| 2009 | 282 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 0.0\% | 21.3\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 19.5\% | 47.2\% |
| 1979-2009 | 1172 |  | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.3\% | 1.2\% | 0.1\% | 0.0\% | 2.8\% | 0.0\% | 16.3\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 8.7\% | 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 | 1748 |  | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 2.3\% | 0.5\% | 0.0\% | 3.2\% | 0.0\% | 1.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 20.4\% | 71.3\% |
| 1996-1998 | 415 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 13.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 4.4\% | 77.0\% |
| 1999-2009 | 1274 |  | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 1.4\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 19.7\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 7.7\% | 66.2\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 10 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 116 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 1762 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.7\% | 0.5\% | 0.0\% | 4.0\% | 0.0\% | 0.8\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.5\% | 51.8\% |
| 1995 | 1836 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.8\% | 1.3\% | 0.5\% | 0.0\% | 2.8\% | 0.0\% | 3.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 3.7\% | 86.9\% |
| 1996 | 75 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 74.7\% |
| 1997 | 266 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 18.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.9\% | 0.0\% | 0.0\% | 5.3\% | 59.4\% |
| 1998 | 1028 | 2,3,4,5 | 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 | 2977 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 24.2\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 72.8\% |
| 2000 | 2263 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 30.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 60.7\% |
| 2001 | 2188 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.1\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 7.8\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 82.2\% |
| 2002 | 2128 | 2,3,4,5 | 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 | 2174 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.8\% | 0.5\% | 0.0\% | 2.1\% | 0.0\% | 18.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 69.8\% |
| 2004 | 444 | 2,3,4,5 | 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 | 466 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 24.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.1\% | 51.5\% |
| 2006 | 449 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 17.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 66.8\% |
| 2007 | 136 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.1\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.3\% | 45.6\% |
| 2008 | 724 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 23.6\% | 0.0\% | 1.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 3.0\% | 65.5\% |
| 2009 | 292 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.2\% | 0.0\% | 21.6\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 20.2\% | 45.5\% |
| 1979-2009 | 1200 |  | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 1.4\% | 0.1\% | 0.0\% | 3.1\% | 0.0\% | 17.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 9.0\% | 66.0\% |
| 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 | 1799 |  | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 2.5\% | 0.5\% | 0.0\% | 3.4\% | 0.0\% | 2.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 21.1\% | 69.3\% |
| 1996-1998 | 456 |  | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.5\% | 0.4\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 20.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 4.1\% | 67.3\% |
| 1999-2009 | 1295 |  | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.3\% | 1.4\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 19.8\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 8.1\% | 65.1\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 10 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 77 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 197 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 153 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 1.3\% | 11.8\% | 2.0\% | 2.0\% | 0.0\% | 5.2\% | 0.0\% | 0.0\% | 3.9\% | 15.7\% | 0.0\% | 32.7\% | 2.6\% | 12.4\% |
| 1988 | 277 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2791 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 1.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 0.4\% | 0.8\% | 5.7\% | 0.0\% | 38.9\% | 0.0\% | 39.3\% |
| 2007 | 3023 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 10.2\% | 1.5\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 0.4\% | 0.8\% | 11.0\% | 0.0\% | 35.2\% | 0.0\% | 35.5\% |
| 2008 | 973 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 3.4\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.4\% | 0.8\% | 10.2\% | 0.0\% | 47.8\% | 0.0\% | 26.2\% |
| 2009 | 1355 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.1\% | 0.7\% | 8.2\% | 0.0\% | 36.5\% | 0.0\% | 46.3\% |
| 1979-2009 | 996 |  | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 9.0\% | 2.3\% | 0.3\% | 3.5\% | 0.2\% | 1.5\% | 0.0\% | 4.6\% | 0.1\% | 0.4\% | 4.6\% | 15.9\% | 0.0\% | 27.7\% | 0.4\% | 29.1\% |
| 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 | 627 |  | 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\% | 7.8\% | 17.2\% | 0.0\% | 21.1\% | 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\% |
| 1999-2009 | 1536 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 6.1\% | 2.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.6\% | 0.9\% | 10.8\% | 0.0\% | 36.3\% | 0.4\% | 36.8\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 25 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  |
| 1982 | 96 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 287 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 192 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.1\% | 0.0\% | 1.0\% | 10.4\% | 2.6\% | 1.6\% | 0.0\% | 5.7\% | 0.0\% | 0.0\% | 3.6\% | 20.8\% | 0.0\% | 27.6\% | 2.6\% | 9.9\% |
| 1988 | 381 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1803 | 2,3,4,5 | 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\% | 40.3\% |
| 2005 | 1322 | 2,3,4,5 | 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 | 3054 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 1.8\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 0.4\% | 0.8\% | 8.6\% | 0.0\% | 38.1\% | 0.0\% | 35.9\% |
| 2007 | 3273 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 9.9\% | 1.5\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.4\% | 0.8\% | 14.6\% | 0.0\% | 34.1\% | 0.0\% | 32.8\% |
| 2008 | 1107 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 3.5\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.5\% | 0.9\% | 15.5\% | 0.0\% | 44.9\% | 0.0\% | 23.0\% |
| 2009 | 1540 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 0.0\% | 0.1\% | 0.8\% | 15.0\% | 0.0\% | 34.7\% | 0.0\% | 40.7\% |
| 1979-2009 | 1141 |  | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 9.3\% | 2.3\% | 0.3\% | 3.6\% | 0.2\% | 1.3\% | 0.0\% | 4.8\% | 0.1\% | 0.4\% | 4.5\% | 22.3\% | 0.0\% | 25.5\% | 0.4\% | 24.8\% |
| 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\% | 12.4\% | 2.4\% | 0.5\% | 5.4\% | 0.4\% | 2.4\% | 0.0\% | 7.0\% | 0.2\% | 0.2\% | 7.8\% | 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\% |
| 1999-2009 | 1718 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 5.8\% | 2.6\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 0.6\% | 0.9\% | 16.9\% | 0.0\% | 34.0\% | 0.5\% | 32.6\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 23 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 214 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 185 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 191 | 2,4,5 | 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 | 523 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 537 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 116 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 148 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 31 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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\% |
| 1999-2009 | 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 (Nooksack Spring Yearling) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 39 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 226 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 200 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 237 | 2,4,5 | 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 | 562 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 556 | 2,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 124 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 1002 | 2,3,4,5 | 1.7\% | 1.6\% | 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\% | 47.2\% |
| 1993 | 666 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 155 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 31 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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\% |
| 1999-2009 | 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 (Nooksack Spring Yearling) reported catch among fisheries and escapement.

| Catch Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 4 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | 127 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 459 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 359 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 45 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 358 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 949 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1601 | 2,3,4,5 | 1.6\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 2.2\% | 5.4\% | 0.0\% | 3.6\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 83.6\% |
| 2000 | 867 | 2,3,4,5 | 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 | 1331 | 2,3,4,5 | 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\% | 77.3\% |
| 2002 | 1242 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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\% | 2.7\% | 0.0\% | 2.3\% | 0.6\% | 43.7\% |
| 2007 | 526 | 2,3,4,5 | 5.3\% | 0.0\% | 1.0\% | 0.4\% | 0.0\% | 24.7\% | 8.9\% | 0.0\% | 7.0\% | 0.0\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.8\% | 0.4\% | 47.7\% |
| 2008 | 946 | 2,3,4,5 | 1.1\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 20.8\% | 12.8\% | 0.0\% | 13.1\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.4\% | 0.4\% | 4.8\% | 0.0\% | 2.6\% | 0.0\% | 42.4\% |
| 2009 | 737 | 2,3,4,5 | 3.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 7.5\% | 10.0\% | 0.0\% | 11.7\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 1.5\% | 0.0\% | 62.4\% |
| 1979-2009 | 1023 |  | 3.2\% | 0.1\% | 0.2\% | 0.2\% | 0.3\% | 15.5\% | 5.5\% | 0.0\% | 8.0\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.2\% | 2.3\% | 0.0\% | 0.8\% | 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\% |
| 1999-2009 | 905 |  | 2.9\% | 0.2\% | 0.2\% | 0.3\% | 0.2\% | 19.4\% | 5.9\% | 0.0\% | 7.5\% | 0.0\% | 0.1\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.2\% | 1.8\% | 0.0\% | 0.9\% | 0.1\% | 59.5\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 10 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | 182 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 509 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 367 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 63 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 462 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 1098 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1664 | 2,3,4,5 | 2.0\% | 1.7\% | 0.0\% | 0.0\% | 1.0\% | 2.2\% | 5.8\% | 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\% | 80.4\% |
| 2000 | 925 | 2,3,4,5 | 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 | 1386 | 2,3,4,5 | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 5.0\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.5\% | 1.6\% | 0.0\% | 0.3\% | 0.0\% | 74.2\% |
| 2002 | 1280 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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\% | 3.8\% | 0.0\% | 2.2\% | 0.5\% | 40.5\% |
| 2007 | 595 | 2,3,4,5 | 5.7\% | 0.0\% | 1.5\% | 0.3\% | 0.0\% | 24.7\% | 9.6\% | 0.0\% | 7.9\% | 0.0\% | 0.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.7\% | 0.3\% | 42.2\% |
| 2008 | 1038 | 2,3,4,5 | 1.4\% | 0.2\% | 0.0\% | 0.4\% | 0.0\% | 20.0\% | 13.5\% | 0.0\% | 15.1\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.5\% | 0.4\% | 6.0\% | 0.0\% | 2.6\% | 0.0\% | 38.6\% |
| 2009 | 813 | 2,3,4,5 | 3.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 7.6\% | 11.2\% | 0.0\% | 13.5\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 1.4\% | 0.0\% | 56.6\% |
| 1979-2009 | 1090 |  | 3.8\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% | 15.6\% | 6.0\% | 0.0\% | 9.1\% | 0.0\% | 0.5\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.2\% | 3.5\% | 0.0\% | 0.7\% | 0.1\% | 58.5\% |
| 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 | 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\% |
| 1999-2009 | 961 |  | 3.4\% | 0.2\% | 0.2\% | 0.3\% | 0.3\% | 19.4\% | 6.5\% | 0.0\% | 8.6\% | 0.0\% | 0.1\% | 0.0\% | 0.9\% | 0.0\% | 0.1\% | 0.2\% | 2.9\% | 0.0\% | 0.8\% | 0.1\% | 55.9\% |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 8 | 2,4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 48 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 101 | 2,3,4,5 | 2.0\% | 2.0\% | 3.0\% | 0.0\% | 5.9\% | 0.0\% | 7.9\% | 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\% | 72.3\% |
| 2009 | 245 | 2,3,4,5 | 3.3\% | 2.9\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 10.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 78.8\% |
| 1979-2009 | 227 |  | 4.1\% | 1.2\% | 0.4\% | 1.6\% | 4.4\% | 0.7\% | 0.8\% | 3.2\% | 19.4\% | 2.2\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.4\% |
| 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 | 36 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 71.5\% |
| 1999-2009 | 152 |  | 5.0\% | 2.1\% | 0.4\% | 0.3\% | 4.3\% | 0.6\% | 1.8\% | 0.0\% | 6.6\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 78.2\% |


| Appendix C.44. Percent distribution of Puntledge River Summer (Lower Strait of Georgia Hatchery) total fishing mortalities among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | 52 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 254 | 2,3,4,5 | 9.4\% | 14.6\% | 0.0\% | 1.2\% | 3.1\% | 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\% | 66.9\% |
| 2007 | 180 | 2,3,4,5 | 21.7\% | 10.6\% | 2.2\% | 1.1\% | 7.2\% | 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\% | 55.6\% |
| 2008 | 112 | 2,3,4,5 | 2.7\% | 2.7\% | 5.4\% | 0.0\% | 7.1\% | 0.0\% | 8.9\% | 0.0\% | 8.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 65.2\% |
| 2009 | 267 | 2,3,4,5 | 5.2\% | 3.4\% | 0.0\% | 0.0\% | 6.7\% | 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\% | 72.3\% |
| 1979-2009 | 246 |  | 4.8\% | 1.9\% | 0.6\% | 1.8\% | 5.0\% | 0.8\% | 0.9\% | 3.3\% | 20.9\% | 2.6\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 50.9\% |
| 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 | 38 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 21.1\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 67.5\% |
| 1999-2009 | 165 |  | 6.4\% | 3.2\% | 0.7\% | 0.3\% | 5.5\% | 0.5\% | 2.0\% | 0.0\% | 7.9\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 72.6\% |

## Appendix C.45. Percent distribution of Queets Fall Fingerling (Washington Coastal Wild) reported catch among fisheries and escapement.

| CatchYear | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |  |  |
| 1980 | 3 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 96 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 31.3\% | 0.0\% | 24.0\% |
| 1982 | 230 | 2,3,4,5 | 12.6\% | 2.6\% | 0.0\% | 18.3\% | 1.3\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.0\% | 0.0\% | 24.3\% |
| 1983 | 147 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 21.8\% | 0.0\% | 20.4\% |
| 1984 | 144 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 0.0\% | 22.9\% |
| 1985 | 250 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 14.4\% | 0.0\% | 33.6\% |
| 1986 | 283 | 3,4,5,6 | 17.3\% | 0.0\% | 1.1\% | 11.7\% | 0.0\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 0.0\% | 50.5\% |
| 1987 | 538 | 2,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.2\% | 0.6\% | 0.0\% | 22.7\% | 0.0\% | 38.7\% |
| 1988 | 727 | 2,3,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 16.6\% | 0.0\% | 47.3\% |
| 1989 | 569 | 2,3,4,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 27.8\% | 0.0\% | 41.1\% |
| 1990 | 1264 | 2,3,4,5 | 12.7\% | 0.0\% | 0.0\% | 5.5\% | 1.8\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 0.0\% | 58.9\% |
| 1991 | 1102 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 15.7\% | 0.0\% | 46.3\% |
| 1992 | 631 | 2,3,4,5,6 | 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\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 19.3\% | 0.0\% | 41.7\% |
| 1993 | 613 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% | 0.0\% | 32.4\% |
| 1995 | 746 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 0.0\% | 77.8\% |
| 2000 | 444 | 2,3,4,5,6 | 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 | 447 | 2,3,4,5,6 | 23.5\% | 0.0\% | 5.8\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 41.8\% | 0.0\% | 22.4\% |
| 2002 | 1632 | 2,3,4,5,6 | 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 | 1447 | 2,3,4,5,6 | 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\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% | 0.0\% | 37.7\% |
| 2004 | 2548 | 2,3,4,5,6 | 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\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 0.0\% | 54.1\% |
| 2005 | 2523 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 17.3\% | 0.0\% | 34.4\% |
| 2007 | 599 | 2,3,4,5,6 | 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 | 1003 | 3,4,5,6 | 13.3\% | 0.0\% | 1.2\% | 7.2\% | 4.4\% | 0.8\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.4\% | 0.0\% | 50.7\% |
| 2009 | 1467 | 4,5,6 | 22.9\% | 1.2\% | 3.0\% | 8.8\% | 2.9\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.5\% | 0.0\% | 46.8\% |
| 1979-2009 | 847 |  | 18.2\% | 0.3\% | 1.9\% | 11.0\% | 2.0\% | 4.1\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.1\% | 0.4\% | 0.0\% | 19.7\% | 0.2\% | 40.8\% |
| 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\% | 0.0\% | 0.0\% | 0.3\% | 0.8\% | 0.0\% | 27.1\% | 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\% | 0.0\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 19.1\% | 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\% |
| 1999-2009 | 1266 |  | 20.0\% | 0.2\% | 3.7\% | 8.2\% | 3.7\% | 1.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 18.3\% | 0.0\% | 44.0\% |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 15 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - | - |
| 1981 | 115 | 2,3,4 | 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\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 27.0\% | 0.0\% | 20.0\% |
| 1982 | 249 | 2,3,4,5 | 14.5\% | 2.4\% | 0.0\% | 20.1\% | 1.2\% | 12.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 25.3\% | 0.0\% | 22.5\% |
| 1983 | 199 | 2,3,4,5,6 | 46.2\% | 0.0\% | 0.0\% | 13.1\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 16.6\% | 0.0\% | 15.1\% |
| 1984 | 154 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.3\% | 0.0\% | 21.4\% |
| 1985 | 293 | 2,3,4,5,6 | 20.1\% | 0.0\% | 0.0\% | 33.4\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 12.6\% | 0.0\% | 28.7\% |
| 1986 | 328 | 3,4,5,6 | 25.3\% | 0.0\% | 1.2\% | 11.3\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% | 43.6\% |
| 1987 | 607 | 2,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.2\% | 0.7\% | 0.0\% | 20.3\% | 0.0\% | 34.3\% |
| 1988 | 825 | 2,3,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 14.9\% | 0.0\% | 41.7\% |
| 1989 | 661 | 2,3,4,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 24.4\% | 0.0\% | 35.4\% |
| 1990 | 1351 | 2,3,4,5 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 0.0\% | 55.1\% |
| 1991 | 1199 | 2,3,4,5,6 | 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\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 14.6\% | 0.0\% | 42.5\% |
| 1992 | 763 | 2,3,4,5,6 | 14.0\% | 4.1\% | 2.4\% | 8.7\% | 1.8\% | 17.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 16.3\% | 0.0\% | 34.5\% |
| 1993 | 699 | 2,3,4,5,6 | 19.3\% | 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 | 1214 | 2,3,4,5,6 | 23.6\% | 0.7\% | 0.4\% | 21.3\% | 1.5\% | 4.0\% | 1.0\% | 0.0\% | 0.2\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 0.0\% | 28.0\% |
| 1995 | 834 | 2,3,4,5,6 | 21.9\% | 0.0\% | 1.8\% | 7.4\% | 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\% | 32.4\% |
| 1996 | 805 | 2,3,4,5,6 | 18.1\% | 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\% | 62.2\% |
| 1997 | 972 | 2,3,4,5,6 | 38.3\% | 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\% | 19.5\% | 0.0\% | 34.7\% |
| 1998 | 676 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 8.4\% | 0.0\% | 73.1\% |
| 2000 | 512 | 2,3,4,5,6 | 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 | 503 | 2,3,4,5,6 | 28.6\% | 0.0\% | 6.8\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 38.0\% | 0.0\% | 19.9\% |
| 2002 | 1784 | 2,3,4,5,6 | 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 | 1572 | 2,3,4,5,6 | 23.0\% | 0.1\% | 3.9\% | 11.5\% | 5.9\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 20.0\% | 0.0\% | 34.7\% |
| 2004 | 2757 | 2,3,4,5,6 | 17.3\% | 0.7\% | 3.2\% | 7.3\% | 8.3\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 11.2\% | 0.0\% | 50.0\% |
| 2005 | 2620 | 2,3,4,5,6 | 15.6\% | 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 | 1171 | 2,3,4,5,6 | 26.1\% | 0.4\% | 2.9\% | 13.7\% | 3.8\% | 4.1\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.1\% | 0.0\% | 31.6\% |
| 2007 | 713 | 2,3,4,5,6 | 32.3\% | 0.0\% | 4.5\% | 11.4\% | 15.3\% | 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\% | 14.2\% | 0.0\% | 19.4\% |
| 2008 | 1062 | 3,4,5,6 | 16.5\% | 0.2\% | 1.2\% | 7.3\% | 4.6\% | 0.8\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 20.5\% | 0.0\% | 47.9\% |
| 2009 | 1545 | 4,5,6 | 25.8\% | 1.1\% | 3.0\% | 8.6\% | 3.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.9\% | 0.0\% | 44.5\% |
| 1979-2009 | 930 |  | 22.5\% | 0.5\% | 2.1\% | 11.7\% | 2.3\% | 4.2\% | 0.2\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.1\% | 0.4\% | 0.0\% | 17.9\% | 0.2\% | 36.7\% |
| 1979-1984 | 179 |  | 22.3\% | 0.8\% | 0.0\% | 18.2\% | 1.0\% | 9.7\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 1.4\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.5\% | 0.9\% | 0.0\% | 24.0\% | 0.0\% | 19.7\% |
| 1985-1995 | 798 |  | 20.7\% | 0.7\% | 0.9\% | 13.2\% | 1.3\% | 6.6\% | 0.2\% | 0.0\% | 0.0\% | 0.6\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 17.1\% | 0.0\% | 37.0\% |
| 1996-1998 | 818 |  | 27.2\% | 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\% | 43.9\% |
| 1999-2009 | 1366 |  | 23.2\% | 0.2\% | 4.2\% | 8.5\% | 4.3\% | 1.0\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 17.0\% | 0.0\% | 40.6\% |


| Appendix C.47. Percent distribution of Quinsam River Fall (Upper Strait of Georgia) reported catch among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 791 | 2,3,4,5,6 | 16.1\% | 4.7\% | 1.1\% | 0.8\% | 7.7\% | 0.0\% | 0.8\% | 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\% | 64.7\% |
| 2007 | 566 | 2,3,4,5,6 | 19.8\% | 2.8\% | 1.1\% | 3.2\% | 12.5\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.9\% |
| 2008 | 388 | 2,3,4,5,6 | 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\% |
| 2009 | 403 | 2,3,4,5,6 | 11.2\% | 5.0\% | 2.0\% | 0.7\% | 10.4\% | 0.0\% | 1.5\% | 0.0\% | 7.9\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.8\% |
| 1979-2009 | 917 |  | 12.8\% | 3.6\% | 2.1\% | 4.7\% | 7.5\% | 0.3\% | 0.3\% | 0.4\% | 4.7\% | 3.8\% | 11.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.5\% |
| 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\% |
| 1999-2009 | 726 |  | 13.3\% | 3.8\% | 1.9\% | 0.8\% | 11.4\% | 0.0\% | 0.2\% | 0.0\% | 3.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 64.9\% |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 1276 | 2,3,4,5,6 | 16.1\% | 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\% | 28.0\% |
| 1985 | 1827 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 1906 | 2,3,4,5,6 | 13.4\% | 9.0\% | 2.8\% | 4.0\% | 3.1\% | 0.3\% | 0.0\% | 0.0\% | 7.6\% | 2.0\% | 16.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 41.2\% |
| 1990 | 1270 | 2,3,4,5,6 | 17.5\% | 4.1\% | 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 | 864 | 2,3,4,5,6 | 11.3\% | 6.3\% | 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\% | 33.8\% |
| 1992 | 685 | 2,3,4,5,6 | 15.2\% | 2.2\% | 2.6\% | 11.1\% | 6.6\% | 0.3\% | 0.0\% | 0.4\% | 3.4\% | 9.9\% | 9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.4\% |
| 1993 | 386 | 2,3,4,5,6 | 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 | 360 | 2,3,4,5,6 | 6.4\% | 14.4\% | 3.9\% | 9.4\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 1.4\% | 15.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.1\% |
| 1995 | 291 | 2,3,4,5,6 | 8.6\% | 7.9\% | 0.0\% | 11.3\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 18.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 39.9\% |
| 1996 | 287 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 609 | 2,3,4,5,6 | 15.4\% | 3.8\% | 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\% | 61.2\% |
| 1999 | 1018 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 851 | 2,3,4,5,6 | 8.6\% | 20.3\% | 1.8\% | 0.2\% | 17.4\% | 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\% | 49.5\% |
| 2005 | 940 | 2,3,4,5,6 | 18.2\% | 3.4\% | 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\% | 55.0\% |
| 2006 | 844 | 2,3,4,5,6 | 17.5\% | 5.8\% | 1.3\% | 0.7\% | 8.6\% | 0.0\% | 0.8\% | 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\% | 60.7\% |
| 2007 | 630 | 2,3,4,5,6 | 21.0\% | 4.8\% | 1.1\% | 3.2\% | 14.3\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 48.4\% |
| 2008 | 407 | 2,3,4,5,6 | 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\% |
| 2009 | 423 | 2,3,4,5,6 | 11.6\% | 6.1\% | 1.9\% | 0.7\% | 11.6\% | 0.0\% | 1.4\% | 0.0\% | 8.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 57.0\% |
| 1979-2009 | 1028 |  | 14.1\% | 5.8\% | 2.3\% | 5.1\% | 8.3\% | 0.3\% | 0.3\% | 0.4\% | 4.8\% | 4.0\% | 11.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.5\% |
| 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\% | 7.7\% | 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 | 461 |  | 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\% | 55.8\% |
| 1999-2009 | 794 |  | 14.5\% | 5.4\% | 2.1\% | 0.8\% | 13.3\% | 0.0\% | 0.2\% | 0.0\% | 3.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 59.6\% |


| Appendix C.49. Percent distribution of Robertson Creek Fall (WCVI Hatchery and Natural) reported catch among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 7823 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2061 | 2,3,4,5 | 15.5\% | 1.6\% | 3.4\% | 5.1\% | 6.7\% | 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\% | 27.9\% | 12.6\% | 22.0\% |
| 2008 | 1493 | 2,3,4,5 | 7.6\% | 0.1\% | 1.3\% | 2.3\% | 5.8\% | 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\% | 21.5\% | 13.1\% | 45.5\% |
| 2009 | 1295 | 2,3,4,5 | 11.7\% | 6.0\% | 2.2\% | 1.9\% | 10.9\% | 0.0\% | 3.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.9\% | 12.7\% | 42.3\% |
| 1979-2009 | 2919 |  | 14.6\% | 2.3\% | 2.0\% | 6.3\% | 2.7\% | 3.3\% | 1.9\% | 0.0\% | 0.8\% | 2.1\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 10.1\% | 11.5\% | 40.2\% |
| 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\% |
| 1999-2009 | 2013 |  | 10.3\% | 2.0\% | 2.6\% | 2.4\% | 5.7\% | 0.1\% | 2.3\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.6\% | 10.8\% | 48.9\% |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2171 | 2,3,4,5 | 30.1\% | 3.7\% | 0.0\% | 14.3\% | 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\% | 6.9\% |
| 1985 | 1085 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 4761 | 2,3,4,5 | 10.5\% | 7.6\% | 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\% | 31.0\% |
| 1990 | 7262 | 2,3,4,5 | 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 | 10516 | 2,3,4,5 | 19.8\% | 1.9\% | 3.2\% | 9.9\% | 0.8\% | 4.8\% | 1.0\% | 0.0\% | 0.3\% | 2.9\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 13.2\% | 12.1\% | 28.8\% |
| 1992 | 10004 | 2,3,4,5 | 15.0\% | 14.1\% | 1.6\% | 7.1\% | 1.3\% | 17.6\% | 1.8\% | 0.0\% | 0.1\% | 2.8\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 5.0\% | 32.1\% |
| 1993 | 6336 | 2,3,4,5 | 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 | 3494 | 2,3,4,5 | 17.5\% | 5.7\% | 3.5\% | 9.2\% | 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\% | 11.5\% | 16.3\% | 23.0\% |
| 1995 | 1292 | 2,3,4,5 | 17.2\% | 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\% | 48.1\% |
| 1996 | 793 | 2,3,4,5 | 9.2\% | 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\% | 75.4\% |
| 1997 | 2447 | 2,3,4,5 | 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 | 3350 | 2,3,4,5 | 16.4\% | 1.8\% | 5.0\% | 6.1\% | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2068 | 2,3,4,5 | 13.1\% | 0.4\% | 1.8\% | 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 | 3006 | 2,3,4,5 | 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 | 5270 | 2,3,4,5 | 12.7\% | 11.4\% | 2.8\% | 2.6\% | 5.6\% | 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\% | 11.4\% | 12.8\% | 37.8\% |
| 2005 | 3351 | 2,3,4,5 | 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 | 2889 | 2,3,4,5 | 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 | 2273 | 2,3,4,5 | 16.8\% | 2.6\% | 3.7\% | 5.3\% | 8.0\% | 0.1\% | 4.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.9\% | 12.6\% | 20.0\% |
| 2008 | 1603 | 2,3,4,5 | 9.9\% | 0.2\% | 1.5\% | 2.6\% | 6.1\% | 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\% | 20.8\% | 13.3\% | 42.4\% |
| 2009 | 1421 | 2,3,4,5 | 12.6\% | 6.6\% | 2.3\% | 2.0\% | 12.5\% | 0.0\% | 4.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 13.2\% | 38.6\% |
| 1979-2009 | 3316 |  | 16.5\% | 4.0\% | 2.3\% | 6.8\% | 3.1\% | 3.5\% | 1.9\% | 0.0\% | 0.9\% | 2.3\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 9.3\% | 11.2\% | 36.0\% |
| 1979-1984 | 3665 |  | 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 | 4534 |  | 15.3\% | 6.0\% | 1.8\% | 8.7\% | 1.1\% | 6.0\% | 2.0\% | 0.0\% | 0.5\% | 1.7\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 6.7\% | 13.7\% | 33.7\% |
| 1996-1998 | 2197 |  | 12.9\% | 3.0\% | 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\% | 51.4\% |
| 1999-2009 | 2213 |  | 11.7\% | 2.7\% | 3.0\% | 2.6\% | 6.8\% | 0.1\% | 2.5\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.8\% | 11.1\% | 45.4\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 1916 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 83 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 897 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 4953 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 6152 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 357 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 23 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 614 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 1777 | 2,3,4 | 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 | 2,3,4,5 | 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 | 938 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.4\% | 3.2\% | 1.7\% | 9.7\% | 0.1\% | 3.0\% | 0.0\% | 9.0\% | 0.0\% | 0.7\% | 21.7\% | 8.8\% | 0.0\% | 1.5\% | 1.3\% | 25.8\% |
| 1992 | 577 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1435 | 2,3,4,5 | 0.8\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 8.3\% | 5.4\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 1.2\% | 51.2\% | 5.6\% | 0.0\% | 0.5\% | 0.0\% | 15.1\% |
| 2007 | 1790 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 4.8\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.4\% | 30.7\% | 3.3\% | 0.0\% | 0.5\% | 18.3\% | 23.1\% |
| 2008 | 1589 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 4.6\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 3.8\% | 0.0\% | 0.3\% | 44.0\% | 7.9\% | 0.0\% | 0.3\% | 0.0\% | 27.2\% |
| 2009 | 1462 | 2,3,4,5 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 5.1\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.2\% | 33.8\% | 7.6\% | 0.0\% | 0.6\% | 0.0\% | 43.2\% |
| 1979-2009 | 1102 |  | 0.7\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 8.2\% | 4.8\% | 0.6\% | 8.9\% | 0.1\% | 0.9\% | 0.0\% | 4.6\% | 0.0\% | 0.3\% | 33.8\% | 6.8\% | 0.0\% | 0.4\% | 1.8\% | 27.9\% |
| 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 | 1186 |  | 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\% | 24.1\% |
| 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\% |
| 1999-2009 | 1064 |  | 0.7\% | 0.1\% | 0.0\% | 0.3\% | 0.3\% | 7.9\% | 6.2\% | 0.0\% | 6.8\% | 0.0\% | 0.1\% | 0.0\% | 4.3\% | 0.0\% | 0.4\% | 37.5\% | 4.5\% | 0.0\% | 0.5\% | 1.7\% | 28.8\% |

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

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 1972 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 83 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 1576 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 5514 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 6392 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 369 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 67 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 933 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 2042 | 2,3,4 | 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 | 2,3,4,5 | 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 | 1025 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 3.2\% | 2.0\% | 10.4\% | 0.1\% | 2.9\% | 0.0\% | 9.4\% | 0.0\% | 0.8\% | 20.4\% | 10.0\% | 0.0\% | 1.4\% | 1.3\% | 23.6\% |
| 1992 | 724 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 342 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% | 10.2\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 39.5\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 25.4\% |
| 2001 | 1718 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1611 | 2,3,4,5 | 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\% | 50.0\% | 7.2\% | 0.0\% | 0.4\% | 0.0\% | 13.4\% |
| 2007 | 2028 | 2,3,4,5 | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.5\% | 5.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.4\% | 29.2\% | 6.3\% | 0.0\% | 0.4\% | 18.7\% | 20.4\% |
| 2008 | 1772 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.0\% | 4.8\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 4.2\% | 0.0\% | 0.3\% | 43.1\% | 10.3\% | 0.0\% | 0.3\% | 0.0\% | 24.4\% |
| 2009 | 1779 | 2,3,4,5 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 5.2\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 0.2\% | 32.2\% | 16.7\% | 0.0\% | 0.5\% | 0.0\% | 35.5\% |
| 1979-2009 | 1246 |  | 0.7\% | 0.1\% | 0.0\% | 0.3\% | 0.2\% | 8.5\% | 4.9\% | 0.7\% | 9.7\% | 0.1\% | 0.9\% | 0.0\% | 4.8\% | 0.0\% | 0.3\% | 32.4\% | 9.8\% | 0.0\% | 0.3\% | 1.9\% | 24.5\% |
| 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 | 1345 |  | 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\% | 20.8\% |
| 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\% |
| 1999-2009 | 1202 |  | 0.8\% | 0.1\% | 0.0\% | 0.3\% | 0.3\% | 7.6\% | 6.5\% | 0.0\% | 7.6\% | 0.0\% | 0.1\% | 0.0\% | 4.6\% | 0.0\% | 0.4\% | 36.4\% | 7.8\% | 0.0\% | 0.5\% | 1.7\% | 25.3\% |

Appendix C.53. Percent distribution of Lower Shuswap River Summer (Fraser Early) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 12 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 197 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 597 | 2,3,4 | 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 | 2,3,4,5 | 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 | 606 | 2,3,4,5 | 15.3\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 1.2\% | 0.0\% | 3.0\% | 0.0\% | 8.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 1.3\% | 66.2\% |
| 1997 | 342 | 2,3,4,5 | 17.8\% | 0.9\% | 0.0\% | 12.0\% | 5.8\% | 0.6\% | 0.0\% | 0.0\% | 7.0\% | 1.2\% | 32.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 17.5\% |
| 1998 | 671 | 2,3,4,5 | 20.6\% | 0.1\% | 8.0\% | 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\% | 0.7\% | 0.7\% | 31.4\% |
| 1999 | 354 | 2,3,4,5 | 27.7\% | 0.0\% | 12.7\% | 1.4\% | 13.0\% | 0.0\% | 0.0\% | 0.0\% | 5.6\% | 0.0\% | 10.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.8\% | 27.4\% |
| 2000 | 651 | 2,3,4,5 | 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\% | 0.5\% | 1.4\% | 67.7\% |
| 2001 | 1099 | 2,3,4,5 | 5.8\% | 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\% | 1.2\% | 5.0\% | 76.8\% |
| 2002 | 1412 | 2,3,4,5 | 16.5\% | 0.0\% | 3.0\% | 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\% | 0.6\% | 0.5\% | 48.7\% |
| 2003 | 1537 | 2,3,4,5 | 10.1\% | 0.7\% | 2.0\% | 8.1\% | 5.2\% | 0.0\% | 0.3\% | 0.0\% | 5.2\% | 0.8\% | 4.2\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.3\% | 1.8\% | 59.3\% |
| 2004 | 1047 | 2,3,4,5 | 16.3\% | 0.0\% | 1.9\% | 8.4\% | 8.2\% | 0.9\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 12.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.5\% | 2.1\% | 43.8\% |
| 2005 | 749 | 2,3,4,5 | 13.4\% | 0.0\% | 0.8\% | 10.9\% | 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\% | 0.1\% | 3.9\% | 40.3\% |
| 2006 | 1228 | 2,3,4,5 | 11.6\% | 0.0\% | 2.0\% | 12.9\% | 12.0\% | 0.3\% | 0.9\% | 0.0\% | 6.6\% | 0.0\% | 6.8\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.6\% | 3.0\% | 42.1\% |
| 2007 | 405 | 2,3,4,5 | 6.2\% | 0.2\% | 3.2\% | 2.7\% | 6.4\% | 0.0\% | 0.7\% | 0.0\% | 3.5\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 67.4\% |
| 2008 | 1568 | 2,3,4,5 | 6.3\% | 0.0\% | 0.3\% | 6.3\% | 7.7\% | 0.0\% | 1.4\% | 0.0\% | 4.4\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 3.2\% | 67.5\% |
| 2009 | 1526 | 2,3,4,5 | 7.7\% | 0.0\% | 1.0\% | 5.6\% | 5.2\% | 0.7\% | 2.2\% | 0.0\% | 6.1\% | 0.0\% | 8.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 6.4\% | 55.8\% |
| 1979-2009 | 880 |  | 13.4\% | 0.2\% | 3.1\% | 8.0\% | 7.9\% | 1.3\% | 0.7\% | 0.0\% | 4.3\% | 1.1\% | 9.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.6\% | 2.3\% | 46.8\% |
| 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 | 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 | 540 |  | 17.9\% | 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\% | 0.6\% | 0.7\% | 38.4\% |
| 1999-2009 | 1052 |  | 11.9\% | 0.1\% | 3.1\% | 6.2\% | 7.8\% | 0.4\% | 0.8\% | 0.0\% | 4.5\% | 0.2\% | 6.5\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.7\% | 3.1\% | 54.3\% |

Appendix C.54. Percent distribution of Lower Shuswap River Summer (Fraser Early) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 79 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 267 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 655 | 2,3,4 | 14.7\% | 0.0\% | 1.8\% | 24.3\% | 5.3\% | 11.1\% | 0.0\% | 0.5\% | 1.5\% | 13.7\% | 14.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% |
| 1995 | 385 | 2,3,4,5 | 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 | 649 | 2,3,4,5 | 18.5\% | 0.0\% | 0.0\% | 0.5\% | 3.5\% | 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\% | 0.6\% | 1.4\% | 61.8\% |
| 1997 | 416 | 2,3,4,5 | 20.2\% | 1.4\% | 0.0\% | 12.3\% | 6.5\% | 0.7\% | 0.0\% | 0.0\% | 7.2\% | 1.2\% | 31.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 14.4\% |
| 1998 | 772 | 2,3,4,5 | 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\% | 0.6\% | 0.6\% | 27.3\% |
| 1999 | 412 | 2,3,4,5 | 32.0\% | 0.0\% | 13.1\% | 1.5\% | 13.3\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 23.5\% |
| 2000 | 730 | 2,3,4,5 | 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\% | 0.4\% | 1.4\% | 60.4\% |
| 2001 | 1198 | 2,3,4,5 | 7.9\% | 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\% | 1.2\% | 4.9\% | 70.5\% |
| 2002 | 1543 | 2,3,4,5 | 18.3\% | 0.0\% | 3.4\% | 12.8\% | 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\% | 0.6\% | 0.5\% | 44.6\% |
| 2003 | 1652 | 2,3,4,5 | 11.1\% | 1.0\% | 2.3\% | 9.0\% | 6.2\% | 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\% | 1.3\% | 1.8\% | 55.1\% |
| 2004 | 1169 | 2,3,4,5 | 17.7\% | 0.0\% | 2.3\% | 9.2\% | 10.9\% | 0.8\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 11.4\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.4\% | 2.1\% | 39.3\% |
| 2005 | 832 | 2,3,4,5 | 14.5\% | 0.0\% | 0.8\% | 12.3\% | 16.9\% | 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\% | 0.1\% | 3.7\% | 36.3\% |
| 2006 | 1306 | 2,3,4,5 | 12.1\% | 0.0\% | 2.1\% | 13.3\% | 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\% | 0.5\% | 3.1\% | 39.6\% |
| 2007 | 482 | 2,3,4,5 | 7.9\% | 0.2\% | 7.9\% | 3.3\% | 10.2\% | 0.0\% | 0.8\% | 0.0\% | 4.4\% | 0.0\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 56.6\% |
| 2008 | 1725 | 2,3,4,5 | 8.5\% | 0.0\% | 0.5\% | 7.5\% | 9.2\% | 0.0\% | 1.6\% | 0.0\% | 5.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 3.1\% | 61.4\% |
| 2009 | 1656 | 2,3,4,5 | 9.4\% | 0.0\% | 1.2\% | 6.6\% | 5.8\% | 0.7\% | 2.3\% | 0.0\% | 7.1\% | 0.0\% | 8.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 6.3\% | 51.4\% |
| 1979-2009 | 974 |  | 15.5\% | 0.2\% | 3.7\% | 8.6\% | 9.1\% | 1.3\% | 0.7\% | 0.0\% | 4.8\% | 1.2\% | 8.8\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.6\% | 2.2\% | 42.0\% |
| 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 | 520 |  | 18.8\% | 0.0\% | 3.5\% | 19.9\% | 8.1\% | 7.9\% | 0.0\% | 0.2\% | 1.8\% | 7.4\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.1\% | 0.4\% | 14.5\% |
| 1996-1998 | 612 |  | 19.9\% | 0.5\% | 2.9\% | 7.2\% | 8.8\% | 0.3\% | 0.7\% | 0.0\% | 5.6\% | 0.4\% | 16.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.5\% | 0.7\% | 34.5\% |
| 1999-2009 | 1155 |  | 13.7\% | 0.2\% | 4.0\% | 6.9\% | 9.4\% | 0.3\% | 0.8\% | 0.0\% | 5.1\% | 0.3\% | 6.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.6\% | 3.0\% | 49.0\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 21 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 63 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 38 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 4 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 33 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 467 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 919 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1722 | 2,3,4,5 | 0.3\% | 0.1\% | 0.2\% | 0.2\% | 0.5\% | 6.3\% | 2.8\% | 0.0\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 2.3\% | 0.0\% | 1.0\% | 19.3\% | 60.7\% |
| 2007 | 2466 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.2\% | 6.6\% | 0.0\% | 6.7\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.3\% | 2.9\% | 0.0\% | 1.3\% | 19.1\% | 52.7\% |
| 2008 | 1234 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 4.4\% | 7.2\% | 0.0\% | 5.5\% | 0.0\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 1.4\% | 5.5\% | 0.0\% | 16.0\% | 0.0\% | 58.3\% |
| 2009 | 924 | 2,3,4,5 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 5.2\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 19.9\% | 10.3\% | 50.4\% |
| 1979-2009 | 1334 |  | 1.1\% | 0.1\% | 0.2\% | 0.3\% | 0.5\% | 6.6\% | 4.8\% | 0.0\% | 6.4\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.3\% | 3.1\% | 0.0\% | 3.4\% | 4.0\% | 68.4\% |
| 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 | 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\% |
| 1999-2009 | 1431 |  | 1.0\% | 0.1\% | 0.2\% | 0.3\% | 0.5\% | 7.6\% | 4.7\% | 0.0\% | 5.9\% | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 2.8\% | 0.0\% | 3.9\% | 4.8\% | 67.2\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 29 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 69 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 38 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 4 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 68 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 538 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 986 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1849 | 2,3,4,5 | 0.4\% | 0.1\% | 0.3\% | 0.3\% | 0.5\% | 6.4\% | 3.1\% | 0.0\% | 6.8\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 3.5\% | 0.0\% | 1.0\% | 20.5\% | 56.6\% |
| 2007 | 2642 | 2,3,4,5 | 0.4\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 9.0\% | 6.9\% | 0.0\% | 7.6\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.3\% | 3.8\% | 0.0\% | 1.3\% | 20.6\% | 49.2\% |
| 2008 | 1303 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 4.4\% | 7.9\% | 0.0\% | 6.1\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.4\% | 7.4\% | 0.0\% | 15.6\% | 0.0\% | 55.2\% |
| 2009 | 1016 | 2,3,4,5 | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 5.6\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 10.0\% | 0.0\% | 18.8\% | 10.7\% | 45.9\% |
| 1979-2009 | 1424 |  | 1.3\% | 0.1\% | 0.2\% | 0.3\% | 0.7\% | 6.7\% | 5.2\% | 0.0\% | 7.4\% | 0.0\% | 0.4\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 5.1\% | 0.0\% | 3.3\% | 4.3\% | 64.1\% |
| 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 | 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\% |
| 1999-2009 | 1527 |  | 1.2\% | 0.1\% | 0.2\% | 0.3\% | 0.6\% | 7.8\% | 5.1\% | 0.0\% | 6.9\% | 0.0\% | 0.1\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.3\% | 4.6\% | 0.0\% | 3.7\% | 5.1\% | 63.1\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 3 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 60 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 120 | 2,3,4 | 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 | 2,3,4,5 | 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 | 109 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 4.6\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 10.1\% | 0.0\% | 11.9\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 24.8\% | 20.2\% | 0.0\% | 0.0\% | 0.0\% | 22.9\% |
| 1988 | 509 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 9.6\% | 0.4\% | 14.5\% | 0.0\% | 13.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 20.6\% | 14.5\% | 0.0\% | 0.0\% | 0.0\% | 23.2\% |
| 1989 | 760 | 2,3,4,5 | 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 | 675 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 4.9\% | 8.7\% | 3.1\% | 11.0\% | 0.4\% | 5.9\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 13.5\% | 22.7\% | 0.0\% | 1.9\% | 0.0\% | 23.4\% |
| 1991 | 483 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 29 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 375 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 733 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 143 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 135 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 461 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2376 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 271 | 2,3,4,5 | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 14.8\% | 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\% | 59.0\% |
| 2003 | 891 | 2,3,4,5 | 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 | 1582 | 2,3,4,5 | 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\% | 4.0\% | 0.0\% | 0.8\% | 0.1\% | 71.4\% |
| 2005 | 1157 | 2,3,4,5 | 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\% | 6.3\% | 0.0\% | 1.0\% | 6.6\% | 60.8\% |
| 2006 | 717 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 6.0\% | 0.0\% | 10.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 2.8\% | 0.0\% | 1.1\% | 33.6\% | 35.8\% |
| 2007 | 754 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 8.4\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 1.1\% | 14.9\% | 0.0\% | 0.4\% | 23.3\% | 44.0\% |
| 2008 | 547 | 2,3,4,5 | 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\% |
| 2009 | 366 | 2,3,4,5 | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 1.6\% | 12.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.3\% | 7.7\% | 0.0\% | 18.9\% | 12.8\% | 42.6\% |
| 1979-2009 | 705 |  | 0.4\% | 0.0\% | 0.0\% | 0.3\% | 0.3\% | 5.4\% | 6.2\% | 0.5\% | 12.7\% | 0.3\% | 3.9\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 4.9\% | 11.7\% | 0.0\% | 3.4\% | 4.0\% | 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 | 397 |  | 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\% | 14.1\% | 14.9\% | 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\% |
| 1999-2009 | 858 |  | 0.4\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 6.6\% | 6.3\% | 0.0\% | 8.7\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.5\% | 8.8\% | 0.0\% | 3.9\% | 6.9\% | 56.8\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 5 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 73 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 130 | 2,3,4 | 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 | 2,3,4,5 | 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 | 164 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 7.3\% | 0.0\% | 9.1\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 19.5\% | 39.6\% | 0.0\% | 0.0\% | 0.0\% | 15.2\% |
| 1988 | 580 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 9.3\% | 0.5\% | 17.1\% | 0.0\% | 12.6\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 19.5\% | 16.2\% | 0.0\% | 0.0\% | 0.0\% | 20.3\% |
| 1989 | 844 | 2,3,4,5 | 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 | 729 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 5.1\% | 8.6\% | 3.3\% | 11.5\% | 0.4\% | 5.6\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 12.9\% | 24.3\% | 0.0\% | 1.8\% | 0.0\% | 21.7\% |
| 1991 | 502 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 88 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | 416 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 756 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 175 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 179 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 628 | 2,3,4 | 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\% | 30.1\% | 0.0\% | 0.8\% | 0.0\% | 30.3\% |
| 1998 | 1233 | 2,3,4,5 | 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 | 2512 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 309 | 2,3,4,5 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 15.5\% | 0.0\% | 16.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 13.3\% | 0.0\% | 0.6\% | 0.0\% | 51.8\% |
| 2003 | 962 | 2,3,4,5 | 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 | 1649 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 13.2\% | 4.1\% | 0.0\% | 6.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.2\% | 5.6\% | 0.0\% | 0.8\% | 0.1\% | 68.5\% |
| 2005 | 1241 | 2,3,4,5 | 1.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 7.5\% | 5.6\% | 0.0\% | 11.6\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.1\% | 8.6\% | 0.0\% | 0.9\% | 6.9\% | 56.7\% |
| 2006 | 791 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 6.4\% | 0.0\% | 11.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.5\% | 4.7\% | 0.0\% | 1.0\% | 33.6\% | 32.5\% |
| 2007 | 839 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 8.3\% | 0.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.2\% | 1.0\% | 18.2\% | 0.0\% | 0.4\% | 24.3\% | 39.6\% |
| 2008 | 586 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 5.1\% | 0.0\% | 8.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 13.5\% | 0.0\% | 15.2\% | 0.0\% | 55.3\% |
| 2009 | 403 | 2,3,4,5 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 1.5\% | 13.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.2\% | 11.7\% | 0.0\% | 17.6\% | 12.9\% | 38.7\% |
| 1979-2009 | 774 |  | 0.4\% | 0.0\% | 0.0\% | 0.3\% | 0.4\% | 5.4\% | 6.3\% | 0.5\% | 13.3\% | 0.3\% | 3.7\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 4.4\% | 16.5\% | 0.0\% | 3.2\% | 4.1\% | 40.2\% |
| 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 | 445 |  | 0.2\% | 0.0\% | 0.0\% | 0.8\% | 0.2\% | 4.6\% | 4.3\% | 1.7\% | 20.0\% | 0.9\% | 10.9\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 12.6\% | 19.7\% | 0.0\% | 3.1\% | 0.0\% | 19.0\% |
| 1996-1998 | 930 |  | 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\% | 25.3\% | 0.0\% | 0.7\% | 0.0\% | 40.7\% |
| 1999-2009 | 925 |  | 0.5\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 6.4\% | 6.6\% | 0.0\% | 9.5\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.4\% | 13.1\% | 0.0\% | 3.6\% | 7.1\% | 51.7\% |

Appendix C.59. Percent distribution of Skykomish Fall Fingerling (Snohomish Wild) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 1 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 103 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 569 | 2,3,4 | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 16.7\% | 3.2\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.5\% | 5.8\% | 0.0\% | 0.0\% | 0.0\% | 64.5\% |
| 2005 | 511 | 2,3,4,5 | 0.8\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 18.4\% | 8.0\% | 0.0\% | 5.1\% | 0.0\% | 0.6\% | 0.0\% | 2.9\% | 0.0\% | 0.4\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 61.3\% |
| 2006 | 584 | 2,3,4,5 | 0.9\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 14.6\% | 3.9\% | 0.0\% | 6.5\% | 0.0\% | 0.2\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 1.0\% | 5.0\% | 0.0\% | 0.0\% | 0.0\% | 63.2\% |
| 2007 | 1104 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 1.2\% | 15.1\% | 6.3\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 1.5\% | 6.3\% | 0.0\% | 0.0\% | 0.0\% | 62.2\% |
| 2008 | 702 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.3\% | 2.7\% | 0.0\% | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 78.5\% |
| 2009 | 328 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 4.3\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 76.2\% |
| 1979-2009 | 633 |  | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 12.7\% | 4.7\% | 0.0\% | 4.9\% | 0.0\% | 0.1\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 0.8\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 67.6\% |
| 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 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1999-2009 | 633 |  | 0.5\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 12.7\% | 4.7\% | 0.0\% | 4.9\% | 0.0\% | 0.1\% | 0.0\% | 2.0\% | 0.0\% | 0.1\% | 0.8\% | 6.1\% | 0.0\% | 0.0\% | 0.0\% | 67.6\% |

Appendix C.60. Percent distribution of Skykomish Fall Fingerling (Snohomish Wild) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 16 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 130 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 607 | 2,3,4 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 16.5\% | 3.6\% | 0.0\% | 7.7\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.5\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 60.5\% |
| 2005 | 546 | 2,3,4,5 | 0.9\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 18.5\% | 9.0\% | 0.0\% | 5.7\% | 0.0\% | 0.7\% | 0.0\% | 3.3\% | 0.0\% | 0.5\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 57.3\% |
| 2006 | 641 | 2,3,4,5 | 1.2\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 14.4\% | 4.2\% | 0.0\% | 7.8\% | 0.0\% | 0.2\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.9\% | 8.3\% | 0.0\% | 0.0\% | 0.0\% | 57.6\% |
| 2007 | 1162 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 1.3\% | 15.0\% | 6.5\% | 0.0\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 1.5\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 59.1\% |
| 2008 | 727 | 2,3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.4\% | 3.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 7.2\% | 0.0\% | 0.0\% | 0.0\% | 75.8\% |
| 2009 | 345 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 4.6\% | 0.0\% | 4.3\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 0.0\% | 0.0\% | 0.0\% | 72.5\% |
| 1979-2009 | 671 |  | 0.6\% | 0.0\% | 0.0\% | 0.1\% | 0.5\% | 12.7\% | 5.2\% | 0.0\% | 5.5\% | 0.0\% | 0.1\% | 0.0\% | 2.3\% | 0.0\% | 0.1\% | 0.7\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 63.8\% |
| 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\% |
| 1999-2009 | 671 |  | 0.6\% | 0.0\% | 0.0\% | 0.1\% | 0.5\% | 12.7\% | 5.2\% | 0.0\% | 5.5\% | 0.0\% | 0.1\% | 0.0\% | 2.3\% | 0.0\% | 0.1\% | 0.7\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 63.8\% |

Appendix C.61. Percent distribution of Sooes Fall Fingerling (Washington Coastal Wild) reported catch among fisheries and escapement.

| Catch <br> Year | $\begin{aligned} & \text { Estimated } \\ & \text { \# of } \\ & \text { CWTs } \\ & \hline \end{aligned}$ | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 13 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 26 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 158 | 2,3,4 | 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 | 3,4,5 | 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 | 2,4,5,6 | 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 | 2,3,5,6 | 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 | 2,3,4,6 | 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 | 2,3,4,5 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 0.5\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 61.0\% |
| 2005 | 492 | 2,3,4,5,6 | 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 | 214 | 2,3,4,5,6 | 22.9\% | 1.4\% | 2.8\% | 26.6\% | 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\% | 31.3\% |
| 2007 | 68 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% |
| 2009 | 155 | 3,4,5,6 | 32.3\% | 3.2\% | 2.6\% | 23.9\% | 11.0\% | 0.0\% | 13.5\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% |
| 1979-2009 | 290 |  | 12.0\% | 0.6\% | 2.0\% | 10.1\% | 2.4\% | 3.9\% | 2.5\% | 0.0\% | 1.4\% | 0.3\% | 0.9\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 0.2\% | 0.5\% | 0.0\% | 2.4\% | 0.0\% | 59.5\% |
| 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\% |
| 1999-2009 | 346 |  | 14.3\% | 0.5\% | 2.5\% | 12.2\% | 4.3\% | 0.4\% | 3.7\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.6\% | 0.1\% | 0.3\% | 0.0\% | 2.4\% | 0.0\% | 56.1\% |

## Appendix C.62. Percent distribution of Sooes Fall Fingerling (Washington Coastal Wild) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 17 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 32 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 190 | 2,3,4 | 10.0\% | 4.2\% | 0.5\% | 3.2\% | 0.0\% | 4.7\% | 7.4\% | 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\% | 62.6\% |
| 1990 | 170 | 3,4,5 | 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 | 2,4,5,6 | 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 | 2,3,5,6 | 10.4\% | 0.3\% | 0.3\% | 10.7\% | 0.0\% | 20.6\% | 1.5\% | 0.0\% | 1.2\% | 2.1\% | 3.1\% | 0.0\% | 0.3\% | 0.0\% | 0.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 46.9\% |
| 1993 | 253 | 2,3,4,6 | 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 | 228 | 2,3,4,5 | 19.3\% | 8.8\% | 3.5\% | 9.6\% | 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\% | 48.7\% |
| 1995 | 181 | 2,3,4,5,6 | 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 | 226 | 2,3,4,5,6 | 15.5\% | 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\% | 82.3\% |
| 1997 | 307 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 937 | 2,3,4,5,6 | 19.3\% | 0.7\% | 2.1\% | 16.2\% | 0.0\% | 0.7\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.4\% | 0.0\% | 0.9\% | 0.0\% | 57.3\% |
| 2005 | 524 | 2,3,4,5,6 | 27.3\% | 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 | 2,3,4,5,6 | 23.3\% | 1.8\% | 2.6\% | 26.4\% | 2.2\% | 1.8\% | 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\% | 29.5\% |
| 2007 | 78 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 8.7\% | 0.0\% | 0.0\% | 14.8\% | 11.3\% | 0.0\% | 9.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 53.0\% |
| 2009 | 166 | 3,4,5,6 | 31.9\% | 3.6\% | 2.4\% | 22.9\% | 12.0\% | 0.0\% | 13.9\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% |
| 1979-2009 | 314 |  | 14.2\% | 1.2\% | 2.3\% | 10.9\% | 2.8\% | 4.4\% | 2.6\% | 0.0\% | 1.5\% | 0.4\% | 0.9\% | 0.0\% | 0.7\% | 0.0\% | 0.5\% | 0.3\% | 0.6\% | 0.0\% | 2.3\% | 0.0\% | 54.4\% |
| 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 | 246 |  | 12.5\% | 2.8\% | 1.2\% | 9.2\% | 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 |  | 12.6\% | 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\% | 65.9\% |
| 1999-2009 | 368 |  | 15.7\% | 0.6\% | 3.0\% | 12.7\% | 5.0\% | 0.4\% | 3.9\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.6\% | 0.1\% | 0.3\% | 0.0\% | 2.3\% | 0.0\% | 52.4\% |


| Appendix C.63. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 893 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.3\% | 0.4\% | 0.0\% | 0.0\% | 2.6\% | 1.5\% | 0.0\% | 6.6\% | 0.0\% | 1.1\% | 0.8\% | 4.3\% | 0.0\% | 16.5\% | 3.4\% | 32.6\% |
| 1985 | 1160 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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\% | 0.0\% | 2.9\% | 0.0\% | 4.3\% | 0.0\% | 21.4\% | 3.2\% | 28.3\% |
| 1994 | 893 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 698 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.2\% | 0.0\% | 1.9\% | 0.0\% | 1.0\% | 0.0\% | 37.1\% | 1.0\% | 32.7\% |
| 2007 | 986 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 3.1\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 3.7\% | 0.0\% | 0.9\% | 0.0\% | 38.7\% | 1.4\% | 42.9\% |
| 2008 | 2145 | 2,3,4,5 | 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\% | 1.7\% | 0.0\% | 41.6\% | 2.6\% | 33.6\% |
| 2009 | 2438 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.9\% | 1.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 2.9\% | 0.0\% | 1.6\% | 0.0\% | 40.6\% | 1.7\% | 49.0\% |
| 1979-2009 | 2375 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 2.3\% | 0.0\% | 0.4\% | 0.3\% | 0.5\% | 0.0\% | 11.6\% | 0.1\% | 3.7\% | 0.9\% | 2.0\% | 0.0\% | 28.0\% | 2.7\% | 33.8\% |
| 1979-1984 | 3826 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 25.5\% | 0.2\% | 0.1\% | 1.2\% | 0.8\% | 1.3\% | 0.0\% | 16.3\% | 0.5\% | 5.9\% | 0.8\% | 3.9\% | 0.0\% | 22.2\% | 0.6\% | 20.7\% |
| 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\% |
| 1999-2009 | 3072 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 3.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 0.0\% | 3.1\% | 0.0\% | 0.6\% | 0.0\% | 30.2\% | 2.7\% | 43.0\% |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 4967 | 2,3,4,5 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 0.5\% | 0.0\% | 1.1\% | 0.5\% | 0.0\% | 0.0\% | 9.2\% | 0.0\% | 4.1\% | 0.3\% | 7.8\% | 0.0\% | 18.6\% | 0.0\% | 26.4\% |
| 1984 | 1031 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.8\% | 0.4\% | 0.0\% | 0.0\% | 2.6\% | 1.4\% | 0.0\% | 6.6\% | 0.0\% | 1.2\% | 1.1\% | 10.4\% | 0.0\% | 15.2\% | 3.2\% | 28.2\% |
| 1985 | 1257 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.6\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 0.2\% | 0.0\% | 16.2\% | 0.0\% | 2.5\% | 0.7\% | 1.4\% | 0.0\% | 26.5\% | 0.2\% | 36.9\% |
| 1986 | 351 | 2,3,4,5 | 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\% |
| 1987 | 151 | 2,3,4,5 | 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 | 789 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 26.2\% | 2.3\% | 0.0\% | 1.0\% | 0.3\% | 1.8\% | 0.0\% | 17.9\% | 0.0\% | 3.2\% | 2.2\% | 5.1\% | 0.0\% | 25.9\% | 4.7\% | 9.1\% |
| 1989 | 2374 | 2,3,4,5 | 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 | 2444 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3224 | 2,3,4,5 | 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\% | 27.5\% |
| 1993 | 1251 | 2,3,4,5 | 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\% | 0.0\% | 2.9\% | 0.0\% | 5.5\% | 0.0\% | 19.7\% | 3.3\% | 25.0\% |
| 1994 | 971 | 2,3,4,5 | 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 | 966 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 37.7\% | 0.0\% | 47.6\% |
| 1996 | 870 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.1\% | 0.0\% | 1.1\% | 0.0\% | 0.9\% | 0.0\% | 58.4\% | 1.8\% | 27.9\% |
| 1997 | 649 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 1.2\% | 0.0\% | 3.5\% | 0.0\% | 23.6\% | 7.4\% | 40.4\% |
| 1998 | 845 | 2,3,4,5 | 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\% | 1.1\% | 0.0\% | 15.1\% | 13.5\% | 63.2\% |
| 1999 | 1669 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 3.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 19.2\% | 0.0\% | 2.6\% | 0.0\% | 0.2\% | 0.0\% | 35.8\% | 7.7\% | 29.9\% |
| 2000 | 866 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 2.2\% | 0.0\% | 1.5\% | 0.0\% | 21.8\% | 8.4\% | 48.6\% |
| 2001 | 6815 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.9\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 16.2\% | 0.0\% | 3.1\% | 0.0\% | 0.8\% | 0.0\% | 22.6\% | 2.6\% | 50.2\% |
| 2002 | 4710 | 2,3,4,5 | 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\% | 0.5\% | 0.0\% | 24.6\% | 2.9\% | 32.3\% |
| 2003 | 6486 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 0.0\% | 3.7\% | 0.0\% | 0.2\% | 0.0\% | 22.0\% | 2.4\% | 45.9\% |
| 2004 | 6429 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 3.3\% | 0.0\% | 0.4\% | 0.0\% | 18.6\% | 2.1\% | 50.1\% |
| 2005 | 2457 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.3\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 27.2\% | 1.0\% | 36.0\% |
| 2006 | 744 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.8\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 0.0\% | 1.9\% | 0.0\% | 1.2\% | 0.0\% | 37.2\% | 1.2\% | 30.6\% |
| 2007 | 1096 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.5\% | 3.6\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 4.1\% | 0.0\% | 4.5\% | 0.0\% | 37.6\% | 1.6\% | 38.6\% |
| 2008 | 2314 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 6.7\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 7.2\% | 0.0\% | 2.9\% | 0.0\% | 2.0\% | 0.0\% | 41.7\% | 3.2\% | 31.1\% |
| 2009 | 2831 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 1.0\% | 2.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 3.1\% | 0.0\% | 9.6\% | 0.0\% | 37.9\% | 1.9\% | 42.2\% |
| 1979-2009 | 2655 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 2.5\% | 0.0\% | 0.4\% | 0.3\% | 0.5\% | 0.0\% | 12.7\% | 0.1\% | 3.7\% | 1.1\% | 3.1\% | 0.0\% | 26.9\% | 3.0\% | 30.6\% |
| 1979-1984 | 4464 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.5\% | 0.2\% | 0.1\% | 1.1\% | 0.9\% | 1.2\% | 0.0\% | 17.3\% | 0.5\% | 5.9\% | 0.9\% | 5.5\% | 0.0\% | 20.4\% | 0.5\% | 17.9\% |
| 1985-1995 | 1522 |  | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 17.4\% | 2.5\% | 0.0\% | 0.4\% | 0.4\% | 0.7\% | 0.0\% | 15.1\% | 0.0\% | 3.5\% | 2.6\% | 3.3\% | 0.0\% | 26.2\% | 2.8\% | 24.9\% |
| 1996-1998 | 788 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 0.0\% | 1.4\% | 0.0\% | 1.8\% | 0.0\% | 32.4\% | 7.6\% | 43.8\% |
| 1999-2009 | 3311 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 3.6\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 9.8\% | 0.0\% | 3.3\% | 0.0\% | 1.9\% | 0.0\% | 29.7\% | 3.2\% | 39.6\% |

Appendix C.65. Percent distribution of South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) reported catch among fisheries and
escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 993 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 426 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 957 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 2776 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 435 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.6\% | 0.0\% | 0.0\% | 12.6\% | 0.0\% | 3.9\% | 0.0\% | 7.1\% | 0.5\% | 0.2\% | 13.8\% | 10.6\% | 0.0\% | 0.0\% | 0.0\% | 38.6\% |
| 1988 | 1706 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 5.5\% | 4.2\% | 0.2\% | 7.3\% | 0.5\% | 4.6\% | 0.0\% | 7.1\% | 0.0\% | 0.6\% | 25.2\% | 14.1\% | 0.0\% | 1.2\% | 0.0\% | 28.7\% |
| 1989 | 5015 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1746 | 2,3,4,5 | 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\% | 11.9\% | 12.6\% | 0.0\% | 14.7\% | 0.2\% | 27.4\% |
| 1992 | 1332 | 2,3,4,5 | 0.6\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 17.3\% | 2.2\% | 0.3\% | 3.4\% | 0.9\% | 3.1\% | 0.0\% | 9.2\% | 0.0\% | 0.7\% | 14.2\% | 17.4\% | 0.0\% | 9.6\% | 0.0\% | 21.2\% |
| 1993 | 1403 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3729 | 2,3,4,5 | 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\% | 60.8\% |
| 2002 | 3426 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3274 | 2,3,4,5 | 0.3\% | 0.0\% | 0.1\% | 0.5\% | 0.4\% | 12.3\% | 2.6\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 0.5\% | 6.3\% | 6.4\% | 0.0\% | 7.7\% | 0.0\% | 54.4\% |
| 2007 | 3267 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 12.0\% | 4.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.2\% | 3.1\% | 10.3\% | 0.0\% | 12.3\% | 0.2\% | 50.5\% |
| 2008 | 2344 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 7.3\% | 3.5\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.4\% | 4.1\% | 9.4\% | 0.0\% | 13.1\% | 0.3\% | 56.7\% |
| 2009 | 2618 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 4.9\% | 8.2\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 2.3\% | 8.3\% | 0.0\% | 12.7\% | 0.2\% | 56.8\% |
| 1979-2009 | 2599 |  | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 11.7\% | 2.7\% | 0.2\% | 4.1\% | 0.2\% | 1.4\% | 0.0\% | 4.6\% | 0.0\% | 0.4\% | 9.4\% | 12.6\% | 0.0\% | 6.8\% | 0.1\% | 45.0\% |
| 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 | 2191 |  | 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\% | 13.3\% | 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\% |
| 1999-2009 | 2659 |  | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 10.3\% | 4.1\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.5\% | 4.9\% | 7.8\% | 0.0\% | 8.5\% | 0.1\% | 55.7\% |

Appendix C.66. Percent distribution of South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) total fishing mortalities among
fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 1034 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1980 | 621 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 1308 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 3260 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 585 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.2\% | 0.0\% | 0.0\% | 10.4\% | 0.0\% | 3.4\% | 0.0\% | 8.9\% | 0.9\% | 0.2\% | 11.3\% | 15.0\% | 0.0\% | 0.0\% | 0.0\% | 28.7\% |
| 1988 | 2536 | 2,3,4,5 | 0.4\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 10.2\% | 3.4\% | 0.2\% | 9.1\% | 1.0\% | 3.5\% | 0.0\% | 7.6\% | 0.0\% | 0.5\% | 21.2\% | 22.1\% | 0.0\% | 0.9\% | 0.0\% | 19.3\% |
| 1989 | 5597 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1897 | 2,3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.6\% | 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\% | 25.3\% |
| 1992 | 1598 | 2,3,4,5 | 0.6\% | 0.3\% | 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\% | 23.4\% | 0.0\% | 8.3\% | 0.0\% | 17.6\% |
| 1993 | 1609 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2510 | 2,3,4,5 | 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 | 4114 | 2,3,4,5 | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.1\% | 7.8\% | 3.4\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.4\% | 4.1\% | 13.8\% | 0.0\% | 7.0\% | 0.0\% | 55.1\% |
| 2002 | 3686 | 2,3,4,5 | 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\% | 46.0\% |
| 2003 | 2351 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3565 | 2,3,4,5 | 0.3\% | 0.0\% | 0.1\% | 0.5\% | 0.4\% | 12.1\% | 2.8\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 7.1\% | 0.0\% | 0.5\% | 6.5\% | 9.7\% | 0.0\% | 7.5\% | 0.0\% | 50.0\% |
| 2007 | 3645 | 2,3,4,5 | 0.2\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 11.7\% | 4.4\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 5.8\% | 0.0\% | 0.2\% | 3.0\% | 15.8\% | 0.0\% | 11.6\% | 0.2\% | 45.2\% |
| 2008 | 2569 | 2,3,4,5 | 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\% | 13.7\% | 0.0\% | 12.7\% | 0.3\% | 51.7\% |
| 2009 | 2907 | 2,3,4,5 | 0.1\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 5.0\% | 8.8\% | 0.0\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.3\% | 2.3\% | 13.0\% | 0.0\% | 12.0\% | 0.2\% | 51.1\% |
| 1979-2009 | 2922 |  | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 12.5\% | 2.8\% | 0.2\% | 4.3\% | 0.3\% | 1.3\% | 0.0\% | 4.9\% | 0.0\% | 0.4\% | 8.9\% | 16.8\% | 0.0\% | 6.4\% | 0.1\% | 40.3\% |
| 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 | 2513 |  | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 15.3\% | 2.0\% | 0.2\% | 5.0\% | 0.3\% | 2.7\% | 0.0\% | 6.6\% | 0.1\% | 0.4\% | 12.3\% | 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\% |
| 1999-2009 | 2924 |  | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 0.2\% | 10.1\% | 4.5\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.5\% | 4.8\% | 12.1\% | 0.0\% | 8.1\% | 0.1\% | 50.7\% |

Appendix C.67. Percent distribution of South Puget Sound Fall Yearling (Puget Sound Hatchery Yearling) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 2 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 118 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 283 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 65 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 30 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 449 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1270 | 2,3,4 | 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 | 2,3,4,5 | 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 | 500 | 2,3,4,5 | 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\% | 27.4\% | 48.4\% | 0.0\% | 1.0\% | 0.0\% | 11.2\% |
| 1993 | 265 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 2.2\% | 82.2\% | 0.0\% | 3.3\% | 0.0\% | 10.0\% |
| 1999 | 39 | 2,3,4,5 | 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 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 11.8\% | 69.7\% | 0.0\% | 0.0\% | 0.0\% | 6.6\% |
| 2001 | 67 | 2,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 74.6\% | 0.0\% | 0.0\% | 0.0\% | 17.9\% |
| 2002 | 12 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 83.3\% | 0.0\% | 0.0\% | 0.0\% | 16.7\% |
| 2003 | 8 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 140 | 2,4,5 | 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 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 1.2\% | 16.1\% | 53.7\% | 0.0\% | 3.1\% | 0.0\% | 23.9\% |
| 2006 | 270 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.5\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.6\% | 0.0\% | 0.0\% | 21.1\% | 30.4\% | 0.0\% | 3.0\% | 0.0\% | 30.4\% |
| 2007 | 295 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 2.0\% | 13.6\% | 51.5\% | 0.0\% | 2.4\% | 0.0\% | 24.7\% |
| 2008 | 89 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 5.6\% | 37.1\% | 0.0\% | 11.2\% | 0.0\% | 40.4\% |
| 2009 | 133 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 21.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 2.3\% | 3.8\% | 41.4\% | 0.0\% | 1.5\% | 4.5\% | 24.8\% |
| 1979-2009 | 360 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 1.7\% | 0.0\% | 1.3\% | 0.2\% | 0.1\% | 0.0\% | 2.0\% | 0.0\% | 0.4\% | 11.3\% | 58.1\% | 0.0\% | 1.4\% | 0.5\% | 20.2\% |
| 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 | 725 |  | 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\% | 16.5\% |
| 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\% |
| 1999-2009 | 138 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 3.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 0.5\% | 7.5\% | 52.0\% | 0.0\% | 2.1\% | 0.5\% | 27.8\% |

Appendix C.68. Percent distribution of South Puget Sound Fall Yearling (Puget Sound Hatchery Yearling) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 18 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | 179 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 370 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 70 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 143 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 731 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1423 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.5\% | 0.0\% | 1.6\% | 0.0\% | 0.1\% | 31.3\% | 54.6\% | 0.0\% | 0.3\% | 0.7\% | 9.8\% |
| 1991 | 1230 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 11.3\% | 62.1\% | 0.0\% | 0.2\% | 0.3\% | 16.5\% |
| 1992 | 583 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 1.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.0\% | 0.7\% | 26.1\% | 50.9\% | 0.0\% | 0.9\% | 0.0\% | 9.6\% |
| 1993 | 494 | 2,3,4,5 | 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 | 875 | 2,3,4,5 | 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\% | 65.0\% | 0.0\% | 0.0\% | 0.0\% | 14.9\% |
| 1995 | 791 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 1.6\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 8.0\% | 73.7\% | 0.0\% | 0.3\% | 1.3\% | 7.0\% |
| 1996 | 809 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 1.7\% | 86.1\% | 0.0\% | 2.6\% | 0.0\% | 7.8\% |
| 1999 | 102 | 2,3,4,5 | 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 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 9.6\% | 73.4\% | 0.0\% | 0.0\% | 0.0\% | 5.3\% |
| 2001 | 91 | 2,4,5 | 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 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 88.9\% | 0.0\% | 0.0\% | 0.0\% | 11.1\% |
| 2003 | 9 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 272 | 2,4,5 | 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\% | 40.8\% | 0.0\% | 0.4\% | 0.0\% | 45.2\% |
| 2005 | 314 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.3\% | 14.3\% | 60.2\% | 0.0\% | 2.5\% | 0.0\% | 19.4\% |
| 2006 | 455 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.1\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 15.4\% | 55.4\% | 0.0\% | 1.8\% | 0.0\% | 18.0\% |
| 2007 | 380 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 1.6\% | 11.6\% | 60.8\% | 0.0\% | 1.8\% | 0.0\% | 19.2\% |
| 2008 | 129 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 5.4\% | 52.7\% | 0.0\% | 8.5\% | 0.0\% | 27.9\% |
| 2009 | 257 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 1.2\% | 3.1\% | 65.0\% | 0.0\% | 0.8\% | 3.1\% | 12.8\% |
| 1979-2009 | 461 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.4\% | 1.3\% | 0.0\% | 1.0\% | 0.2\% | 0.1\% | 0.0\% | 1.6\% | 0.0\% | 0.3\% | 10.4\% | 67.3\% | 0.0\% | 1.0\% | 0.4\% | 13.8\% |
| 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 | 899 |  | 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\% |
| 1999-2009 | 211 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 2.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 2.1\% | 0.0\% | 0.4\% | 7.1\% | 66.3\% | 0.0\% | 1.6\% | 0.3\% | 17.4\% |

Appendix C.69. Percent distribution of Squaxin Pens Fall Yearling (Puget Sound Hatchery Yearling) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | AgesPresent | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 54 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 580 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1423 | 2,3,4 | 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 | 846 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 0.6\% | 0.0\% | 8.9\% | 0.0\% | 0.4\% | 32.9\% | 48.2\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% |
| 1992 | 728 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 47.5\% | 30.5\% | 0.0\% | 0.0\% | 0.0\% | 22.0\% |
| 1996 | 362 | 2,3,4 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 0.0\% | 7.9\% | 84.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% |
| 1998 | 104 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 1.9\% | 91.3\% | 0.0\% | 1.0\% | 0.0\% | 2.9\% |
| 1999 | 16 | 2,4,5 | 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 | 321 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 208 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 12 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 422 |  | 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 | 594 |  | 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\% | 11.4\% |
| 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\% |
| 1999-2009 | 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.70. Percent distribution of Squaxin Pens Fall Yearling (Puget Sound Hatchery Yearling) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 192 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 988 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 1742 | 2,3,4 | 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 | 989 | 2,3,4,5 | 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\% | 50.6\% | 0.0\% | 0.0\% | 0.0\% | 2.8\% |
| 1992 | 964 | 2,3,4,5 | 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 | 3,4,5 | 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 | 2,4,5 | 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 | 2,3,5 | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 0.0\% | 1.6\% | 93.0\% | 0.0\% | 0.8\% | 0.0\% | 2.3\% |
| 1999 | 196 | 2,4,5 | 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 | 409 | 3,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | 250 | 4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | 12 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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 | 749 |  | 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\% | 49.7\% | 0.0\% | 0.4\% | 0.0\% | 7.7\% |
| 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\% |
| 1999-2009 | 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.71. Percent distribution of Salmon River (Oregon Coast) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 479 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 846 | 2,3,4 | 31.3\% | 0.0\% | 0.8\% | 9.6\% | 0.0\% | 8.2\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 1.5\% | 0.0\% | 1.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 31.6\% |
| 1981 | 772 | 2,3,4,5 | 21.5\% | 0.0\% | 0.5\% | 25.3\% | 0.0\% | 3.4\% | 0.6\% | 0.0\% | 0.0\% | 0.3\% | 2.6\% | 0.0\% | 0.8\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.5\% | 28.6\% |
| 1982 | 716 | 2,3,4,5,6 | 7.7\% | 1.4\% | 0.8\% | 12.4\% | 0.0\% | 6.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.6\% | 0.0\% | 1.0\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.9\% | 43.9\% |
| 1983 | 640 | 3,4,5,6 | 15.5\% | 0.5\% | 0.0\% | 15.2\% | 0.0\% | 8.0\% | 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\% | 21.1\% | 38.8\% |
| 1984 | 764 | 2,4,5,6 | 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 | 2,3,5,6 | 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 | 2,3,4,6 | 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 | 2,3,4,5 | 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 | 1214 | 2,3,4,5,6 | 9.3\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 3.8\% | 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\% | 14.3\% | 63.6\% |
| 1989 | 1142 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2804 | 2,3,4,5,6 | 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 | 2264 | 2,3,4,5,6 | 7.6\% | 0.2\% | 0.2\% | 15.2\% | 1.1\% | 18.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 3.2\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.7\% | 30.7\% |
| 1994 | 4085 | 2,3,4,5,6 | 8.7\% | 0.2\% | 1.0\% | 14.8\% | 2.1\% | 4.7\% | 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\% | 17.3\% | 49.0\% |
| 1995 | 3899 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 3591 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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\% | 0.0\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 26.9\% | 20.8\% |
| 2007 | 1254 | 2,3,4,5,6 | 12.8\% | 0.0\% | 0.9\% | 6.6\% | 3.3\% | 0.2\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 37.0\% | 38.7\% |
| 2008 | 688 | 2,3,4,5,6 | 8.3\% | 0.0\% | 0.0\% | 4.4\% | 4.5\% | 2.9\% | 2.8\% | 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\% | 60.0\% |
| 2009 | 1692 | 2,3,4,5,6 | 13.5\% | 0.0\% | 0.6\% | 8.9\% | 2.3\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.8\% | 38.3\% |
| 1979-2009 | 2213 |  | 13.7\% | 0.4\% | 0.5\% | 9.8\% | 1.5\% | 3.5\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 0.4\% | 0.0\% | 1.2\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 24.6\% | 42.6\% |
| 1979-1984 | 748 |  | 17.3\% | 0.4\% | 0.4\% | 16.0\% | 0.0\% | 5.9\% | 0.1\% | 0.0\% | 0.0\% | 1.3\% | 1.2\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 19.1\% | 37.0\% |
| 1985-1995 | 1929 |  | 10.1\% | 0.8\% | 0.2\% | 11.7\% | 0.7\% | 6.0\% | 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\% | 21.1\% | 46.0\% |
| 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\% |
| 1999-2009 | 2969 |  | 14.9\% | 0.2\% | 0.7\% | 6.5\% | 3.1\% | 1.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.2\% | 42.3\% |


| Appendix C.72. Percent distribution of Salmon River (Oregon Coast) total fishing mortalities among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 591 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  | - |
| 1980 | 930 | 2,3,4 | 30.9\% | 0.1\% | 0.9\% | 12.3\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 1.5\% | 0.0\% | 1.2\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.2\% | 28.7\% |
| 1981 | 869 | 2,3,4,5 | 22.3\% | 0.0\% | 0.5\% | 27.0\% | 0.0\% | 4.1\% | 0.6\% | 0.0\% | 0.0\% | 0.7\% | 2.5\% | 0.0\% | 0.8\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.1\% | 25.4\% |
| 1982 | 820 | 2,3,4,5,6 | 10.7\% | 1.3\% | 1.0\% | 14.3\% | 0.0\% | 7.3\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.6\% | 0.0\% | 1.1\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23.3\% | 38.3\% |
| 1983 | 732 | 3,4,5,6 | 20.6\% | 0.5\% | 0.0\% | 16.3\% | 0.0\% | 7.9\% | 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\% | 19.7\% | 33.9\% |
| 1984 | 837 | 2,4,5,6 | 13.3\% | 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\% | 38.5\% |
| 1985 | 762 | 2,3,5,6 | 15.4\% | 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\% | 20.7\% | 33.9\% |
| 1986 | 647 | 2,3,4,6 | 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 | 2,3,4,5 | 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 | 1424 | 2,3,4,5,6 | 15.3\% | 0.0\% | 0.0\% | 8.4\% | 0.0\% | 5.1\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.6\% | 54.2\% |
| 1989 | 1514 | 2,3,4,5,6 | 17.4\% | 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\% | 21.3\% | 35.3\% |
| 1990 | 1825 | 2,3,4,5,6 | 18.2\% | 1.6\% | 0.0\% | 12.9\% | 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\% | 21.7\% | 30.7\% |
| 1991 | 2917 | 2,3,4,5,6 | 24.0\% | 0.0\% | 0.5\% | 16.5\% | 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\% | 22.7\% | 28.0\% |
| 1992 | 3316 | 2,3,4,5,6 | 4.6\% | 3.3\% | 0.0\% | 8.3\% | 2.1\% | 16.8\% | 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\% | 14.8\% | 46.1\% |
| 1993 | 2753 | 2,3,4,5,6 | 10.5\% | 0.5\% | 0.2\% | 17.2\% | 1.0\% | 19.4\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.4\% | 0.0\% | 3.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 22.0\% | 25.2\% |
| 1994 | 4687 | 2,3,4,5,6 | 15.1\% | 0.4\% | 1.0\% | 15.1\% | 2.2\% | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.1\% | 0.0\% | 1.4\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 16.5\% | 42.7\% |
| 1995 | 4445 | 2,3,4,5,6 | 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\% | 30.1\% | 49.3\% |
| 1996 | 2459 | 2,3,4,5,6 | 19.9\% | 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\% | 47.2\% | 24.7\% |
| 1997 | 4407 | 2,3,4,5,6 | 32.2\% | 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 | 3113 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 2,3,4,5,6 | 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 | 5500 | 2,3,4,5,6 | 20.6\% | 1.2\% | 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\% | 38.5\% |
| 2005 | 4965 | 2,3,4,5,6 | 21.2\% | 0.0\% | 1.3\% | 8.8\% | 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 | 2020 | 2,3,4,5,6 | 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\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 26.8\% | 19.0\% |
| 2007 | 1417 | 2,3,4,5,6 | 15.3\% | 0.0\% | 1.3\% | 7.3\% | 4.5\% | 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\% | 36.6\% | 34.2\% |
| 2008 | 865 | 2,3,4,5,6 | 17.2\% | 0.0\% | 0.0\% | 7.1\% | 4.7\% | 3.1\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 1.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 47.7\% |
| 2009 | 1943 | 2,3,4,5,6 | 17.4\% | 0.0\% | 0.7\% | 9.9\% | 2.5\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 34.6\% | 33.4\% |
| 1979-2009 | 2539 |  | 17.9\% | 0.8\% | 0.5\% | 11.1\% | 1.7\% | 3.9\% | 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\% | 24.1\% | 36.8\% |
| 1979-1984 | 838 |  | 19.6\% | 0.4\% | 0.5\% | 17.6\% | 0.0\% | 6.4\% | 0.1\% | 0.0\% | 0.0\% | 1.4\% | 1.1\% | 0.0\% | 0.7\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.7\% | 33.0\% |
| 1985-1995 | 2285 |  | 15.3\% | 1.6\% | 0.2\% | 13.3\% | 0.8\% | 6.7\% | 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\% | 20.2\% | 38.6\% |
| 1996-1998 | 3326 |  | 21.2\% | 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\% | 32.4\% | 35.7\% |
| 1999-2009 | 3352 |  | 18.8\% | 0.2\% | 0.8\% | 7.2\% | 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\% | 28.1\% | 37.0\% |

Appendix C.73. Percent distribution of Skagit Summer Fingerling (Skagit Wild) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 3 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 6 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | 179 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1423 | 2,3,4,5 | 5.4\% | 0.4\% | 0.2\% | 0.9\% | 0.9\% | 8.6\% | 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\% | 75.1\% |
| 2008 | 1070 | 2,3,4,5 | 4.7\% | 0.0\% | 0.0\% | 1.3\% | 1.5\% | 5.1\% | 5.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.7\% | 0.0\% | 18.2\% | 0.0\% | 61.1\% |
| 2009 | 779 | 2,3,4,5 | 6.8\% | 0.8\% | 0.8\% | 1.5\% | 1.2\% | 3.5\% | 7.3\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 2.4\% | 0.0\% | 35.7\% | 0.0\% | 36.2\% |
| 1979-2009 | 887 |  | 6.2\% | 0.6\% | 0.3\% | 1.1\% | 1.4\% | 5.8\% | 5.9\% | 0.0\% | 3.7\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.4\% | 1.1\% | 0.0\% | 5.5\% | 0.0\% | 67.5\% |
| 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\% |
| 1999-2009 | 952 |  | 6.5\% | 0.7\% | 0.3\% | 1.2\% | 1.4\% | 6.2\% | 5.8\% | 0.0\% | 3.9\% | 0.0\% | 0.1\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 6.0\% | 0.0\% | 66.0\% |

Appendix C.74. Percent distribution of Skagit Summer Fingerling (Skagit Wild) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | AABM |  |  |  |  |  |  | ISBM |  |  |  |  |  |  |  |  |  |  |  |  | Esc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | SEAK |  |  |  |  | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 4 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 12 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | 183 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1394 | 2,3,4,5 | 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\% | 0.6\% | 0.0\% | 3.0\% | 0.0\% | 76.4\% |
| 2007 | 1471 | 2,3,4,5 | 6.4\% | 0.7\% | 0.2\% | 1.0\% | 1.1\% | 8.8\% | 3.8\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 1.0\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.0\% | 2.8\% | 0.0\% | 72.7\% |
| 2008 | 1115 | 2,3,4,5 | 5.7\% | 0.0\% | 0.0\% | 1.5\% | 1.7\% | 5.3\% | 5.8\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 1.1\% | 0.0\% | 17.9\% | 0.0\% | 58.7\% |
| 2009 | 865 | 2,3,4,5 | 8.0\% | 0.8\% | 1.3\% | 1.6\% | 1.5\% | 3.6\% | 8.1\% | 0.0\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.1\% | 5.0\% | 0.0\% | 33.3\% | 0.0\% | 32.6\% |
| 1979-2009 | 940 |  | 7.8\% | 0.9\% | 0.4\% | 1.3\% | 1.7\% | 5.9\% | 6.3\% | 0.0\% | 4.3\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 2.1\% | 0.0\% | 5.3\% | 0.0\% | 63.2\% |
| 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 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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\% |
| 1999-2009 | 1009 |  | 8.1\% | 0.9\% | 0.4\% | 1.4\% | 1.8\% | 6.3\% | 6.2\% | 0.0\% | 4.4\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.4\% | 2.2\% | 0.0\% | 5.7\% | 0.0\% | 61.4\% |

Appendix C.75. Percent distribution of Stillaguamish Fall Fingerling (Stillaguamish Wild) reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 10 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 42 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 83 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 41 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 57 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 255 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 339 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 679 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 308 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 13 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 98 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 456 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | 779 | 2,3,4 | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 11.3\% | 1.0\% | 0.0\% | 2.4\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 1.7\% | 2.3\% | 0.0\% | 0.6\% | 0.0\% | 77.0\% |
| 2007 | 653 | 2,3,4,5 | 0.6\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 15.9\% | 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\% | 56.4\% |
| 2008 | 1107 | 2,3,4,5 | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.0\% | 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\% | 70.8\% |
| 2009 | 882 | 2,3,4,5 | 1.2\% | 0.1\% | 0.2\% | 0.3\% | 0.7\% | 2.3\% | 4.1\% | 0.0\% | 7.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.2\% | 5.8\% | 0.0\% | 4.1\% | 0.0\% | 72.7\% |
| 1979-2009 | 611 |  | 2.6\% | 0.1\% | 0.0\% | 0.6\% | 0.5\% | 10.0\% | 4.8\% | 0.0\% | 6.9\% | 1.5\% | 4.7\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 3.6\% | 11.3\% | 0.0\% | 1.0\% | 0.0\% | 50.9\% |
| 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\% |
| 1999-2009 | 760 |  | 1.8\% | 0.3\% | 0.0\% | 0.0\% | 0.3\% | 7.0\% | 4.1\% | 0.0\% | 5.0\% | 0.0\% | 0.1\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.3\% | 5.1\% | 0.0\% | 1.3\% | 0.0\% | 73.2\% |

Appendix C.76. Percent distribution of Stillaguamish Fall Fingerling (Stillaguamish Wild) total fishing mortalities among fisheries and escapement.

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 16 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | 53 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | 106 | 2,3,4 | 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 | 2,3,4,5 | 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 | 3,4,5 | 5.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.3\% | 0.0\% | 0.0\% | 20.8\% | 0.0\% | 4.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 21.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1987 | 42 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 102 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 315 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | 411 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 817 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 3,4,5 | 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 | 308 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | 13 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 128 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 497 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | 816 | 2,3,4 | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 11.8\% | 1.2\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.0\% | 1.7\% | 3.9\% | 0.0\% | 0.6\% | 0.0\% | 73.5\% |
| 2007 | 756 | 2,3,4,5 | 1.1\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 15.7\% | 6.2\% | 0.0\% | 10.6\% | 0.0\% | 0.8\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 4.4\% | 9.4\% | 0.0\% | 0.5\% | 0.0\% | 48.7\% |
| 2008 | 1172 | 2,3,4,5 | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 5.5\% | 0.0\% | 5.6\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.5\% | 10.8\% | 0.0\% | 3.4\% | 0.0\% | 66.9\% |
| 2009 | 947 | 2,3,4,5 | 1.4\% | 0.1\% | 0.3\% | 0.3\% | 0.8\% | 2.2\% | 4.5\% | 0.0\% | 8.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 1.3\% | 9.1\% | 0.0\% | 3.9\% | 0.0\% | 67.7\% |
| 1979-2009 | 681 |  | 2.8\% | 0.3\% | 0.0\% | 0.7\% | 0.5\% | 10.5\% | 4.8\% | 0.1\% | 7.3\% | 1.3\% | 4.3\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 3.4\% | 15.0\% | 0.0\% | 0.9\% | 0.0\% | 46.5\% |
| 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\% |
| 1999-2009 | 812 |  | 2.1\% | 0.8\% | 0.0\% | 0.0\% | 0.3\% | 7.0\% | 4.4\% | 0.0\% | 5.7\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 1.3\% | 7.8\% | 0.0\% | 1.3\% | 0.0\% | 68.6\% |


| Appendix C.77. Percent distribution of Columbia River Summers (Columbia River Summer) reported catch among fisheries and escapement. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 327 | 3,4,5 | 33.3\% | 0.0\% | 0.9\% | 8.9\% | 0.0\% | 17.1\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 1.2\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 32.4\% |
| 1981 | 312 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 24 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 13 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 76 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 117 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 146 | 2,4,5 | 2.1\% | 0.0\% | 0.0\% | 13.7\% | 3.4\% | 26.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.6\% | 0.0\% | 36.3\% |
| 1989 | 128 | 2,3,5 | 2.3\% | 0.0\% | 3.1\% | 3.1\% | 3.1\% | 0.0\% | 11.7\% | 0.0\% | 3.9\% | 0.0\% | 10.9\% | 0.0\% | 5.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.5\% | 0.0\% | 50.8\% |
| 1990 | 422 | 2,3,4 | 7.3\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 32.2\% | 0.0\% | 0.0\% | 1.2\% | 2.1\% | 3.3\% | 0.0\% | 10.9\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 4.3\% | 0.0\% | 32.2\% |
| 1991 | 594 | 2,3,4,5 | 4.9\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 6.9\% | 0.8\% | 0.0\% | 0.0\% | 0.7\% | 3.4\% | 0.0\% | 4.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.5\% | 69.2\% |
| 1992 | 282 | 2,3,4,5 | 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 | 203 | 2,3,4,5 | 7.4\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 14.8\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 5.4\% | 0.0\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 0.0\% | 61.6\% |
| 1994 | 32 | 2,3,4,5 | 15.6\% | 0.0\% | 0.0\% | 0.0\% | 15.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 6.3\% | 0.0\% | 62.5\% |
| 1995 | 148 | 2,3,4,5 | 2.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 89.2\% |
| 1996 | 346 | 2,3,4,5 | 13.9\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.3\% | 0.0\% | 2.9\% | 0.0\% | 2.9\% | 0.0\% | 0.9\% | 0.0\% | 1.2\% | 0.0\% | 4.0\% | 2.3\% | 69.4\% |
| 1997 | 1228 | 2,3,4,5 | 8.1\% | 0.1\% | 3.4\% | 0.2\% | 1.1\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.1\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.1\% | 0.5\% | 80.1\% |
| 1998 | 1460 | 2,3,4,5 | 8.4\% | 0.1\% | 0.9\% | 0.5\% | 1.8\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.8\% | 0.4\% | 80.7\% |
| 1999 | 710 | 2,3,4,5 | 10.3\% | 3.0\% | 2.1\% | 0.7\% | 2.4\% | 0.7\% | 4.4\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 8.7\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 3.4\% | 62.0\% |
| 2000 | 1931 | 2,3,4,5 | 18.4\% | 1.0\% | 2.5\% | 0.4\% | 2.7\% | 5.1\% | 6.5\% | 0.0\% | 0.2\% | 0.0\% | 0.5\% | 0.0\% | 3.7\% | 0.0\% | 1.7\% | 0.1\% | 0.2\% | 0.0\% | 1.0\% | 2.7\% | 53.2\% |
| 2001 | 6667 | 2,3,4,5 | 12.9\% | 2.7\% | 1.3\% | 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\% | 42.1\% |
| 2002 | 10425 | 2,3,4,5 | 21.6\% | 0.0\% | 1.4\% | 12.3\% | 1.6\% | 15.2\% | 1.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.4\% | 0.0\% | 3.4\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 2.2\% | 31.3\% |
| 2003 | 7230 | 2,3,4,5 | 25.8\% | 0.4\% | 1.0\% | 11.1\% | 2.0\% | 12.2\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 6.4\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 0.0\% | 2.9\% | 5.8\% | 30.9\% |
| 2004 | 4536 | 2,3,4,5 | 13.1\% | 0.3\% | 1.1\% | 5.1\% | 1.3\% | 12.5\% | 1.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.3\% | 0.0\% | 1.5\% | 0.0\% | 0.2\% | 0.0\% | 7.8\% | 14.7\% | 30.6\% |
| 2005 | 9655 | 2,3,4,5 | 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\% | 51.1\% |
| 2006 | 3641 | 2,3,4,5 | 10.8\% | 0.1\% | 0.5\% | 3.5\% | 1.1\% | 11.1\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.4\% | 0.2\% | 0.1\% | 0.0\% | 13.3\% | 9.8\% | 45.1\% |
| 2007 | 4664 | 2,3,4,5 | 9.4\% | 0.8\% | 1.1\% | 1.2\% | 1.8\% | 6.0\% | 1.1\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 9.6\% | 11.0\% | 53.9\% |
| 2008 | 1507 | 2,3,4,5 | 6.3\% | 0.3\% | 0.4\% | 1.0\% | 0.3\% | 4.3\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.3\% | 0.0\% | 0.2\% | 0.0\% | 22.8\% | 9.8\% | 49.0\% |
| 2009 | 924 | 3,4,5 | 6.6\% | 0.3\% | 0.2\% | 1.4\% | 0.6\% | 11.5\% | 11.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 3.4\% | 4.9\% | 57.0\% |
| 1979-2009 | 2390 |  | 11.5\% | 0.4\% | 0.9\% | 3.7\% | 1.8\% | 9.9\% | 2.0\% | 0.1\% | 0.6\% | 0.5\% | 1.6\% | 0.0\% | 5.0\% | 0.0\% | 1.0\% | 0.1\% | 0.2\% | 0.0\% | 5.1\% | 3.2\% | 52.4\% |
| 1979-1984 | 245 |  | 22.2\% | 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\% | 32.8\% |
| 1985-1995 | 244 |  | 7.1\% | 0.0\% | 0.4\% | 3.7\% | 2.8\% | 12.6\% | 1.8\% | 0.0\% | 0.7\% | 0.6\% | 2.6\% | 0.0\% | 5.1\% | 0.0\% | 0.6\% | 0.2\% | 0.2\% | 0.0\% | 4.7\% | 0.1\% | 56.9\% |
| 1996-1998 | 1011 |  | 10.1\% | 0.2\% | 1.4\% | 0.2\% | 1.0\% | 0.6\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 1.0\% | 0.0\% | 2.6\% | 0.0\% | 0.3\% | 0.0\% | 0.4\% | 0.0\% | 3.3\% | 1.1\% | 76.7\% |
| 1999-2009 | 4717 |  | 13.0\% | 0.8\% | 1.1\% | 3.9\% | 1.6\% | 9.3\% | 3.1\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 6.4\% | 0.0\% | 1.2\% | 0.0\% | 0.1\% | 0.0\% | 6.5\% | 6.7\% | 46.0\% |


| CatchYear | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 344 | 3,4,5 | 32.8\% | 0.0\% | 0.9\% | 9.3\% | 0.0\% | 18.3\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 1.2\% | 0.0\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 30.8\% |
| 1981 | 316 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1982 | 24 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1985 | 20 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  |
| 1986 | 87 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 123 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | 175 | 2,4,5 | 4.0\% | 0.0\% | 0.0\% | 13.1\% | 3.4\% | 30.3\% | 0.6\% | 0.0\% | 0.6\% | 0.6\% | 0.6\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 0.0\% | 30.3\% |
| 1989 | 160 | 2,3,5 | 6.9\% | 0.0\% | 2.5\% | 4.4\% | 2.5\% | 8.8\% | 10.0\% | 0.0\% | 3.8\% | 0.6\% | 8.8\% | 0.0\% | 6.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.4\% | 0.0\% | 40.6\% |
| 1990 | 448 | 2,3,4 | 8.0\% | 0.0\% | 0.0\% | 4.9\% | 0.0\% | 33.0\% | 0.0\% | 0.0\% | 1.1\% | 2.2\% | 3.6\% | 0.0\% | 11.2\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 4.0\% | 0.0\% | 30.4\% |
| 1991 | 607 | 2,3,4,5 | 5.1\% | 0.0\% | 0.0\% | 2.8\% | 0.0\% | 7.6\% | 0.8\% | 0.0\% | 0.0\% | 0.7\% | 3.5\% | 0.0\% | 4.3\% | 0.0\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 4.9\% | 0.5\% | 67.7\% |
| 1992 | 302 | 2,3,4,5 | 17.5\% | 0.0\% | 0.0\% | 3.6\% | 0.0\% | 15.9\% | 0.0\% | 0.0\% | 0.7\% | 2.0\% | 1.0\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 0.0\% | 1.3\% | 0.0\% | 49.7\% |
| 1993 | 210 | 2,3,4,5 | 8.1\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 15.7\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 5.7\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 0.0\% | 59.5\% |
| 1994 | 37 | 2,3,4,5 | 18.9\% | 0.0\% | 0.0\% | 0.0\% | 21.6\% | 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\% | 5.4\% | 0.0\% | 54.1\% |
| 1995 | 163 | 2,3,4,5 | 4.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 1.8\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 81.0\% |
| 1996 | 405 | 2,3,4,5 | 22.5\% | 0.7\% | 0.0\% | 0.2\% | 0.2\% | 0.7\% | 0.0\% | 0.0\% | 2.7\% | 0.0\% | 3.2\% | 0.0\% | 2.7\% | 0.0\% | 0.7\% | 0.0\% | 1.2\% | 0.0\% | 3.5\% | 2.2\% | 59.3\% |
| 1997 | 1272 | 2,3,4,5 | 9.2\% | 0.1\% | 3.9\% | 0.2\% | 1.7\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 1.1\% | 0.5\% | 77.4\% |
| 1998 | 1502 | 2,3,4,5 | 9.4\% | 0.3\% | 1.1\% | 0.5\% | 2.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 0.4\% | 78.4\% |
| 1999 | 828 | 2,3,4,5 | 14.4\% | 4.3\% | 3.6\% | 0.7\% | 3.4\% | 0.6\% | 4.6\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 9.5\% | 0.0\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 3.1\% | 53.1\% |
| 2000 | 2292 | 2,3,4,5 | 24.6\% | 1.3\% | 3.4\% | 0.5\% | 3.8\% | 4.8\% | 6.5\% | 0.0\% | 0.2\% | 0.0\% | 0.6\% | 0.0\% | 4.1\% | 0.0\% | 1.7\% | 0.1\% | 0.3\% | 0.0\% | 0.9\% | 2.5\% | 44.9\% |
| 2001 | 7357 | 2,3,4,5 | 15.2\% | 4.0\% | 1.3\% | 0.5\% | 1.8\% | 12.3\% | 2.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 16.9\% | 0.0\% | 3.6\% | 0.0\% | 0.9\% | 0.0\% | 0.7\% | 1.6\% | 38.2\% |
| 2002 | 11306 | 2,3,4,5 | 22.9\% | 0.0\% | 1.5\% | 12.6\% | 2.2\% | 14.9\% | 1.4\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 8.7\% | 0.0\% | 3.5\% | 0.0\% | 0.0\% | 0.0\% | 1.0\% | 2.2\% | 28.8\% |
| 2003 | 7899 | 2,3,4,5 | 27.3\% | 0.7\% | 1.1\% | 11.8\% | 2.5\% | 11.7\% | 0.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 6.7\% | 0.0\% | 1.0\% | 0.0\% | 0.1\% | 0.0\% | 2.7\% | 5.8\% | 28.3\% |
| 2004 | 4893 | 2,3,4,5 | 14.3\% | 0.3\% | 1.1\% | 5.4\% | 1.9\% | 12.2\% | 1.4\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 10.7\% | 0.0\% | 1.5\% | 0.0\% | 0.3\% | 0.0\% | 7.4\% | 14.8\% | 28.4\% |
| 2005 | 10087 | 2,3,4,5 | 9.1\% | 0.0\% | 0.7\% | 6.0\% | 2.7\% | 10.3\% | 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\% | 48.9\% |
| 2006 | 3784 | 2,3,4,5 | 11.8\% | 0.1\% | 0.5\% | 3.6\% | 1.3\% | 11.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.1\% | 0.0\% | 0.4\% | 0.2\% | 0.1\% | 0.0\% | 13.0\% | 10.2\% | 43.4\% |
| 2007 | 4858 | 2,3,4,5 | 10.2\% | 1.1\% | 1.2\% | 1.3\% | 2.2\% | 6.0\% | 1.2\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 0.0\% | 0.4\% | 0.0\% | 0.1\% | 0.0\% | 9.3\% | 11.4\% | 51.8\% |
| 2008 | 1575 | 2,3,4,5 | 7.6\% | 0.4\% | 0.4\% | 1.1\% | 0.3\% | 4.4\% | 3.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.0\% | 0.0\% | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 22.1\% | 10.3\% | 46.9\% |
| 2009 | 968 | 3,4,5 | 8.4\% | 0.3\% | 0.2\% | 1.4\% | 0.7\% | 11.3\% | 12.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 3.2\% | 5.1\% | 54.4\% |
| 1979-2009 | 2570 |  | 13.6\% | 0.6\% | 1.0\% | 3.9\% | 2.3\% | 10.8\% | 2.1\% | 0.1\% | 0.6\% | 0.6\% | 1.6\% | 0.0\% | 5.3\% | 0.0\% | 1.0\% | 0.1\% | 0.2\% | 0.0\% | 4.8\% | 3.3\% | 48.1\% |
| 1979-1984 | 270 |  | 23.3\% | 0.0\% | 0.9\% | 9.0\% | 0.0\% | 18.9\% | 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\% | 29.2\% |
| 1985-1995 | 263 |  | 9.2\% | 0.0\% | 0.3\% | 3.8\% | 3.4\% | 15.0\% | 1.7\% | 0.0\% | 0.8\% | 0.8\% | 2.7\% | 0.0\% | 5.4\% | 0.0\% | 0.6\% | 0.3\% | 0.2\% | 0.0\% | 4.1\% | 0.1\% | 51.7\% |
| 1996-1998 | 1060 |  | 13.7\% | 0.4\% | 1.7\% | 0.3\% | 1.5\% | 0.9\% | 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\% | 1.0\% | 71.7\% |
| 1999-2009 | 5077 |  | 15.1\% | 1.1\% | 1.4\% | 4.1\% | 2.1\% | 9.0\% | 3.3\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 6.8\% | 0.0\% | 1.2\% | 0.0\% | 0.2\% | 0.0\% | 6.2\% | 6.8\% | 42.5\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 210 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 298 | 3,4,5 | 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 | 3,4,5,6 | 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 | 267 | 3,4,5,6 | 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\% | 91.8\% |
| 1983 | 168 | 3,4,5,6 | 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 | 353 | 3,4,5,6 | 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 | 345 | 4,5,6 | 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 | 164 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 50 | 6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 63 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 168 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 376 | 3,4,5 | 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 | 634 | 3,4,5,6 | 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\% | 89.0\% |
| 1998 | 389 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 1101 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 904 | 3,4,5,6 | 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 | 893 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 368 | 3,4,5,6 | 6.5\% | 5.2\% | 1.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 87.2\% |
| 2008 | 609 | 4,5,6 | 4.8\% | 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\% | 90.6\% |
| 2009 | 254 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 682 |  | 3.4\% | 4.2\% | 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\% | 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 | 345 |  | 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\% |
| 1999-2009 | 968 |  | 3.2\% | 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\% | 87.6\% |

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

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 216 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 300 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 6.3\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90.7\% |
| 1983 | 170 | 3,4,5,6 | 2.9\% | 1.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 95.3\% |
| 1984 | 356 | 3,4,5,6 | 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\% | 87.6\% |
| 1985 | 346 | 4,5,6 | 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\% | 87.9\% |
| 1986 | 166 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 50 | 6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1988 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | 71 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 184 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 383 | 3,4,5 | 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 | 651 | 3,4,5,6 | 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 | 391 | 3,4,5,6 | 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 | 627 | 3,4,5,6 | 2.1\% | 4.8\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 89.2\% |
| 2000 | 1111 | 3,4,5,6 | 2.2\% | 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\% | 94.5\% |
| 2001 | 998 | 3,4,5,6 | 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 | 938 | 3,4,5,6 | 3.5\% | 2.8\% | 7.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 86.6\% |
| 2003 | 914 | 3,4,5,6 | 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 | 2208 | 3,4,5,6 | 3.2\% | 6.3\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 87.4\% |
| 2005 | 1292 | 3,4,5,6 | 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 | 910 | 3,4,5,6 | 3.7\% | 18.0\% | 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\% | 74.9\% |
| 2007 | 400 | 3,4,5,6 | 7.8\% | 10.8\% | 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\% | 80.3\% |
| 2008 | 618 | 4,5,6 | 4.9\% | 5.3\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 89.3\% |
| 2009 | 254 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 702 |  | 3.8\% | 5.4\% | 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\% | 87.9\% |
| 1979-1984 | 309 |  | 5.7\% | 1.9\% | 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 | 346 |  | 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\% | 87.9\% |
| 1996-1998 | 475 |  | 1.2\% | 1.7\% | 4.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 92.9\% |
| 1999-2009 | 1002 |  | 3.7\% | 8.8\% | 3.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 84.6\% |

Appendix C.81. Percent distribution of Unuk River reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 24 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 605 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 417 | 3,4,5 | 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 | 439 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 4,5,6 | 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 | 129 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 142 | 6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 1 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 24 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 123 | 3,4,5 | 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 | 336 | 3,4,5,6 | 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\% | 84.5\% |
| 1999 | 458 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 411 | 3,4,5,6 | 16.8\% | 0.7\% | 11.9\% | 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\% | 68.1\% |
| 2003 | 283 | 3,4,5,6 | 24.4\% | 0.4\% | 15.9\% | 3.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55.5\% |
| 2004 | 290 | 3,4,5,6 | 13.4\% | 21.4\% | 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\% | 57.2\% |
| 2005 | 380 | 3,4,5,6 | 33.9\% | 3.9\% | 19.2\% | 0.5\% | 3.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 38.7\% |
| 2006 | 377 | 3,4,5,6 | 21.0\% | 12.5\% | 11.9\% | 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\% | 53.1\% |
| 2007 | 326 | 3,4,5,6 | 32.2\% | 8.9\% | 8.6\% | 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\% | 48.5\% |
| 2008 | 173 | 3,4,5,6 | 26.6\% | 7.5\% | 1.7\% | 0.0\% | 4.6\% | 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\% | 59.5\% |
| 2009 | 215 | 3,4,5,6 | 20.5\% | 1.9\% | 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\% | 67.9\% |
| 1979-2009 | 350 |  | 17.1\% | 4.2\% | 8.3\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 68.6\% |
| 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 | 318 |  | 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\% | 84.5\% |
| 1999-2009 | 384 |  | 20.6\% | 5.6\% | 11.3\% | 0.8\% | 1.2\% | 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\% | 60.1\% |

Appendix C.82. Percent distribution of Unuk River total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1983 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1984 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1985 | 44 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1986 | 638 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1987 | 428 | 3,4,5 | 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 | 445 | 3,4,5,6 | 6.7\% | 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 | 3,4,5,6 | 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 | 4,5,6 | 28.2\% | 0.6\% | 11.6\% | 2.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 56.9\% |
| 1991 | 136 | 5,6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | 143 | 6 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | 2 | 3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | 36 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | 144 | 3,4,5 | 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 | 356 | 3,4,5,6 | 12.9\% | 3.1\% | 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\% | 79.8\% |
| 1999 | 517 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 435 | 3,4,5,6 | 18.6\% | 1.4\% | 13.1\% | 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\% | 64.4\% |
| 2003 | 323 | 3,4,5,6 | 28.5\% | 0.3\% | 18.6\% | 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\% | 48.6\% |
| 2004 | 368 | 3,4,5,6 | 14.4\% | 32.1\% | 8.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 45.1\% |
| 2005 | 433 | 3,4,5,6 | 35.8\% | 4.6\% | 20.8\% | 0.5\% | 4.4\% | 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\% | 33.9\% |
| 2006 | 420 | 3,4,5,6 | 22.4\% | 16.0\% | 12.6\% | 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\% | 47.6\% |
| 2007 | 371 | 3,4,5,6 | 32.3\% | 13.7\% | 8.6\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 42.6\% |
| 2008 | 197 | 3,4,5,6 | 32.5\% | 8.1\% | 2.0\% | 0.0\% | 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\% | 52.3\% |
| 2009 | 237 | 3,4,5,6 | 24.5\% | 3.0\% | 11.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 61.6\% |
| 1979-2009 | 384 |  | 19.8\% | 6.0\% | 9.7\% | 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\% | 62.6\% |
| 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 | 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\% | 5.7\% | 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\% | 76.0\% |
| 1999-2009 | 428 |  | 23.0\% | 7.8\% | 12.6\% | 0.8\% | 1.4\% | 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\% | 53.8\% |


| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1723 | 2,3,4,5 | 15.4\% | 1.2\% | 0.1\% | 9.5\% | 0.2\% | 7.7\% | 0.2\% | 0.0\% | 0.2\% | 2.1\% | 2.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 9.6\% | 1.3\% | 49.3\% |
| 1985 | 3519 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 525 | 2,3,4,5 | 11.0\% | 0.2\% | 0.8\% | 5.9\% | 5.0\% | 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\% | 12.8\% | 14.1\% | 46.9\% |
| 2008 | 785 | 2,3,4,5 | 8.7\% | 0.3\% | 0.0\% | 2.3\% | 1.8\% | 1.9\% | 3.6\% | 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\% | 51.2\% |
| 2009 | 1150 | 2,3,4,5 | 17.1\% | 1.1\% | 1.2\% | 8.1\% | 1.4\% | 0.5\% | 1.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 1.0\% | 0.0\% | 0.7\% | 0.0\% | 26.6\% | 2.1\% | 38.0\% |
| 1979-2009 | 1785 |  | 11.4\% | 0.5\% | 0.9\% | 5.9\% | 0.7\% | 4.9\% | 0.5\% | 0.0\% | 0.1\% | 0.5\% | 0.9\% | 0.0\% | 0.8\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 19.3\% | 4.8\% | 47.8\% |
| 1979-1984 | 2518 |  | 15.2\% | 0.5\% | 0.3\% | 7.1\% | 0.1\% | 6.6\% | 0.1\% | 0.2\% | 0.2\% | 1.8\% | 2.6\% | 0.0\% | 0.7\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 8.8\% | 0.4\% | 54.7\% |
| 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\% |
| 1999-2009 | 1583 |  | 12.2\% | 0.6\% | 1.2\% | 4.4\% | 1.7\% | 1.4\% | 1.3\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 16.7\% | 8.0\% | 50.6\% |

Appendix C.84. Percent distribution of Columbia River Upriver Bright (Columbia River Upriver Brights) total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1437 | 2,3,4,5 | 8.5\% | 0.4\% | 0.3\% | 4.2\% | 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 | 2,3,4,5 | 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 | 1996 | 2,3,4,5 | 20.4\% | 1.2\% | 0.2\% | 10.5\% | 0.2\% | 8.4\% | 0.3\% | 0.0\% | 0.2\% | 2.3\% | 2.3\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.1\% | 0.0\% | 8.8\% | 1.3\% | 42.6\% |
| 1985 | 3939 | 2,3,4,5 | 12.3\% | 2.3\% | 0.3\% | 8.6\% | 0.0\% | 7.8\% | 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 | 2,3,4,5 | 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 | 4694 | 2,3,4,5 | 19.1\% | 1.3\% | 0.3\% | 12.3\% | 0.1\% | 7.6\% | 0.4\% | 0.0\% | 0.0\% | 1.8\% | 0.7\% | 0.0\% | 1.2\% | 0.1\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 32.7\% | 2.6\% | 19.0\% |
| 1988 | 3005 | 2,3,4,5 | 11.0\% | 1.5\% | 0.4\% | 8.6\% | 0.0\% | 11.6\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.6\% | 0.0\% | 2.0\% | 0.0\% | 0.6\% | 0.1\% | 0.2\% | 0.0\% | 42.8\% | 2.3\% | 17.8\% |
| 1989 | 1315 | 2,3,4,5 | 14.3\% | 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\% | 40.5\% | 1.7\% | 16.2\% |
| 1990 | 708 | 2,3,4,5 | 14.1\% | 0.0\% | 1.1\% | 10.6\% | 0.0\% | 8.8\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.7\% | 0.0\% | 1.3\% | 0.0\% | 0.4\% | 0.0\% | 0.8\% | 0.0\% | 32.8\% | 1.3\% | 27.4\% |
| 1991 | 294 | 2,3,4,5 | 8.2\% | 1.0\% | 3.4\% | 6.5\% | 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\% | 18.7\% | 4.4\% | 46.6\% |
| 1992 | 326 | 2,3,4,5 | 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 | 2,3,4,5 | 15.6\% | 0.0\% | 0.0\% | 7.5\% | 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 | 996 | 2,3,4,5 | 10.8\% | 2.0\% | 0.0\% | 7.9\% | 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 | 745 | 2,3,4,5 | 10.2\% | 0.3\% | 2.4\% | 2.4\% | 0.0\% | 6.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.7\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 9.7\% | 3.9\% | 62.7\% |
| 1996 | 796 | 2,3,4,5 | 4.5\% | 0.0\% | 0.0\% | 0.1\% | 0.3\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 22.6\% | 5.9\% | 65.1\% |
| 1997 | 1041 | 2,3,4,5 | 12.8\% | 0.4\% | 3.3\% | 5.0\% | 1.2\% | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1017 | 2,3,4,5 | 26.1\% | 0.1\% | 3.2\% | 0.0\% | 0.0\% | 1.5\% | 2.9\% | 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\% | 41.6\% |
| 2001 | 1799 | 2,3,4,5 | 5.4\% | 0.0\% | 1.1\% | 0.0\% | 0.6\% | 0.8\% | 0.6\% | 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 | 2,3,4,5 | 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 | 2468 | 2,3,4,5 | 15.3\% | 1.1\% | 0.6\% | 5.2\% | 1.3\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 14.5\% | 7.1\% | 52.2\% |
| 2004 | 2537 | 2,3,4,5 | 10.8\% | 2.3\% | 0.8\% | 3.7\% | 2.0\% | 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\% | 15.5\% | 6.7\% | 53.5\% |
| 2005 | 2670 | 2,3,4,5 | 14.6\% | 1.8\% | 0.9\% | 9.3\% | 5.6\% | 3.4\% | 2.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.9\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 13.3\% | 7.2\% | 39.5\% |
| 2006 | 1724 | 2,3,4,5 | 13.9\% | 1.9\% | 1.4\% | 6.8\% | 2.0\% | 1.5\% | 2.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 13.0\% | 15.8\% | 39.6\% |
| 2007 | 574 | 2,3,4,5 | 11.8\% | 0.2\% | 1.2\% | 5.7\% | 6.8\% | 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\% | 15.5\% | 42.9\% |
| 2008 | 879 | 2,3,4,5 | 12.9\% | 0.5\% | 0.0\% | 2.8\% | 1.9\% | 1.8\% | 3.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.0\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 19.0\% | 9.6\% | 45.7\% |
| 2009 | 1324 | 2,3,4,5 | 21.5\% | 1.3\% | 1.7\% | 9.1\% | 2.2\% | 0.5\% | 1.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 1.1\% | 0.0\% | 1.1\% | 0.0\% | 24.2\% | 2.0\% | 33.0\% |
| 1979-2009 | 1925 |  | 13.8\% | 0.8\% | 1.1\% | 6.4\% | 0.9\% | 5.4\% | 0.6\% | 0.0\% | 0.1\% | 0.6\% | 0.9\% | 0.0\% | 0.9\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% | 0.0\% | 18.4\% | 5.1\% | 44.2\% |
| 1979-1984 | 2668 |  | 17.7\% | 0.5\% | 0.3\% | 7.8\% | 0.1\% | 7.2\% | 0.1\% | 0.2\% | 0.2\% | 1.9\% | 2.6\% | 0.0\% | 0.7\% | 0.0\% | 0.6\% | 0.0\% | 0.3\% | 0.0\% | 8.5\% | 0.4\% | 50.9\% |
| 1985-1995 | 2025 |  | 11.9\% | 0.9\% | 0.8\% | 8.3\% | 0.3\% | 9.7\% | 0.2\% | 0.0\% | 0.0\% | 0.5\% | 1.1\% | 0.0\% | 0.9\% | 0.0\% | 0.4\% | 0.0\% | 0.3\% | 0.0\% | 26.3\% | 3.3\% | 35.1\% |
| 1996-1998 | 869 |  | 9.3\% | 1.3\% | 2.0\% | 2.7\% | 0.6\% | 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\% | 19.0\% | 8.6\% | 55.2\% |
| 1999-2009 | 1708 |  | 14.8\% | 0.8\% | 1.5\% | 4.7\% | 2.2\% | 1.3\% | 1.4\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 1.0\% | 0.0\% | 0.8\% | 0.0\% | 0.1\% | 0.0\% | 15.9\% | 8.6\% | 46.6\% |

Appendix C.85. Percent distribution of University Of Washington Accelerated reported catch among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 964 | 3,4,5 | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.8\% | 1.5\% | 1.3\% | 4.7\% | 0.3\% | 0.3\% | 0.0\% | 4.0\% | 0.0\% | 0.2\% | 22.8\% | 13.7\% | 0.0\% | 25.5\% | 0.0\% | 14.5\% |
| 1988 | 594 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 43 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 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 | 831 |  | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 14.8\% | 1.2\% | 0.4\% | 4.5\% | 0.1\% | 4.6\% | 0.0\% | 2.6\% | 0.0\% | 0.1\% | 16.5\% | 18.8\% | 0.0\% | 13.4\% | 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\% |
| 1999-2009 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 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.86. Percent distribution of University Of Washington Accelerated total fishing mortalities among fisheries and escapement.

| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 1037 | 3,4,5 | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.4\% | 1.4\% | 1.4\% | 4.6\% | 0.3\% | 0.3\% | 0.0\% | 4.4\% | 0.0\% | 0.2\% | 22.3\% | 14.9\% | 0.0\% | 24.9\% | 0.0\% | 13.5\% |
| 1988 | 616 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1989 | 44 | 5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1990 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1991 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1992 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1993 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1994 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1995 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1996 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1997 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1998 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1999 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2000 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2001 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2007 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2008 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2009 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1979-2009 | 3026 |  | 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\% | 14.9\% | 35.3\% | 0.0\% | 5.1\% | 0.0\% | 20.3\% |
| 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 | 960 |  | 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\% | 16.4\% | 23.1\% | 0.0\% | 12.7\% | 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\% |
| 1999-2009 | 0 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |


| Catch <br> Year | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 1 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1981 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1982 | 82 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 464 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 0.0\% | 0.4\% | 0.0\% | 3.2\% | 0.0\% | 0.0\% | 13.6\% | 41.2\% | 0.0\% | 0.0\% | 0.0\% | 40.1\% |
| 1988 | 1606 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 278 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 2.9\% | 0.0\% | 0.0\% | 2.9\% | 30.6\% | 0.0\% | 0.7\% | 0.0\% | 62.2\% |
| 1994 | 212 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 267 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 40.4\% | 0.0\% | 0.0\% | 0.0\% | 55.8\% |
| 1998 | 126 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 1.6\% | 27.0\% | 0.0\% | 0.0\% | 0.0\% | 69.8\% |
| 1999 | 82 | 2,3,4,5 | 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 | 3,4,5 | 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 | 46 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 161 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 1038 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |
| 2006 | 1014 | 2,3,4 | 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\% | 9.1\% | 0.0\% | 1.7\% | 0.0\% | 84.9\% |
| 2007 | 865 | 2,3,4,5 | 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\% | 0.5\% | 0.2\% | 17.3\% | 0.0\% | 2.2\% | 0.0\% | 78.4\% |
| 2008 | 232 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 5.6\% | 0.0\% | 5.6\% | 0.0\% | 86.2\% |
| 2009 | 200 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 0.0\% | 2.5\% | 0.0\% | 87.0\% |
| 1979-2009 | 445 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.3\% | 0.2\% | 0.2\% | 0.9\% | 0.3\% | 0.5\% | 0.0\% | 1.5\% | 0.0\% | 0.1\% | 9.4\% | 34.4\% | 0.0\% | 1.1\% | 0.0\% | 50.2\% |
| 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 | 601 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.5\% | 0.0\% | 1.3\% | 0.0\% | 1.0\% | 0.0\% | 2.3\% | 0.0\% | 0.1\% | 11.3\% | 42.0\% | 0.0\% | 0.2\% | 0.0\% | 40.6\% |
| 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\% |
| 1999-2009 | 413 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.2\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.5\% | 18.4\% | 0.0\% | 2.0\% | 0.0\% | 76.0\% |

Appendix C.88. Percent distribution of White River Spring Yearling (Puget Sound Hatchery Yearling) total fishing mortalities among fisheries and escapement.

| $\begin{aligned} & \text { Catch } \\ & \text { Year } \end{aligned}$ | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1980 | 1 | 2,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - | - |
| 1981 | 9 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - | - |
| 1982 | 106 | 2,3,4 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 731 | 2,3,4,5 | 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\% | 10.1\% | 60.6\% | 0.0\% | 0.0\% | 0.0\% | 25.4\% |
| 1988 | 1821 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 320 | 2,3,4,5 | 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\% | 39.4\% | 0.0\% | 0.6\% | 0.0\% | 54.1\% |
| 1994 | 248 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 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 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.5\% | 49.5\% | 0.0\% | 0.0\% | 0.0\% | 47.0\% |
| 1998 | 139 | 2,3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 0.0\% | 0.0\% | 1.4\% | 33.8\% | 0.0\% | 0.0\% | 0.0\% | 63.3\% |
| 1999 | 104 | 2,3,4,5 | 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 | 3,4,5 | 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 | 57 | 4,5 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2002 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2003 | No Data |  | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2004 | 220 | 2 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2005 | 1078 | 2,3 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | 1122 | 2,3,4 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 2.5\% | 0.0\% | 0.1\% | 0.2\% | 17.6\% | 0.0\% | 1.6\% | 0.0\% | 76.7\% |
| 2007 | 913 | 2,3,4,5 | 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\% | 21.6\% | 0.0\% | 2.2\% | 0.0\% | 74.3\% |
| 2008 | 239 | 2,3,4,5 | 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\% | 8.4\% | 0.0\% | 5.4\% | 0.0\% | 83.7\% |
| 2009 | 205 | 3,4,5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.7\% | 0.0\% | 2.4\% | 0.0\% | 84.9\% |
| 1979-2009 | 517 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.2\% | 0.2\% | 0.2\% | 0.8\% | 0.3\% | 0.5\% | 0.0\% | 1.5\% | 0.0\% | 0.1\% | 8.2\% | 42.4\% | 0.0\% | 1.0\% | 0.0\% | 43.7\% |
| 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 | 712 |  | 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\% | 10.0\% | 50.0\% | 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\% |
| 1999-2009 | 446 |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.9\% | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.5\% | 0.0\% | 0.1\% | 0.5\% | 24.9\% | 0.0\% | 1.9\% | 0.0\% | 69.9\% |


| Appen <br> Catch <br> Year | C. 89. | Percen |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2098 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - |  |  |  | - |  | - |
| 1980 | 5769 | 3,4,5 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 636 | 3,4,5,6 | 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\% | 6.1\% | 27.2\% | 36.3\% |
| 1988 | 1894 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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\% |
| 1994 | 4726 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 1537 | 3,4,5,6 | 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\% | 4.7\% | 17.7\% | 71.6\% |
| 2008 | 2185 | 3,4,5,6 | 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\% |
| 2009 | 1701 | 3,4,5,6 | 5.5\% | 0.1\% | 0.0\% | 0.5\% | 0.9\% | 1.8\% | 5.7\% | 0.0\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.4\% | 0.0\% | 0.5\% | 0.0\% | 18.6\% | 8.8\% | 55.3\% |
| 1979-2009 | 4881 |  | 4.5\% | 0.3\% | 0.2\% | 2.4\% | 0.1\% | 1.8\% | 0.4\% | 0.0\% | 0.1\% | 0.1\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.0\% | 6.6\% | 23.2\% | 59.0\% |
| 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\% |
| 1999-2009 | 7748 |  | 3.6\% | 0.1\% | 0.1\% | 0.3\% | 0.2\% | 2.1\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.6\% | 0.0\% | 0.1\% | 0.0\% | 0.1\% | 0.0\% | 7.8\% | 18.3\% | 65.8\% |


| Appen <br> Catch <br> Year | C. 90. | Percent |  |  |  |  |  |  |  |  |  |  | ) |  |  |  |  |  |  |  | ca | , |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated <br> \# of <br> CWTs | Ages <br> Present | 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 | 2331 | 3,4 | Failed | Criteria | - | - | - | - | - | - | - | - | - | - | - | - | - |  | - |  |  |  |  |
| 1980 | 6143 | 3,4,5 | 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\% | 72.5\% |
| 1981 | 8470 | 3,4,5,6 | 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 | 4025 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 4114 | 3,4,5,6 | 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 | 2663 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 806 | 3,4,5,6 | 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\% | 5.2\% | 23.2\% | 28.7\% |
| 1988 | 2213 | 3,4,5,6 | 10.0\% | 0.3\% | 0.6\% | 8.0\% | 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 | 2829 | 3,4,5,6 | 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 | 2862 | 3,4,5,6 | 10.0\% | 0.6\% | 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 | 3123 | 3,4,5,6 | 4.2\% | 2.1\% | 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\% | 38.8\% |
| 1992 | 2924 | 3,4,5,6 | 7.1\% | 5.7\% | 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\% | 0.5\% | 0.0\% | 5.2\% | 29.9\% | 42.5\% |
| 1993 | 5586 | 3,4,5,6 | 12.5\% | 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\% | 37.3\% |
| 1994 | 5185 | 3,4,5,6 | 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 | 4657 | 3,4,5,6 | 5.4\% | 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 | 3821 | 3,4,5,6 | 2.4\% | 0.0\% | 0.0\% | 0.3\% | 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\% | 60.2\% |
| 1997 | 2299 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 36123 | 3,4,5,6 | 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\% | 26.8\% | 66.7\% |
| 2002 | 20303 | 3,4,5,6 | 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\% | 22.2\% | 57.0\% |
| 2003 | 7045 | 3,4,5,6 | 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 | 7239 | 3,4,5,6 | 3.8\% | 0.5\% | 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\% | 22.7\% | 58.4\% |
| 2005 | 3074 | 3,4,5,6 | 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 | 3,4,5,6 | 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 | 1639 | 3,4,5,6 | 5.4\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 1.4\% | 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\% | 20.2\% | 67.2\% |
| 2008 | 2292 | 3,4,5,6 | 1.9\% | 1.0\% | 0.1\% | 0.5\% | 0.0\% | 1.1\% | 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\% | 13.9\% | 61.6\% |
| 2009 | 1925 | 3,4,5,6 | 8.5\% | 0.1\% | 0.0\% | 0.6\% | 1.6\% | 2.0\% | 6.6\% | 0.0\% | 1.6\% | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 0.0\% | 0.5\% | 0.0\% | 1.7\% | 0.0\% | 17.6\% | 9.7\% | 48.8\% |
| 1979-2009 | 5263 |  | 6.7\% | 0.5\% | 0.3\% | 2.9\% | 0.1\% | 2.1\% | 0.4\% | 0.0\% | 0.1\% | 0.2\% | 0.2\% | 0.0\% | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.2\% | 0.0\% | 6.3\% | 24.4\% | 54.4\% |
| 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 | 3053 |  | 8.2\% | 1.0\% | 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 | 2580 |  | 4.2\% | 0.1\% | 0.1\% | 0.3\% | 0.0\% | 0.1\% | 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\% | 23.8\% | 70.3\% |
| 1999-2009 | 8268 |  | 5.5\% | 0.2\% | 0.2\% | 0.4\% | 0.3\% | 2.2\% | 0.7\% | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 0.2\% | 0.0\% | 7.6\% | 20.3\% | 61.2\% |

Appendix D Age 2 (fingerling stocks) or age 3 (yearling stocks) CWT survival indices (completed brood years only) for exploitation rate indicator stocks and age 2 or 3 Chinook model (EV) survival indices for corresponding model stocks. Some exploitation rate indicator stocks do not have corresponding model 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. The correlation coefficient (r) between CWT and EV survival indices is shown on each figure.

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CHILKAT RIVER
INDEX OF AGE 3 SURVIVAL


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ELK RIVER
INDEX OF AGE 2 SURVIVAL $r=0.30$


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## GEORGE ADAMS FALL FINGERLING

INDEX OF AGE 2 SURVIVAL


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HOKO FALL FINGERLING INDEX OF AGE 2 SURVIVAL


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LYONS FERRY
INDEX OF AGE 2 SURVIVAL $\mathrm{r}=0.40$


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LYONS FERRY YEARLING
INDEX OF AGE 2 SURVIVAL


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NANAIMO RIVER FALL
INDEX OF AGE 2 SURVIVAL
$r=0.42$

$\rightarrow$ - EV Indexed Survival $\rightarrow-$ CWT Indexed Cohort Survival
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## NISQUALLY FALL FINGERLING INDEX OF AGE 2 SURVIVAL



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$r=0.67$

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SKAGIT SPRING YEARLING INDEX OF AGE 2 SURVIVAL


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UNUK RIVER
INDEX OF AGE 3 SURVIVAL


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- CWT Indexed Cohort Survival

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Brood Year Ocean Exploitation Rates ALASKA SPRING


Brood Year

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

Figure E 1. Alaska Spring (Alaska South SE) ocean exploitation rates by brood year.
Brood Year Total Exploitation Rates
BIG QUALICUM RIVER FALL


Brood Year

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

Figure E 2. Big Qualicum River Fall (Lower Strait of Georgia Hatchery and Natural) total exploitation rates by brood year.

Brood Year Total Exploitation Rates
CHILLIWACK RIVER FALL


Brood Year
$\square$ landed catch ■ incidental mortality
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Brood Year Ocean Exploitation Rates CHILKAT RIVER


Brood Year
$\square$ landed catch ■incidental mortality
Figure E 4. Chilkat River ocean exploitation rates by brood year.

Brood Year Total Exploitation Rates COWICHAN RIVER FALL


Brood Year

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

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Brood Year Total Exploitation Rates DOME CREEK SPRING


Brood Year
$■$ landed catch ■incidental mortality
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Brood Year Ocean Exploitation Rates
ELWHA RIVER


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Brood Year Total Exploitation Rates
HANFORD WILD BRIGHTS


Brood Year
$\square$ landed catch ■incidental mortality
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## Brood Year Ocean Exploitation Rates HOKO FALL FINGERLING



Brood Year
$\square$ landed catch ■incidental mortality
Figure E 12. Hoko Fall Fingerling ocean exploitation rates by brood year.

$\square$ landed catch $\quad$ incidental mortality
Figure E 13. Kitsumkalum River Summer (North/Central BC) total exploitation rates by brood year.

Brood Year Total Exploitation Rates
LOWER RIVER HATCHERY TULE


Brood Year

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

Figure E 14. Lower River Hatchery Tule (Lower Bonneville Hatchery) total exploitation rates by brood year.


Figure E 15. Lewis River Wild (Lewis River Wild) total exploitation rates by brood year.

## Brood Year Total Exploitation Rates LYONS FERRY



Figure E 16. Lyons Ferry (Lyons Ferry Hatchery) total exploitation rates by brood year.

Brood Year Total Exploitation Rates
LYONS FERRY YEARLING


Brood Year

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

Figure E 17. Lyons Ferry Yearling total exploitation rates by brood year.
Brood Year Total Exploitation Rates NANAIMO RIVER FALL


Figure E 18. Nanaimo River Fall (Lower Strait of Georgia Natural) total exploitation rates by brood year.

Brood Year Total Exploitation Rates NICOLA RIVER SPRING


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 19. Nicola River Spring (Fraser Early) total exploitation rates by brood year.
Brood Year Ocean Exploitation Rates NISQUALLY FALL FINGERLING


Figure E 20. Nisqually Fall Fingerling ocean exploitation rates by brood year.

## Brood Year Ocean Exploitation Rates

 NOOKSACK SPRING YEARLING

Figure E 21. Nooksack Spring Yearling (Nooksack Spring Yearling) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates NOOKSACK SPRING FINGERLING


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 22. Nooksack Spring Fingerling (Nooksack Spring Yearling) ocean exploitation rates by brood year.

## Brood Year Total Exploitation Rates

 PUNTLEDGE RIVER SUMMER

Brood Year

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

Figure E 23. Puntledge River Summer (Lower Strait of Georgia Hatchery) total exploitation rates by brood year.

Brood Year Total Exploitation Rates QUEETS FALL FINGERLING


Brood Year

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

Figure E 24. Queets Fall Fingerling (Washington Coastal Wild) total exploitation rates by brood year.

Brood Year Total Exploitation Rates QUINSAM RIVER FALL


Brood Year
$\square$ landed catch $\quad$ incidental mortality
Figure E 25. Quinsam River Fall (Upper Strait of Georgia) total exploitation rates by brood year.
Brood Year Ocean Exploitation Rates ROBERTSON CREEK FALL


Figure E 26. Robertson Creek Fall (WCVI Hatchery and Natural) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates
SAMISH FALL FINGERLING


Figure E 27. Samish Fall Fingerling (Nooksack Fall Fingerling) ocean exploitation rates by brood year.


Figure E 28. Lower Shuswap River Summer (Fraser Early) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SKAGIT SPRING FINGERLING


Brood Year
$\square$ landed catch ■ incidental mortality
Figure E 29. Skagit Spring Fingerling ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates SKAGIT SPRING YEARLING


Figure E 30. Skagit Spring Yearling ocean exploitation rates by brood year.

## Brood Year Ocean Exploitation Rates

 SKYKOMISH FALL FINGERLING

Brood Year
$\square$ landed catch incidental mortality
Figure E 31. Skykomish Fall Fingerling (Snohomish Wild) ocean exploitation rates by brood year.


Figure E 32. 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 33. Spring Creek Tule (Spring Creek Hatchery) total exploitation rates by brood year.
Brood Year Ocean Exploitation Rates SOUTH PUGET SOUND FALL FINGERLING


Figure E 34. South Puget Sound Fall Fingerling (Puget Sound Hatchery Fingerling) ocean exploitation rates by brood year.

$\square$ landed catch $\quad$ incidental mortality
Figure E 35. South Puget Sound Fall Yearling (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.


Figure E 36. Squaxin Pens Fall Yearling (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.

Brood Year Ocean Exploitation Rates SALMON RIVER


Figure E 37. Salmon River (Oregon Coast) ocean exploitation rates by brood year.
Brood Year Ocean Exploitation Rates SKAGIT SUMMER FINGERLING


Figure E 38. Skagit Summer Fingerling (Skagit Wild) ocean exploitation rates by brood year.


Figure E 39. Stillaguamish Fall Fingerling (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 40. Columbia River Summers (Columbia River Summer) total exploitation rates by brood year.

Brood Year Ocean Exploitation Rates
TAKU RIVER


Figure E 41. Taku River ocean exploitation rates by brood year.

## Brood Year Ocean Exploitation Rates UNUK RIVER



Brood Year
$\square$ landed catch ■ incidental mortality
Figure E 42. Unuk River ocean exploitation rates by brood year.


Figure E 43. Columbia River Upriver Bright (Columbia River Upriver Brights) total exploitation rates by brood year.


Brood Year

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

Figure E 44. University Of Washington Accelerated ocean exploitation rates by brood year.


Figure E 45. White River Spring Yearling (Puget Sound Hatchery Yearling) ocean exploitation rates by brood year.


Figure E 46. Willamette Spring (Willamette River Hatchery) ocean exploitation rates by brood year.
Appendix F Total mortality and landed catch exploitation rates for exploitation rate indicator stocks with analogous model stocks in parentheses (complete broods only).
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Appendix F.1. Southeast Alaska All Gear

| FISHERY: | SE ALASKA ALL GEAR |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2010 | Average (1985-2009) |  |  |  |
|  | Percent <br> of <br> Fishery <br> Catch | Percent <br> of <br> Fishery <br> Catch | Percent <br> of <br> Stock <br> Catch | Stock <br> Total <br> Return | Associated Escapement Indicator Stocks |
| Model Stock | $14.61 \%$ | $16.82 \%$ | $22.26 \%$ | $10.67 \%$ | Yakoun <br> Nass |
| North/Central BC |  |  |  |  | Skeena <br> Area 6 Index <br> Area |
| Sindex |  |  |  |  |  |

Appendix F.2. North BC Troll and Sport

| FISHERY: | NORTH TROLL AND SPORT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | Average (1985-2009) |  |  |  |
| Model Stock | Percent of Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return | Associated Escapement Indicator Stocks |
| North/Central BC | 62.01\% | 53.37\% | 68.95\% | 36.34\% | Yakoun Nass <br> Skeena <br> Area 6 Index <br> Area 8 Index <br> Rivers Inlet <br> Smith Inlet |
| Oregon Coastal North Migrating | 5.14\% | 11.53\% | 27.15\% | 13.37\% | Oregon Coastal |
| Columbia Upriver Bright | 6.25\% | 5.90\% | 10.90\% | 5.64\% | Columbia Upriver Bright |
| WCVI Hatchery | 2.17\% | 5.12\% | 14.81\% | 5.77\% | NA |
| Upper Georgia Strait | 5.08\% | 4.11\% | 35.45\% | 21.15\% | Upper Georgia Strait |
| Willamette River Hatchery | 3.26\% | 2.84\% | 15.31\% | 7.31\% | NA |
| Fraser Early | 2.58\% | 2.84\% | 16.14\% | 4.50\% | Upper Fraser Middle Fraser Thompson |
| Washington Coastal Wild | 1.13\% | 2.51\% | 14.81\% | 8.51\% | Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall |
| WA Coastal Hatchery | 1.22\% | 1.98\% | 13.67\% | 7.98\% | NA |
| Mid-Columbia Brights | 1.86\% | 1.81\% | 12.85\% | 5.49\% | Not Represented |
| Columbia Upriver Summer | 4.29\% | 1.79\% | 23.98\% | 10.80\% | Columbia Upriver Summer |
| WCVI Wild | 0.28\% | 1.13\% | 15.00\% | 5.77\% | WCVI |
| Lower GS Hatchery | 0.62\% | 0.94\% | 9.49\% | 5.00\% | NA |
| Fraser Late | 0.86\% | 0.80\% | 1.69\% | 0.68\% | Harrison |
| Fall Cowlitz Hatchery | 0.69\% | 0.78\% | 4.41\% | 1.82\% | NA |
| Lower Georgia Strait | 0.34\% | 0.46\% | 9.29\% | 5.09\% | Lower Georgia Strait |
| Nooksack Fall | 0.42\% | 0.40\% | 1.92\% | 1.39\% | NA |
| Skagit Summer/Fall | 0.27\% | 0.33\% | 16.19\% | 4.64\% | Skagit Summer/Fall |
| PS Hatchery Fingerling | 0.37\% | 0.30\% | 0.87\% | 0.49\% | NA |
| Lewis River Wild | 0.14\% | 0.28\% | 5.65\% | 2.81\% | Lewis River |
| Spring Cowlitz Hatchery | 0.16\% | 0.21\% | 4.53\% | 2.49\% | NA |
| Snohomish Summer/Fall | 0.22\% | 0.17\% | 16.53\% | 4.70\% | Snohomish |
| PS Yearling | 0.29\% | 0.16\% | 2.16\% | 1.41\% | NA |
| Alaska South SE | 0.07\% | 0.08\% | 2.30\% | 0.88\% | King Salmon <br> Andrew Creek <br> Blossom <br> Keta <br> Unuk <br> Chickamin |
| Puget Sound Natural | 0.04\% | 0.07\% | 0.92\% | 0.44\% | Green, Lake Washington |
| Snake River Fall | 0.18\% | 0.05\% | 6.01\% | 3.89\% | Not Represented |
| Stillaguamish Summer/Fall | 0.02\% | 0.03\% | 11.17\% | 4.00\% | Stillaguamish |
| Spring Creek Hatchery | 0.01\% | 0.01\% | 0.06\% | 0.04\% | NA |
| Nooksack Spring | 0.00\% | 0.00\% | 1.55\% | 0.50\% | Not Represented |
| Lower Bonneville Hatchery | 0.00\% | 0.00\% | 0.00\% | 0.00\% | NA |

Appendix F.3. Central BC Troll

| FISHERY: | CENTRAL TROLL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | Average (1985-2009) |  |  |  |
| Model Stock | Percent of <br> Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return | Associated Escapement Indicator Stocks |
| Fraser Late | 0.00\% | 18.42\% | 1.70\% | 0.97\% | Harrison |
| WCVI Hatchery | 0.00\% | 15.40\% | 2.91\% | 1.21\% | NA |
| Columbia Upriver Bright | 0.00\% | 7.65\% | 0.74\% | 0.43\% | Columbia Upriver Bright |
| North/Central BC | 0.00\% | 6.57\% | 0.80\% | 0.34\% | Yakoun <br> Nass <br> Skeena <br> Area 6 Index <br> Area 8 Index <br> Rivers Inlet <br> Smith Inlet |
| Upper Georgia Strait | 0.00\% | 5.57\% | 2.73\% | 1.77\% | Upper Georgia Strait |
| Columbia Upriver Summer | 0.00\% | 3.76\% | 2.89\% | 1.38\% | Columbia Upriver Summer |
| WCVI Wild | 0.00\% | 3.10\% | 2.87\% | 1.20\% | WCVI |
| Fraser Early | 0.00\% | 2.82\% | 0.82\% | 0.29\% | Upper Fraser Middle Fraser Thompson |
| Washington Coastal Wild | 0.00\% | 2.78\% | 0.93\% | 0.62\% | Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall |
| Lower GS Hatchery | 0.00\% | 2.58\% | 1.13\% | 0.79\% | NA |
| WA Coastal Hatchery | 0.00\% | 2.19\% | 0.88\% | 0.57\% | NA |
| Mid-Columbia Brights | 0.00\% | 2.17\% | 0.87\% | 0.45\% | Not Represented |
| Oregon Coastal North <br> Migrating | 0.00\% | 2.06\% | 0.30\% | 0.15\% | Oregon Coastal |
| Lower Bonneville Hatchery | 0.00\% | 1.70\% | 0.81\% | 0.41\% | NA |
| Lower Georgia Strait | 0.00\% | 1.28\% | 1.08\% | 0.78\% | Lower Georgia Strait |
| Nooksack Fall | 0.00\% | 1.27\% | 0.30\% | 0.25\% | NA |
| PS Hatchery Fingerling | 0.00\% | 1.24\% | 0.21\% | 0.14\% | NA |
| Skagit Summer/Fall | 0.00\% | 0.78\% | 1.76\% | 0.74\% | Skagit Summer/Fall |
| Lewis River Wild | 0.00\% | 0.50\% | 0.50\% | 0.28\% | Lewis River |
| Snohomish Summer/Fall | 0.00\% | 0.43\% | 1.41\% | 0.76\% | Snohomish |
| PS Yearling | 0.00\% | 0.35\% | 0.31\% | 0.24\% | NA |
| Puget Sound Natural | 0.00\% | 0.35\% | 0.23\% | 0.14\% | Green, Lake Washington |
| Spring Creek Hatchery | 0.00\% | 0.33\% | 0.08\% | 0.06\% | NA |
| Willamette River Hatchery | 0.00\% | 0.29\% | 0.09\% | 0.05\% | NA |
| Fall Cowlitz Hatchery | 0.00\% | 0.13\% | 0.04\% | 0.02\% | NA |
| Spring Cowlitz Hatchery | 0.00\% | 0.11\% | 0.15\% | 0.11\% | NA |
| Snake River Fall | 0.00\% | 0.08\% | 0.57\% | 0.42\% | Not Represented |
| Stillaguamish Summer/Fall | 0.00\% | 0.08\% | 1.56\% | 0.76\% | Stillaguamish |
| Nooksack Spring | 0.00\% | 0.01\% | 0.23\% | 0.13\% | Not Represented |
| Alaska South SE | 0.00\% | 0.00\% | 0.01\% | 0.00\% | King Salmon <br> Andrew Creek <br> Blossom <br> Keta <br> Unuk <br> Chickamin |

Appendix F. 4 WCVI Troll and Outside Sport

| FISHERY: | WCVI TROLL AND OUTSIDE SPORT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | Average (1985-2009) |  |  |  |
| Model Stock | Percent of Fishery Catch | Percent of <br> Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return | Associated Escapement Indicator Stocks |
| Fraser Late | 33.54\% | 22.54\% | 22.72\% | 11.12\% | Harrison |
| PS Hatchery Fingerling | 7.50\% | 11.11\% | 15.16\% | 9.40\% | NA |
| Columbia Upriver Bright | 10.72\% | 8.95\% | 9.49\% | 5.15\% | Columbia Upriver Bright |
| Fall Cowlitz Hatchery | 6.35\% | 6.90\% | 23.11\% | 10.71\% | NA |
| Spring Creek Hatchery | 14.06\% | 6.84\% | 14.26\% | 11.18\% | NA |
| Lower Bonneville Hatchery | 3.12\% | 5.62\% | 31.31\% | 14.65\% | NA |
| Oregon Coastal North Migrating | 2.27\% | 4.92\% | 7.58\% | 3.75\% | Oregon Coastal |
| Nooksack Fall | 1.63\% | 4.59\% | 10.48\% | 8.09\% | NA |
| WCVI Hatchery | 0.00\% | 4.17\% | 6.78\% | 3.05\% | NA |
| Mid-Columbia Brights | 3.94\% | 3.50\% | 12.46\% | 5.67\% | Not Represented |
| Columbia Upriver Summer | 4.17\% | 2.86\% | 21.07\% | 9.82\% | Columbia Upriver Summer |
| Puget Sound Natural | 0.99\% | 2.75\% | 17.15\% | 9.47\% | Green, Lake Washington |
| Washington Coastal Wild | 1.45\% | 2.36\% | 8.68\% | 4.84\% | Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall |
| Willamette River Hatchery | 2.23\% | 2.10\% | 6.51\% | 3.18\% | NA |
| WA Coastal Hatchery | 1.54\% | 2.02\% | 8.19\% | 4.68\% | NA |
| PS Yearling | 1.49\% | 1.54\% | 9.76\% | 7.07\% | NA |
| Fraser Early | 1.13\% | 1.42\% | 4.08\% | 1.11\% | Upper Fraser Middle Fraser Thompson |
| WCVI Wild | 0.00\% | 1.05\% | 6.77\% | 3.06\% | WCVI |
| Skagit Summer/Fall | 0.54\% | 0.92\% | 20.61\% | 6.96\% | Skagit Summer/Fall |
| Lewis River Wild | 0.38\% | 0.79\% | 10.22\% | 5.08\% | Lewis River |
| Spring Cowlitz Hatchery | 0.41\% | 0.69\% | 7.41\% | 4.76\% | NA |
| Lower GS Hatchery | 0.24\% | 0.50\% | 2.47\% | 1.38\% | NA |
| North/Central BC | 0.30\% | 0.49\% | 0.39\% | 0.19\% | Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet |
| Snohomish Summer/Fall | 0.37\% | 0.49\% | 19.28\% | 7.04\% | Snohomish |
| Snake River Fall | 1.32\% | 0.41\% | 22.27\% | 15.04\% | Not Represented |
| Lower Georgia Strait | 0.19\% | 0.24\% | 2.40\% | 1.39\% | Lower Georgia Strait |
| Upper Georgia Strait | 0.07\% | 0.11\% | 0.53\% | 0.33\% | Upper Georgia Strait |
| Stillaguamish Summer/Fall | 0.04\% | 0.11\% | 16.21\% | 6.64\% | Stillaguamish |
| Nooksack Spring | 0.01\% | 0.02\% | 10.39\% | 3.72\% | Not Represented |
| Alaska South SE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | King Salmon <br> Andrew Creek <br> Blossom <br> Keta <br> Unuk <br> Chickamin |

Appendix F. 5 Strait of Georgia Sport and Troll

| FISHERY: | GS SPORT AND TROLL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | Average (1985-2009) |  |  |  |
| Model Stock | Percent of Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return | Associated Escapement Indicator Stocks |
| Oregon Coastal North Migrating | 10.48\% | 22.37\% | 25.76\% | 11.28\% | Oregon Coastal |
| Willamette River Hatchery | 53.33\% | 18.25\% | 44.42\% | 21.78\% | NA |
| WCVI Hatchery | 4.14\% | 9.67\% | 14.24\% | 4.94\% | NA |
| Lower GS Hatchery | 3.90\% | 9.07\% | 34.08\% | 19.26\% | NA |
| Columbia Upriver Bright | 10.51\% | 7.35\% | 5.40\% | 2.63\% | Columbia Upriver Bright |
| Spring Cowlitz Hatchery | 3.48\% | 5.97\% | 50.86\% | 31.27\% | NA |
| Lewis River Wild | 0.61\% | 5.33\% | 41.04\% | 22.72\% | Lewis River |
| Fraser Late | 0.00\% | 4.99\% | 3.61\% | 2.21\% | Harrison |
| Lower Georgia Strait | 2.35\% | 4.31\% | 32.93\% | 19.32\% | Lower Georgia Strait |
| Fall Cowlitz Hatchery | 5.62\% | 3.57\% | 9.71\% | 3.81\% | NA |
| North/Central BC | 1.41\% | 2.68\% | 1.84\% | 0.84\% | Yakoun Nass Skeena Area 6 Index Area 8 Index Rivers Inlet Smith Inlet |
| WCVI Wild | 0.54\% | 1.89\% | 14.55\% | 5.00\% | WCVI |
| Mid-Columbia Brights | 1.37\% | 1.47\% | 3.68\% | 1.40\% | Not Represented |
| Nooksack Fall | 0.70\% | 1.20\% | 2.15\% | 1.62\% | NA |
| Lower Bonneville Hatchery | 0.38\% | 0.43\% | 1.90\% | 0.76\% | NA |
| PS Yearling | 0.19\% | 0.35\% | 1.94\% | 1.47\% | NA |
| PS Hatchery Fingerling | 0.09\% | 0.34\% | 0.46\% | 0.30\% | NA |
| Columbia Upriver Summer | 0.39\% | 0.29\% | 1.82\% | 0.80\% | Columbia Upriver Summer |
| Snake River Fall | 0.45\% | 0.15\% | 4.41\% | 2.61\% | Not Represented |
| Puget Sound Natural | 0.01\% | 0.10\% | 0.48\% | 0.29\% | Green, Lake Washington |
| Skagit Summer/Fall | 0.02\% | 0.07\% | 1.30\% | 0.51\% | Skagit Summer/Fall |
| Snohomish Summer/Fall | 0.01\% | 0.04\% | 1.04\% | 0.51\% | Snohomish |
| Upper Georgia Strait | 0.00\% | 0.04\% | 0.19\% | 0.13\% | Upper Georgia Strait |
| Fraser Early | 0.00\% | 0.03\% | 0.10\% | 0.04\% | Upper Fraser Middle Fraser Thompson |
| Nooksack Spring | 0.00\% | 0.02\% | 4.89\% | 2.72\% | Not Represented |
| Spring Creek Hatchery | 0.02\% | 0.01\% | 0.03\% | 0.02\% | NA |
| WA Coastal Hatchery | 0.00\% | 0.00\% | 0.00\% | 0.00\% | NA |
| Washington Coastal Wild | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Grays Harbor Fall Quillayute Fall Hoh Fall Queets Fall |
| Stillaguamish Summer/Fall | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Stillaguamish |
| Alaska South SE | 0.00\% | 0.00\% | 0.00\% | 0.00\% | King Salmon Andrew Creek <br> Blossom <br> Keta <br> Unuk <br> Chickamin |

Appendix F. 6 Washington/Oregon Troll and Sport

| FISHERY: | WA/OR TROLL AND SPORT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | Average (1985-2009) |  |  |  |
| Model Stock | Percent <br> of <br> Fishery Catch | Percent of Fishery Catch | Percent of Stock Catch | Percent of Stock Total Return | Associated Escapement Indicator Stocks |
| Spring Creek Hatchery | 38.32\% | 22.99\% | 30.38\% | 23.94\% | NA |
| Fraser Late | 20.73\% | 19.47\% | 12.09\% | 5.72\% | Harrison |
| Fall Cowlitz Hatchery | 18.56\% | 19.05\% | 40.77\% | 17.82\% | NA |
| Lower Bonneville Hatchery | 5.14\% | 10.74\% | 39.95\% | 17.20\% | NA |
| Spring Cowlitz Hatchery | 2.14\% | 4.58\% | 33.65\% | 19.46\% | NA |
| PS Hatchery Fingerling | 1.86\% | 4.49\% | 3.67\% | 2.18\% | NA |
| Columbia Upriver Bright | 4.22\% | 4.11\% | 2.70\% | 1.40\% | Columbia Upriver Bright |
| Oregon Coastal North Migrating | 1.18\% | 2.67\% | 2.47\% | 1.14\% | Oregon Coastal |
| Willamette River Hatchery | 1.32\% | 1.94\% | 3.82\% | 1.78\% | NA |
| Nooksack Fall | 0.40\% | 1.83\% | 2.44\% | 1.84\% | NA |
| Mid-Columbia Brights | 1.29\% | 1.41\% | 3.12\% | 1.35\% | Not Represented |
| Lewis River Wild | 0.68\% | 1.41\% | 12.68\% | 5.58\% | Lewis River |
| Washington Coastal Wild | 0.40\% | 1.19\% | 2.37\% | 1.31\% | Grays Harbor Fall Quillayute Fall <br> Hoh Fall <br> Queets Fall |
| Puget Sound Natural | 0.25\% | 1.09\% | 4.23\% | 2.17\% | Green, Lake Washington |
| WA Coastal Hatchery | 0.41\% | 1.01\% | 2.26\% | 1.28\% | NA |
| Columbia Upriver Summer | 0.92\% | 0.71\% | 3.09\% | 1.40\% | Columbia Upriver Summer |
| Snake River Fall | 1.72\% | 0.69\% | 21.52\% | 14.03\% | Not Represented |
| PS Yearling | 0.18\% | 0.27\% | 1.03\% | 0.71\% | NA |
| Fraser Early | 0.20\% | 0.19\% | 0.40\% | 0.10\% | Upper Fraser Middle Fraser Thompson |
| Alaska South SE | 0.04\% | 0.08\% | 0.70\% | 0.26\% | King Salmon Andrew Creek <br> Blossom <br> Keta <br> Unuk <br> Chickamin |
| Lower GS Hatchery | 0.02\% | 0.04\% | 0.13\% | 0.07\% | NA |
| WCVI Hatchery | 0.01\% | 0.03\% | 0.03\% | 0.01\% | NA |
| Lower Georgia Strait | 0.01\% | 0.02\% | 0.14\% | 0.08\% | Lower Georgia Strait |
| WCVI Wild | 0.00\% | 0.01\% | 0.03\% | 0.01\% | WCVI |
| Skagit Summer/Fall | 0.00\% | 0.00\% | 0.04\% | 0.01\% | Skagit Summer/Fall |
| Snohomish Summer/Fall | 0.00\% | 0.00\% | 0.04\% | 0.01\% | Snohomish |
| Nooksack Spring | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Not Represented |
| Upper Georgia Strait | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Upper Georgia Strait |
| North/Central BC | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Yakoun <br> Nass <br> Skeena <br> Area 6 Index <br> Area 8 Index <br> Rivers Inlet <br> Smith Inlet |
| Stillaguamish Summer/Fall | 0.00\% | 0.00\% | 0.00\% | 0.00\% | Stillaguamish |

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.

| Fishery Numbe r | Fishery | Rates in original Model |  |  | Rates applied in Model CLB1007 |  |  | Applicable Years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|l\|} \hline \text { Sublega } \\ \text { l } \\ \text { Rate } \\ \hline \end{array}$ | $\begin{aligned} & \text { Lega } \\ & \text { l } \\ & \text { Rate } \\ & \hline \end{aligned}$ | Dropof <br> f | Sublegal Rate | Legal <br> Rate | Dropoff |  |
|  |  |  |  |  |  |  |  |  |
| 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 | $\begin{aligned} & \text { 1984-2006 } \\ & 1979- \end{aligned}$ |
| 6 | Geo St T | 0.3 | 0.3 | 0 | 0.255 | 0.211 | 0.017 | 1985,1987 |
|  |  |  |  |  |  |  |  | 1986,1988- |
| 6 | Geo St T |  |  |  | 0.220 | 0.185 | 0.017 | 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 |
|  | WashOcn |  |  |  |  |  |  |  |
| 21 | 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 2011 for SEAK, NBC, and WCVI AABM fisheries as estimated by CTC Chinook Model calibration CLB1106.

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 1106PABD).

| Year | SEAK | NBC | WCVI |
| :--- | :--- | :--- | :--- |
| 1979 | 0.96 | 1.02 | 1.10 |
| 1980 | 1.02 | 0.97 | 0.96 |
| 1981 | 0.92 | 0.94 | 0.93 |
| 1982 | 1.11 | 1.06 | 1.01 |
| 1983 | 1.27 | 1.22 | 0.94 |
| 1984 | 1.45 | 1.38 | 1.00 |
| 1985 | 1.33 | 1.31 | 0.98 |
| 1986 | 1.50 | 1.46 | 1.03 |
| 1987 | 1.74 | 1.73 | 1.19 |
| 1988 | 2.12 | 1.84 | 1.14 |
| 1989 | 1.85 | 1.67 | 0.99 |
| 1990 | 1.87 | 1.62 | 0.90 |
| 1991 | 1.78 | 1.51 | 0.76 |
| 1992 | 1.66 | 1.40 | 0.79 |
| 1993 | 1.66 | 1.41 | 0.70 |
| 1994 | 1.57 | 1.24 | 0.53 |
| 1995 | 1.05 | 0.97 | 0.42 |
| 1996 | 0.93 | 0.92 | 0.50 |
| 1997 | 1.23 | 1.10 | 0.59 |
| 1998 | 1.18 | 0.99 | 0.57 |
| 1999 | 1.08 | 0.94 | 0.51 |
| 2000 | 0.96 | 0.93 | 0.52 |
| 2001 | 1.15 | 1.19 | 0.80 |
| 2002 | 1.72 | 1.67 | 1.16 |
| 2003 | 2.17 | 1.88 | 1.23 |
| 2004 | 2.02 | 1.77 | 1.02 |
| 2005 | 1.79 | 1.52 | 0.83 |
| 2006 | 1.50 | 1.22 | 0.65 |
| 2007 | 1.14 | 0.91 | 0.53 |
| 2008 | 0.88 | 0.79 | 0.56 |
| 2009 | 1.11 | 1.01 | 0.63 |
| 2010 | 1.31 | 1.23 | 0.95 |
| 2011 |  | 1.38 | 1.15 |
|  |  |  |  |

Appendix I Abundance indices in total and by model stock for AABM fisheries, from Calibration 1106.

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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 1106. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.

| Year | Alaska South SE | North / Centr | Fraser Early | Fraser <br> Late | WCVI <br> Hatchery | WCVI <br> Natural | Georgia <br> St. Upper | Georgia St. <br> Lwr Nat | Georgia St. Lwr Hat | Nooksack Fall | Pgt Sd <br> Fing | Pgt Sd <br> NatF | $\begin{aligned} & \text { Pgt Sd } \\ & \text { Year } \\ & \hline \end{aligned}$ | Nooksack Spring | Skagit Wild | AI Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.03 | 0.12 | 0.06 | 0.00 | 0.05 | 0.07 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.96 |
| 1980 | 0.03 | 0.13 | 0.04 | 0.00 | 0.10 | 0.15 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 |
| 1981 | 0.04 | 0.13 | 0.04 | 0.00 | 0.08 | 0.11 | 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 | 0.20 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.11 |
| 1983 | 0.06 | 0.16 | 0.04 | 0.00 | 0.29 | 0.14 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.27 |
| 1984 | 0.06 | 0.19 | 0.05 | 0.00 | 0.27 | 0.10 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.45 |
| 1985 | 0.06 | 0.20 | 0.07 | 0.00 | 0.15 | 0.05 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.33 |
| 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 | 1.50 |
| 1987 | 0.07 | 0.23 | 0.07 | 0.00 | 0.09 | 0.03 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 |
| 1988 | 0.06 | 0.24 | 0.07 | 0.00 | 0.21 | 0.06 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.12 |
| 1989 | 0.04 | 0.26 | 0.06 | 0.00 | 0.31 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.85 |
| 1990 | 0.03 | 0.26 | 0.06 | 0.00 | 0.47 | 0.09 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.87 |
| 1991 | 0.03 | 0.27 | 0.06 | 0.00 | 0.58 | 0.12 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.78 |
| 1992 | 0.03 | 0.26 | 0.06 | 0.00 | 0.54 | 0.13 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.66 |
| 1993 | 0.04 | 0.24 | 0.06 | 0.00 | 0.51 | 0.13 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.66 |
| 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 | 1.57 |
| 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 | 1.05 |
| 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 | 0.93 |
| 1997 | 0.03 | 0.23 | 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 | 1.23 |
| 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 | 1.18 |
| 1999 | 0.04 | 0.24 | 0.07 | 0.00 | 0.13 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 |
| 2000 | 0.05 | 0.25 | 0.06 | 0.00 | 0.05 | 0.01 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.96 |
| 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 | 1.15 |
| 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 | 1.72 |
| 2003 | 0.04 | 0.24 | 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 | 2.17 |
| 2004 | 0.04 | 0.25 | 0.09 | 0.00 | 0.36 | 0.03 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.02 |
| 2005 | 0.04 | 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 | 1.79 |
| 2006 | 0.05 | 0.22 | 0.09 | 0.00 | 0.23 | 0.03 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.50 |
| 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 | 1.14 |
| 2008 | 0.03 | 0.18 | 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 | 0.88 |
| 2009 | 0.04 | 0.18 | 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 | 1.11 |
| 2010 | 0.05 | 0.18 | 0.09 | 0.00 | 0.12 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.31 |
| 2011 | 0.06 | 0.19 | 0.10 | 0.01 | 0.17 | 0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.69 |
| Avera | 0.04 | 0.21 | 0.07 | 0.00 | 0.23 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.42 |

-continued-

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

|  | WA |  |  |  | Spring <br> Creek <br> Hat | Lwr FallBonnevilleCowlitzHat Hat |  | Lewis R Wild | Willamette R Hat | Spr Cowlitz Col R |  | Oregon <br> Coast | WA Coastal Lyons |  | Mid Col |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | StillaguamiSnohomish |  | Coastal | UpRiver |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | sh Wild | Wild | Hat | Brights |  |  |  | Hat |  | Summer | Wild |  | Ferry | R Bri | s AI Total |
| 1979 | 0.00 | 0.00 | 0.03 | 0.18 | 0.00 | 0.00 | 0.03 |  | 0.02 | 0.02 | 0.00 | 0.04 | 0.23 | 0.03 | 0.00 | 0.00 | 0.96 |
| 1980 | 0.00 | 0.00 | 0.03 | 0.14 | 0.00 | 0.00 | 0.03 | 0.02 | 0.03 | 0.00 | 0.04 | 0.17 | 0.04 | 0.00 | 0.00 | 1.02 |
| 1981 | 0.00 | 0.00 | 0.02 | 0.10 | 0.00 | 0.00 | 0.03 | 0.02 | 0.03 | 0.01 | 0.03 | 0.16 | 0.04 | 0.00 | 0.01 | 0.92 |
| 1982 | 0.00 | 0.00 | 0.02 | 0.06 | 0.00 | 0.00 | 0.03 | 0.01 | 0.03 | 0.00 | 0.02 | 0.20 | 0.03 | 0.00 | 0.01 | 1.11 |
| 1983 | 0.00 | 0.00 | 0.02 | 0.09 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 | 0.00 | 0.03 | 0.26 | 0.03 | 0.00 | 0.02 | 1.27 |
| 1984 | 0.00 | 0.00 | 0.02 | 0.20 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 | 0.00 | 0.03 | 0.36 | 0.04 | 0.00 | 0.02 | 1.45 |
| 1985 | 0.00 | 0.00 | 0.02 | 0.24 | 0.00 | 0.00 | 0.03 | 0.01 | 0.03 | 0.00 | 0.02 | 0.33 | 0.04 | 0.00 | 0.01 | 1.33 |
| 1986 | 0.00 | 0.00 | 0.02 | 0.34 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 | 0.00 | 0.03 | 0.36 | 0.05 | 0.00 | 0.02 | 1.50 |
| 1987 | 0.00 | 0.00 | 0.04 | 0.48 | 0.00 | 0.00 | 0.03 | 0.02 | 0.05 | 0.01 | 0.03 | 0.40 | 0.06 | 0.00 | 0.07 | 1.74 |
| 1988 | 0.00 | 0.00 | 0.05 | 0.51 | 0.00 | 0.00 | 0.14 | 0.03 | 0.06 | 0.00 | 0.03 | 0.38 | 0.07 | 0.00 | 0.14 | 2.12 |
| 1989 | 0.00 | 0.00 | 0.06 | 0.32 | 0.00 | 0.00 | 0.05 | 0.04 | 0.06 | 0.00 | 0.03 | 0.30 | 0.08 | 0.00 | 0.12 | 1.85 |
| 1990 | 0.00 | 0.00 | 0.05 | 0.24 | 0.00 | 0.00 | 0.02 | 0.02 | 0.07 | 0.00 | 0.02 | 0.31 | 0.07 | 0.00 | 0.08 | 1.87 |
| 1991 | 0.00 | 0.00 | 0.05 | 0.12 | 0.00 | 0.00 | 0.01 | 0.01 | 0.05 | 0.00 | 0.02 | 0.29 | 0.06 | 0.00 | 0.05 | 1.78 |
| 1992 | 0.00 | 0.00 | 0.05 | 0.10 | 0.00 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.02 | 0.25 | 0.05 | 0.00 | 0.04 | 1.66 |
| 1993 | 0.00 | 0.00 | 0.05 | 0.18 | 0.00 | 0.00 | 0.01 | 0.01 | 0.03 | 0.00 | 0.02 | 0.24 | 0.05 | 0.00 | 0.05 | 1.66 |
| 1994 | 0.00 | 0.00 | 0.05 | 0.21 | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.02 | 0.29 | 0.05 | 0.00 | 0.05 | 1.57 |
| 1995 | 0.00 | 0.00 | 0.04 | 0.12 | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.01 | 0.21 | 0.04 | 0.00 | 0.04 | 1.05 |
| 1996 | 0.00 | 0.00 | 0.04 | 0.13 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.00 | 0.02 | 0.17 | 0.04 | 0.00 | 0.05 | 0.93 |
| 1997 | 0.00 | 0.00 | 0.03 | 0.18 | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.02 | 0.20 | 0.04 | 0.00 | 0.09 | 1.23 |
| 1998 | 0.00 | 0.00 | 0.02 | 0.12 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.02 | 0.16 | 0.04 | 0.00 | 0.06 | 1.18 |
| 1999 | 0.00 | 0.00 | 0.02 | 0.21 | 0.00 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.02 | 0.15 | 0.03 | 0.00 | 0.06 | 1.08 |
| 2000 | 0.00 | 0.00 | 0.02 | 0.17 | 0.00 | 0.00 | 0.01 | 0.01 | 0.03 | 0.00 | 0.04 | 0.13 | 0.03 | 0.00 | 0.05 | 0.96 |
| 2001 | 0.00 | 0.00 | 0.02 | 0.20 | 0.00 | 0.00 | 0.01 | 0.01 | 0.03 | 0.00 | 0.07 | 0.19 | 0.03 | 0.00 | 0.07 | 1.15 |
| 2002 | 0.00 | 0.00 | 0.03 | 0.30 | 0.00 | 0.00 | 0.02 | 0.02 | 0.07 | 0.00 | 0.10 | 0.27 | 0.03 | 0.00 | 0.16 | 1.72 |
| 2003 | 0.00 | 0.00 | 0.03 | 0.45 | 0.00 | 0.00 | 0.05 | 0.02 | 0.05 | 0.00 | 0.10 | 0.36 | 0.04 | 0.00 | 0.22 | 2.17 |
| 2004 | 0.00 | 0.00 | 0.04 | 0.37 | 0.00 | 0.00 | 0.03 | 0.02 | 0.06 | 0.00 | 0.09 | 0.38 | 0.04 | 0.00 | 0.16 | 2.02 |
| 2005 | 0.00 | 0.00 | 0.04 | 0.37 | 0.00 | 0.00 | 0.03 | 0.01 | 0.02 | 0.00 | 0.09 | 0.32 | 0.04 | 0.00 | 0.13 | 1.79 |
| 2006 | 0.00 | 0.00 | 0.04 | 0.26 | 0.00 | 0.00 | 0.02 | 0.02 | 0.03 | 0.00 | 0.08 | 0.19 | 0.04 | 0.00 | 0.11 | 1.50 |
| 2007 | 0.00 | 0.00 | 0.03 | 0.11 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.07 | 0.12 | 0.03 | 0.00 | 0.08 | 1.14 |
| 2008 | 0.00 | 0.00 | 0.03 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.06 | 0.04 | 0.03 | 0.00 | 0.08 | 0.88 |
| 2009 | 0.00 | 0.00 | 0.03 | 0.26 | 0.00 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.07 | 0.08 | 0.03 | 0.00 | 0.10 | 1.11 |
| 2010 | 0.00 | 0.00 | 0.03 | 0.32 | 0.00 | 0.00 | 0.02 | 0.01 | 0.07 | 0.00 | 0.09 | 0.14 | 0.03 | 0.00 | 0.10 | 1.31 |
| 2011 | 0.00 | 0.00 | 0.03 | 0.48 | 0.00 | 0.00 | 0.04 | 0.01 | 0.04 | 0.00 | 0.12 | 0.17 | 0.03 | 0.01 | 0.16 | 1.69 |
| Average | 0.00 | 0.00 | 0.03 | 0.23 | 0.00 | 0.00 | 0.03 | 0.01 | 0.04 | 0.00 | 0.05 | 0.24 | 0.04 | 0.00 | 0.07 | 1.42 |

Table I.2. Abundance indices (AIs) for the Northern BC troll fishery by stock and year (stock groups 1-15), from CLB 1106. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.


## -continued-

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


Table I.3. Abundance indices (AIs) for the WCVI troll fishery by stock and year (stock groups 1-15), from CLB 1106. Numbers shown represent the portion of the AI total estimated for each model stock; the summation across all 30 stock groups equals the AI total for each calendar year.

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Appendix J Fishery exploitation rate indices by stock, age and fishery, based on CWT data, 1975-2009.

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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 | 0.8775 | 1.1583 | 0.6235 | 1.0743 | 0.5131 | 0.8340 | 0.8340 | Alaska Southeast | Age 4 Age 5 | Age 6 |
| 1980 | 1.1531 | 0.6384 | 1.2276 | 0.9199 | 1.0291 | 1.3757 | 1.3757 | Quinsam | Age 4 Age 5 |  |
| 1981 | 1.1004 | 1.2108 | 0.6346 | 1.0998 | 1.2113 | 1.1397 | 1.1397 | Robertson Creek | Age 3 Age 4 | Age 5 |
| 1982 | 0.8690 | 0.9925 | 1.5143 | 0.9059 | 1.2465 | 0.6506 | 0.6506 | Salmon River Hatchery | Age 4 Age 5 |  |
| 1983 | 0.9412 | 0.9855 | 0.8912 | 0.6476 | 1.0870 | 1.2488 | 1.2488 | Columbia Upriver Brights | Age 4 Age 5 |  |
| 1984 | 0.6760 | 0.3603 | 1.5951 | 0.9735 | 0.4017 | 0.5257 | 0.5257 | Willamette Spring Hatchery | Age 4 Age 5 |  |
| 1985 | 0.7497 | 0.4564 | 1.2487 | 0.6317 | 1.0169 | 0.8392 | 0.8392 |  |  |  |
| 1986 | 0.5264 | 0.4409 | 0.6104 | 0.1790 | 0.7776 | 1.2869 | 1.2869 |  |  |  |
| 1987 | 0.5525 | 0.6054 | 0.8277 | 0.1920 | 1.8734 | 0.6973 | 0.6973 |  |  |  |
| 1988 | 0.4591 | 1.4057 | 0.1981 | 0.0015 | 1.6480 | 0.6907 | 0.6907 |  |  |  |
| 1989 | 0.5358 | 0.8636 | 0.6567 | 0.1222 | 0.7406 | 0.6067 | 0.6067 |  |  |  |
| 1990 | 0.7952 | 0.6820 | 1.2974 | 0.1201 | 1.5729 | 1.2246 | 1.2246 |  |  |  |
| 1991 | 0.6445 | 1.4772 | 1.3086 | 0.2188 | 0.6696 | 0.7960 | 0.7960 |  |  |  |
| 1992 | 0.4226 | 1.0266 | 0.7409 | 0.0722 | 0.2877 | 0.3984 | 0.3984 |  |  |  |
| 1993 | 0.4782 | 0.7571 | 0.4210 | 0.0166 | 0.3456 | 0.9353 | 0.9353 |  |  |  |
| 1994 | 0.4446 | 0.6866 | 0.1686 | 0.0377 | 0.2171 | 0.6928 | 0.6928 |  |  |  |
| 1995 | 0.5360 | 0.4720 | 0.4624 | 0.0496 | 1.2782 | 0.8341 | 0.8341 |  |  |  |
| 1996 | 0.4605 | 0.5433 | 0.9534 | 0.0913 | 0.6759 | 0.5682 | 0.5682 |  |  |  |
| 1997 | 0.6617 | 0.6423 | 0.8725 | 0.1435 | 0.1123 | 1.5667 | 1.5667 |  |  |  |
| 1998 | 0.4379 | 0.8172 | 0.2218 | 0.0563 | 0.5231 | 1.0109 | 1.0109 |  |  |  |
| 1999 | 0.6520 | 0.8024 | 0.3825 | 0.1194 | 0.1561 | 1.0325 | 1.0325 |  |  |  |
| 2000 | 0.4697 | 0.9121 | 0.1377 | 0.0839 | 0.0780 | 1.5015 | 1.5015 |  |  |  |
| 2001 | 0.3952 | 0.5878 | 0.1737 | 0.0748 | 0.1750 | 0.6643 | 0.6643 |  |  |  |
| 2002 | 0.5468 | 0.4333 | 0.1492 | 0.0628 | 0.2069 | 1.2095 | 1.2095 |  |  |  |
| 2003 | 0.5229 | 0.7181 | 0.1741 | 0.0707 | 0.4218 | 0.9321 | 0.9321 |  |  |  |
| 2004 | 0.4623 | 0.8340 | 0.2627 | 0.0733 | 0.3953 | 0.9856 | 0.9856 |  |  |  |
| 2005 | 0.5274 | 0.9410 | 0.3097 | 0.1239 | 0.5735 | 1.3022 | 1.3022 |  |  |  |
| 2006 | 0.7003 | 1.5293 | 1.1290 | 0.1298 | 0.1588 | 1.4592 | 1.4592 |  |  |  |
| 2007 | 0.6678 | 1.2786 | 1.4672 | 0.1440 | 0.2526 | 1.1923 | 1.1923 |  |  |  |
| 2008 | 0.4442 | 0.8474 | 1.0921 | 0.0750 | 0.1171 | 0.6302 | 0.6302 |  |  |  |
| 2009 | 0.4712 | 0.6194 | 0.3786 | 0.1224 | 0.1428 | 0.8044 | 0.8044 |  |  |  |

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 | 0.8626 | 1.1595 | 0.5755 | 1.0711 | 0.5115 | 0.8048 | 0.8048 | Alaska Southeast | Age 4 Age 5 Age 6 |
| 1980 | 1.0656 | 0.6394 | 1.1497 | 0.8711 | 0.8940 | 1.2170 | 1.2170 | Quinsam | Age 4 Age 5 |
| 1981 | 1.0904 | 1.2105 | 0.5857 | 1.1291 | 1.1301 | 1.1441 | 1.1441 | Robertson Creek | Age 3 Age 4 Age 5 |
| 1982 | 0.9815 | 0.9907 | 1.6891 | 0.9287 | 1.4644 | 0.8342 | 0.8342 | Salmon River Hatchery | Age 4 Age 5 |
| 1983 | 1.0885 | 0.9861 | 1.1161 | 0.6647 | 0.9976 | 1.6938 | 1.6938 | Columbia Upriver Brights | Age 4 Age 5 |
| 1984 | 0.7256 | 0.3592 | 1.7292 | 0.9804 | 0.6154 | 0.6137 | 0.6137 | Willamette Spring Hatchery | Age 4 Age 5 |
| 1985 | 0.8761 | 0.4558 | 1.2995 | 0.6167 | 0.9901 | 1.0996 | 1.0996 |  |  |
| 1986 | 0.5980 | 0.4428 | 0.6981 | 0.1759 | 0.8951 | 1.4962 | 1.4962 |  |  |
| 1987 | 0.6375 | 0.6066 | 0.8007 | 0.1817 | 2.4637 | 0.8364 | 0.8364 |  |  |
| 1988 | 0.4810 | 1.4088 | 0.2420 | 0.0070 | 1.7835 | 0.7055 | 0.7055 |  |  |
| 1989 | 0.5877 | 0.8666 | 0.6817 | 0.1211 | 0.8426 | 0.6596 | 0.6596 |  |  |
| 1990 | 1.0467 | 0.9068 | 1.5918 | 0.1397 | 1.5518 | 1.6476 | 1.6476 |  |  |
| 1991 | 0.6928 | 1.5325 | 1.2779 | 0.2081 | 0.8571 | 0.8477 | 0.8477 |  |  |
| 1992 | 0.4946 | 1.0766 | 0.7303 | 0.0687 | 0.3006 | 0.5683 | 0.5683 |  |  |
| 1993 | 0.5406 | 0.7959 | 0.4073 | 0.0176 | 0.3472 | 1.0971 | 1.0971 |  |  |
| 1994 | 0.5461 | 0.7291 | 0.2506 | 0.0381 | 0.2852 | 0.9024 | 0.9024 |  |  |
| 1995 | 0.6644 | 0.5219 | 0.5527 | 0.0519 | 1.3052 | 1.0435 | 1.0435 |  |  |
| 1996 | 0.5656 | 0.5955 | 0.9660 | 0.0965 | 0.7154 | 0.7052 | 0.7052 |  |  |
| 1997 | 0.6715 | 0.6941 | 0.8343 | 0.1434 | 0.1409 | 1.5136 | 1.5136 |  |  |
| 1998 | 0.4288 | 0.8688 | 0.2348 | 0.0562 | 0.4588 | 0.9514 | 0.9514 |  |  |
| 1999 | 0.7283 | 0.8686 | 0.3960 | 0.1163 | 0.2115 | 1.1485 | 1.1485 |  |  |
| 2000 | 0.5042 | 1.0015 | 0.1589 | 0.0908 | 0.1186 | 1.5600 | 1.5600 |  |  |
| 2001 | 0.4226 | 0.6262 | 0.1725 | 0.0721 | 0.2167 | 0.7001 | 0.7001 |  |  |
| 2002 | 0.5504 | 0.5001 | 0.1625 | 0.0659 | 0.2299 | 1.1460 | 1.1460 |  |  |
| 2003 | 0.5193 | 0.7978 | 0.1793 | 0.0721 | 0.3863 | 0.8781 | 0.8781 |  |  |
| 2004 | 0.4639 | 0.9011 | 0.2631 | 0.0747 | 0.3910 | 0.9453 | 0.9453 |  |  |
| 2005 | 0.5653 | 1.1150 | 0.5006 | 0.1289 | 0.5339 | 1.2840 | 1.2840 |  |  |
| 2006 | 0.7198 | 1.6248 | 1.2233 | 0.1308 | 0.1697 | 1.4457 | 1.4457 |  |  |
| 2007 | 0.6807 | 1.3752 | 1.6280 | 0.1408 | 0.2392 | 1.1698 | 1.1698 |  |  |
| 2008 | 0.4715 | 0.8813 | 1.0557 | 0.0771 | 0.1513 | 0.6630 | 0.6630 |  |  |
| 2009 | 0.4970 | 0.6269 | 0.3693 | 0.1150 | 0.1678 | 0.8425 | 0.8425 |  |  |

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 <br> Age 4 | $\begin{aligned} & \hline \text { QUI } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { QUI } \\ & \text { Age } 4 \end{aligned}$ | $\begin{aligned} & \hline \text { RBT } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | RBT <br> Age 4 | $\begin{aligned} & \text { RBT } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | SRH <br> Age 3 | SRH <br> Age 4 | SRH <br> Age 5 | URB Age 3 | URB Age 4 | URB <br> Age 5 | WSH <br> Age 4 | Fishery Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 |  | 0.5508 | 0.8691 | 1.2278 | 0.8306 | 0.4805 | 1.1575 |  |  | 0.4536 | 1.1907 |  | 0.6486 | 0.8244 |
| 1980 |  | 0.7948 | 0.9847 | 1.1057 | 0.8522 | 0.7876 |  | 0.9275 |  | 1.0839 | 0.9886 | 1.2702 | 1.187 | 0.9539 |
| 1981 |  | 1.7733 | 1.4461 | 0.751 | 1.0467 | 1.7319 | 1.2869 |  | 1 |  | 1.1524 | 1.3124 | 1.5239 | 1.2554 |
| 1982 | 1 | 0.881 | 0.7001 | 0.9156 | 1.2705 |  | 0.5557 | 1.0725 |  | 1.4626 | 0.6683 | 0.4174 | 0.6405 | 0.8593 |
| 1983 | 1.587 | 1.2612 | 1.4723 | 1.0409 | 0.7065 | 0.5989 | 0.5329 | 1.1765 | 0.2421 | 1.811 | 1.3146 |  | 1.2758 | 0.7998 |
| 1984 | 1.1363 | 0.2536 | 0.5071 | 0.3991 | 1.3248 | 2.0131 |  | 1.326 | 1.2823 | 1.0114 | 2.1995 |  | 0.5009 | 1.264 |
| 1985 | 0.7802 | 0.2457 | 0.5818 | 0.9123 | 1.9392 |  | 0.3847 |  | 1.0546 | 1.3886 | 1.7111 | 1.6799 | 0.2161 | 1.1 |
| 1986 | 0.7273 | 0.9415 | 0.8476 |  | 1.0484 |  | 0.1129 | 1.1648 |  | 1.0774 | 1.3891 | 1.9838 |  | 1.06 |
| 1987 | 0.6136 | 0.3535 | 0.6224 | 0.4896 |  |  | 0.2045 | 0.8032 | 1.0367 | 1.2073 | 1.7702 | 2.8922 |  | 1.0376 |
| 1988 | 2.0806 | 0.191 | 0.7015 | 0.3334 | 0.6214 |  |  | 0.6569 | 0.3356 | 0.3751 | 1.0821 | 2.3607 | 0.7805 | 0.6953 |
| 1989 | 0.9498 | 0.4378 | 0.4541 | 0.3597 | 0.8827 | 1.0547 | 0.1349 | 0.5682 | 0.9973 |  | 1.037 | 4.216 | 0.3637 | 0.9856 |
| 1990 | 1.952 | 0.3629 | 0.96 | 0.314 | 0.7169 | 0.5617 | 0.1755 | 0.5099 | 0.9236 |  | 1.2462 | 2.3814 | 0.3009 | 0.8054 |
| 1991 | 0.6503 | 0.4198 | 0.661 | 0.3852 | 0.75 | 1.1423 | 0.1386 | 0.8468 | 0.9514 |  |  |  | 0.2727 | 0.7601 |
| 1992 | 0.1179 |  | 1.861 | 0.2889 | 0.5797 | 0.6796 | 0.1262 | 0.5424 | 0.4474 |  |  |  | 0.0991 | 0.5905 |
| 1993 | 0.2829 |  |  | 0.178 | 0.6172 | 0.8375 | 0.1335 | 1.1806 | 1.1305 | 0 | 1.147 |  | 0.2047 | 0.7972 |
| 1994 | 0.0542 |  |  | 0.3267 | 0.7427 | 0.8967 | 0.2177 | 1.1166 | 0.9325 |  | 0.9348 | 2.0129 | 0.1155 | 0.8676 |
| 1995 | 0 |  |  |  | 0.4111 | 0.2616 | 0.1243 | 0 | 0.3956 |  |  | 0.5654 | 0.1482 | 0.3037 |
| 1996 | 0 |  |  | 0 |  |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |
| 1997 | 0 | 0.3523 | 0.3985 | 0.2111 | 0.3855 |  | 0.1448 | 0.2415 | 0.2056 |  | 0.6772 |  | 0.2676 | 0.2978 |
| 1998 | 0 | 0 | 0 |  | 0.568 |  | 0.0871 | 1.1422 | 0.5821 | 0 |  | 1.6501 | 0 | 0.5519 |
| 1999 | 0 | 0.1651 | 0.1932 |  | 0.3403 | 0.5549 | 0.1041 | 0.4056 | 0.192 |  | 1.1939 |  | 0 | 0.347 |
| 2000 | 0 | 0 | 0.0623 |  |  |  | 0.0486 | 0.5755 | 0.1567 |  | 0 | 0 | 0.0135 | 0.139 |
| 2001 | 0 | 0 | 0.0149 | 0 |  |  | 0.0477 | 0.3596 | 0.4155 | 0 | 0 |  | 0.0206 | 0.1947 |
| 2002 | 0.4736 | 0 | 0.1416 | 0 | 0.4649 |  | 0.1879 | 0.6278 | 0.6969 | 0.1018 | 0.1936 |  | 0.1847 | 0.397 |
| 2003 | 0 | 0 | 0 | 0.047 | 0.0506 | 0 | 0.0509 | 0.6216 | 0.2515 | 0 | 0.7597 | 0.8798 | 0.0525 | 0.2309 |
| 2004 | 0.9055 | 0 | 0.0578 | 0.0897 | 0.1947 | 0.409 | 0.0929 | 0.5344 | 0.4392 | 0 | 0.746 | 1.3632 | 0.1893 | 0.3895 |
| 2005 | 0.181 | 0.0739 | 0.0426 | 0.0336 | 0.3206 | 0.1034 | 0.1126 | 0.957 | 0.4514 | 0.1185 | 1.4855 | 1.058 | 0.0955 | 0.424 |
| 2006 | 0.3808 | 0.0821 | 0.0664 | 0.1022 | 0.2594 | 0.2683 | 0.0366 | 1.0033 | 0.7263 |  | 1.4044 | 1.5077 | 0.0472 | 0.5396 |
| 2007 | 0.0903 |  | 0.4454 |  | 0.4907 | 0.5035 |  | 0.5952 | 0.6794 |  |  |  | 0 | 0.5378 |
| 2008 | 0.0616 | 0 |  | 0.0658 | 0.6203 | 0.1904 | 0.0519 |  |  | 0.4729 |  |  | 0.0599 | 0.243 |
| 2009 | 0.4485 |  | 0.1053 |  | 0.1568 |  | 0.0114 | 0.9709 |  |  | 1.6091 |  | 0.0654 | 0.4823 |

[^2]Table J.4. NBC troll fishery Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

| YEAR | SPFI | ER Stock Identifiers: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.9668 | Alaska Southeast | Age 4 | Age 5 | Age 6 |
| 1980 | 0.8300 | Quinsam | Age 4 | Age 5 |  |
| 1981 | 1.2616 | Robertson Creek | Age 3 | Age 4 | Age 5 |
| 1982 | 0.9417 | Salmon River Hatchery | Age 4 | Age 5 |  |
| 1983 | 0.9540 | Columbia Upriver Brights | Age 4 | Age 5 |  |
| 1984 | 0.9270 | Willamette Spring Hatchery | Age 4 | Age 5 |  |
| 1985 | 0.8959 |  |  |  |  |
| 1986 | 0.7852 |  |  |  |  |
| 1987 | 0.7999 |  |  |  |  |
| 1988 | 0.6735 |  |  |  |  |
| 1989 | 0.7011 |  |  |  |  |
| 1990 | 0.5919 |  |  |  |  |
| 1991 | 0.6500 |  |  |  |  |
| 1992 | 0.4587 |  |  |  |  |
| 1993 | 0.5181 |  |  |  |  |
| 1994 | 0.6331 |  |  |  |  |
| 1995 | 0.2733 |  |  |  |  |
| 1996 | 0.0000 |  |  |  |  |
| 1997 | 0.2291 |  |  |  |  |
| 1998 | 0.4435 |  |  |  |  |
| 1999 | 0.3058 |  |  |  |  |
| 2000 | 0.0864 |  |  |  |  |
| 2001 | 0.0789 |  |  |  |  |
| 2002 | 0.3049 |  |  |  |  |
| 2003 | 0.2128 |  |  |  |  |
| 2004 | 0.2843 |  |  |  |  |
| 2005 | 0.4079 |  |  |  |  |
| 2006 | 0.3967 |  |  |  |  |
| 2007 | 0.3850 |  |  |  |  |
| 2008 | 0.1921 |  |  |  |  |
| 2009 | 0.3987 |  |  |  |  |

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

| Year | AKS $\text { Age } 4$ | $\begin{aligned} & \text { QUI } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { QUI } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { RBT } \\ & \text { Age } 3 \end{aligned}$ | $\begin{aligned} & \text { RBT } \\ & \text { Age } 4 \end{aligned}$ | $\begin{aligned} & \text { RBT } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { SRH } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { SRH } \\ & \text { Age } 4 \end{aligned}$ | $\begin{aligned} & \text { SRH } \\ & \text { Age } 5 \end{aligned}$ | $\begin{aligned} & \text { URB } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { URB } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | URB $\text { Age } 5$ | $\begin{aligned} & \text { WSH } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | Fishery Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 |  | 0.5843 | 0.8415 | 1.2523 | 0.8392 | 0.477 | 1.1622 |  |  | 0.5779 | 1.2001 |  | 0.6151 | 0.8374 |
| 1980 |  | 0.799 | 0.9875 | 1.0248 | 0.8494 | 0.7818 |  | 0.9323 |  | 1.0764 | 0.9922 | 1.2667 | 1.1115 | 0.9467 |
| 1981 |  | 1.7471 | 1.4594 | 0.7547 | 1.0419 | 1.7411 | 1.2537 |  | 1 |  | 1.1576 | 1.3242 | 1.5299 | 1.2547 |
| 1982 | 1 | 0.8696 | 0.7117 | 0.9682 | 1.2694 |  | 0.5841 | 1.0677 |  | 1.3457 | 0.6501 | 0.4091 | 0.7435 | 0.8668 |
| 1983 | 1.4141 | 1.1306 | 1.4546 | 0.9161 | 0.6939 | 0.6132 | 0.6213 | 1.1852 | 0.2385 | 1.5755 | 1.2787 |  | 1.0925 | 0.7919 |
| 1984 | 0.9607 | 0.2405 | 0.5079 | 0.4455 | 1.2947 | 2.0366 |  | 1.3249 | 1.2834 | 0.928 | 2.1752 |  | 0.4294 | 1.2218 |
| 1985 | 0.6817 | 0.2441 | 0.572 | 0.9598 | 1.8998 |  | 0.3972 |  | 1.0553 | 1.1977 | 1.6945 | 1.6466 | 0.1804 | 1.0548 |
| 1986 | 0.6248 | 0.8633 | 0.8207 |  | 1.0343 |  | 0.1492 | 1.1404 |  | 0.9733 | 1.3818 | 1.9445 |  | 1.0135 |
| 1987 | 0.5778 | 0.4376 | 0.655 | 0.4787 |  |  | 0.2346 | 0.7941 | 1.0595 | 1.5463 | 1.8063 | 2.9182 |  | 1.0382 |
| 1988 | 1.923 | 0.2795 | 0.7166 | 0.3354 | 0.6256 |  |  | 0.6679 | 0.3308 | 0.7664 | 1.1164 | 2.3919 | 0.7812 | 0.7083 |
| 1989 | 0.8404 | 0.4596 | 0.4711 | 0.3887 | 0.8745 | 1.0651 | 0.2706 | 0.5973 | 1.0087 |  | 1.1026 | 4.2223 | 0.3309 | 0.976 |
| 1990 | 2.0075 | 0.4917 | 0.9876 | 0.388 | 0.7314 | 0.5757 | 0.3069 | 0.5375 | 0.9427 |  | 1.2673 | 2.4379 | 0.2872 | 0.8215 |
| 1991 | 0.634 | 0.525 | 0.6691 | 0.4666 | 0.7542 | 1.162 | 0.2925 | 0.8587 | 0.9653 |  |  |  | 0.2699 | 0.7698 |
| 1992 | 0.1825 |  | 1.933 | 0.3926 | 0.5949 | 0.7028 | 0.1781 | 0.5542 | 0.4593 |  |  |  | 0.105 | 0.6031 |
| 1993 | 0.219 |  |  | 0.3252 | 0.6316 | 0.8601 | 0.279 | 1.1917 | 1.149 | 0.2532 | 1.1571 |  | 0.1999 | 0.8077 |
| 1994 | 0.1049 |  |  | 0.5073 | 0.7558 | 0.9161 | 0.3796 | 1.1238 | 0.9398 |  | 0.9628 | 1.973 | 0.1121 | 0.8742 |
| 1995 | 0.0683 |  |  |  | 0.421 | 0.2844 | 0.2105 | 0.0338 | 0.4228 |  |  | 0.6046 | 0.1795 | 0.3298 |
| 1996 | 0.1114 |  |  | 0.0637 |  |  | 0.074 | 0.0271 | 0.0275 | 0 | 0 |  | 0.0484 | 0.0362 |
| 1997 | 0 | 0.3499 | 0.3858 | 0.2414 | 0.3813 |  | 0.1577 | 0.2407 | 0.2026 |  | 0.6775 |  | 0.2185 | 0.2924 |
| 1998 | 0 | 0 | 0 |  | 0.5677 |  | 0.1952 | 1.1293 | 0.585 | 0.0838 |  | 1.6174 | 0 | 0.5368 |
| 1999 | 0 | 0.1677 | 0.1871 |  | 0.3267 | 0.5617 | 0.1251 | 0.4025 | 0.1892 |  | 1.1973 |  | 0 | 0.3371 |
| 2000 | 0 | 0 | 0.0603 |  |  |  | 0.0659 | 0.5622 | 0.1545 |  | 0 | 0 | 0.012 | 0.1338 |
| 2001 | 0.0441 | 0 | 0.0144 | 0 |  |  | 0.0645 | 0.3568 | 0.4095 | 0 | 0 |  | 0.0173 | 0.1811 |
| 2002 | 0.5133 | 0 | 0.1371 | 0.0299 | 0.4665 |  | 0.2223 | 0.6261 | 0.7053 | 0.138 | 0.1977 |  | 0.1827 | 0.3877 |
| 2003 | 0.068 | 0 | 0 | 0.0426 | 0.052 | 0 | 0.0945 | 0.622 | 0.2536 | 0.1452 | 0.7751 | 0.8943 | 0.0501 | 0.2309 |
| 2004 | 0.8413 | 0 | 0.0559 | 0.1219 | 0.2039 | 0.4274 | 0.1572 | 0.5518 | 0.4597 | 0.1323 | 0.7536 | 1.4163 | 0.1788 | 0.3969 |
| 2005 | 0.1962 | 0.0601 | 0.0413 | 0.0608 | 0.3237 | 0.1027 | 0.2092 | 0.9728 | 0.4646 | 0.4909 | 1.5362 | 1.1111 | 0.0851 | 0.4357 |
| 2006 | 0.4054 | 0.0667 | 0.0643 | 0.1339 | 0.2566 | 0.2663 | 0.1815 | 0.9952 | 0.7289 |  | 1.4256 | 1.5012 | 0.0525 | 0.5317 |
| 2007 | 0.0979 |  | 0.4312 |  | 0.486 | 0.4999 |  | 0.59 | 0.6824 |  |  |  | 0 | 0.5254 |
| 2008 | 0.0716 | 0 |  | 0.1022 | 0.6305 | 0.189 | 0.0953 |  |  | 0.4984 |  |  | 0.0593 | 0.2441 |
| 2009 | 0.4007 |  | 0.102 |  | 0.1581 |  | 0.0893 | 0.9621 |  |  | 1.6325 |  | 0.0486 | 0.4731 |

$\begin{array}{lll}\text { Stock Identifiers: } & & \\ \text { AKS = ALASKA SPRING } & \text { QUI = QUINSAM } & \text { RBT = ROBERTSON CREEK } \\ \text { URB = COLUMBIA UPRIVER BRIGHT } & \text { WSH = WILLAMETTE SPRING }\end{array}$
SRH = SALMON RIVER HATCHERY
WSH = WILLAMEITE SPRING

Table J.6. NBC troll fishery Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

| YEAR | SPFI | ER Stock Identifiers: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 0.9655 | Alaska Southeast | Age | Age 5 | Age 6 |
| 1980 | 0.8036 | Quinsam | Age | Age 5 |  |
| 1981 | 1.2724 | Robertson Creek | Age | Age 4 | Age 5 |
| 1982 | 0.9585 | Salmon River Hatchery | Age | Age 5 |  |
| 1983 | 0.9794 | Columbia Upriver Brights | Age | Age 5 |  |
| 1984 | 0.8676 | Willamette Spring Hatchery | Age | Age 5 |  |
| 1985 | 0.8457 |  |  |  |  |
| 1986 | 0.7264 |  |  |  |  |
| 1987 | 0.7599 |  |  |  |  |
| 1988 | 0.6734 |  |  |  |  |
| 1989 | 0.7061 |  |  |  |  |
| 1990 | 0.6425 |  |  |  |  |
| 1991 | 0.6220 |  |  |  |  |
| 1992 | 0.4798 |  |  |  |  |
| 1993 | 0.5259 |  |  |  |  |
| 1994 | 0.5772 |  |  |  |  |
| 1995 | 0.2748 |  |  |  |  |
| 1996 | 0.0000 |  |  |  |  |
| 1997 | 0.2337 |  |  |  |  |
| 1998 | 0.4036 |  |  |  |  |
| 1999 | 0.2797 |  |  |  |  |
| 2000 | 0.0942 |  |  |  |  |
| 2001 | 0.0923 |  |  |  |  |
| 2002 | 0.3065 |  |  |  |  |
| 2003 | 0.2112 |  |  |  |  |
| 2004 | 0.2897 |  |  |  |  |
| 2005 | 0.3848 |  |  |  |  |
| 2006 | 0.3687 |  |  |  |  |
| 2007 | 0.3472 |  |  |  |  |
| 2008 | 0.2178 |  |  |  |  |
| 2009 | 0.3628 |  |  |  |  |

Table J.7. Landed catch exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

| CWF <br> Year Age 4 | GAD | GAD | LRH Age 3 | LRH Age 4 | LRW | RBT Age 3 | $\begin{aligned} & \hline \text { RBT } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { RBT } \\ & \text { Age } 5 \end{aligned}$ | SAM Age 3 | SAM Age 4 | SAM Age 5 | SPR Age 3 | SPR Age 4 | SPS Age 3 | $\begin{aligned} & \text { SPS } \\ & \text { Age } 4 \end{aligned}$ | SRH Age 3 | SRH Age 4 | $\begin{aligned} & \hline \text { SUM } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | URB Age 3 | URB Age 4 |  | UWA Age 4 | WSH Fishery Age 4 Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 |  |  | 1.1117 |  |  | 1.1538 | 1.2608 |  |  | 1 | 1 O | 0.9549 | 0.8269 |  | 1.13131 | 1.5645 |  |  | 1.3943 | 1.745 | 0.6998 | 1.2158 | 1.02471 .0522 |
| 1980 |  |  | 0.5644 | 0.999 |  | 1.3798 | 1.4195 |  |  |  |  | 1.1835 | 1.4101 |  |  |  | 1.0911 |  | 1.3382 | 0.9392 | 1.3882 | 0.8622 | 1.11131 .0804 |
| 19810.7941 | 0.715 |  | 1.1594 | 0.7568 | 0.8475 | 0.7014 | 0.5836 | 1 |  |  |  | 0.95170 | 0.63690 | 0.7182 |  | 0.4355 |  |  | 0.1999 | 0.8925 | 0.8456 | 0.8862 | 0.62660 .8194 |
| 19821.2059 | 1.285 | 1 | 1.1646 | 1.2441 | 1.1525 | 0.765 | 0.7361 |  | 1 |  |  | 0.9099 | 1.1261 | 1.28180 | 0.8687 |  | 0.9089 |  | 1.0676 | 0.4233 | 1.0664 | 1.0358 | 1.23741 .0476 |
| 19831.3748 |  | 1.4042 | 1.7096 | 1.6173 | 0.9619 | 0.3039 | 0.679 | 2.5003 |  | 0.9583 |  | 1.541 | 0.9395 | 1.64320 | 0.88621 | 1.4251 |  |  | 0.3966 | 0.4388 | 0.7057 | 1.0787 | 0.27391 .1862 |
| 19841.3039 | 2.0896 |  | 2.2238 | 2.7617 |  | 1.2381 | 1.0459 | 1.6866 |  |  | 1.0865 | 1.4687 | 1.57991 | 1.63310 | 0.9656 |  | 0.3691 |  | 0.8824 | 1.3234 | 1.7538 | 0.7309 | 0.68891 .4638 |
| 19850.8961 |  | 0.8449 | 1.2512 | 1.0842 |  | 0.6874 |  |  |  |  |  | 0.5426 | 0.9535 | 0.824 | 0.6569 |  |  |  | 0.7602 | 1.0252 | 0.8411 | 1.0503 | $0.439 \quad 0.869$ |
| 19861.2801 |  |  | 1.297 | 1.1737 | 0.4705 |  | 0.5673 |  |  |  |  | 1.202 | 1.00290 | 0.9009 | 1.0728 |  | 0.1864 |  | 1.4706 | 0.7237 | 0.8517 | 1.2185 | 1.0631 |
| 19870.858 |  |  | 0.9636 |  | 1.4595 | 0.2735 |  |  |  |  |  | 0.4646 |  | 0.75980 | 0.50660 | 0.2666 | 0.2181 |  | 1.0043 | 0.7894 | 0.3726 | 0.4066 | 0.6343 |
| 19880.8427 | 0.4332 |  | 1.1604 | 1.3165 | 1.0574 | 0.4536 | 0.5726 |  | 0.6164 |  |  | 1.0092 |  | 0.30380 | 0.6857 |  | 0.6419 |  | 0.088 | 1.8926 |  | 0.7743 | 0.85610 .8898 |
| 19890.5305 | 0.2548 | 0.4899 | 0.2907 | 0.5416 | 0.5664 | 0.1678 | 0.3407 | 0 | 0.2139 | 0.602 |  | 0.5917 | 0.3954 | 0.3517 | 0.37910 | 0.3392 |  |  |  | 0.8935 |  |  | 0.53730 .4586 |
| 19900.7142 | 1.1033 | 0.9404 | 1.1817 | 0.3996 | 1.21310 | 0.6747 | 0.5577 | 1.535 | 0.4163 | 0.8598 |  | 0.9393 | 0.7245 | 0.75120 | 0.81610 | 0.7115 | 0.4329 |  |  | 1.6144 |  |  | 0.82560 .8361 |
| 1991 |  | 0.9404 | 0.8172 |  | 0.7458 | 0.5998 | 0.5459 | 0.7351 | 0.2553 | 0.5705 | 1.0996 | 0.6024 | 0.62630 | 0.428 | 0.52520 | 0.9483 | 0.3562 |  |  |  |  |  | 0.07670 .6907 |
| 19921.1488 |  | 0.4541 | 0.6673 |  | 0.3208 | 1.6102 | 2.4333 | 5.1136 | 1.0759 | 0.2663 |  | 0.4378 | 0.7413 | 0.745 | 0.72081 | 1.2648 | 2.6016 |  |  |  |  |  | 0.16730 .8226 |
| 1993 |  |  | 1.1192 | 0.649 |  | 1.1771 | 2.2668 | 2.4465 | 1.1429 | 0.423 |  | 0.5471 | 0.9992 | 1.05570 | 0.5178 | 1.2136 | 1.1314 |  | 0.6215 | 1.9373 |  |  | 0.42960 .8627 |
| 19940.1173 |  |  |  |  | 0.2242 | 0.6069 | 0.7332 | 1.3899 | 0.0872 | 0.7022 |  | 0.8408 | 0.6416 | 0.22280 | 0.4605 |  | 0.3847 |  |  | 0.9403 |  |  | 0.24930 .5416 |
| 1995 | 0.2238 |  |  |  | 0.4326 |  | 0.4369 | 0.3652 | 0.1614 | 0.3886 |  | 0.36330 | 0.35080 | 0.281 | 0.25650 | 0.0365 |  |  |  |  |  |  | 0.11530 .3242 |
| 19960 | 0 |  |  |  |  | 0 |  |  |  | 0 |  | 0 |  |  | 0 | 0 | 0 |  | 0 0 | 0 |  |  | 0 |
| 19970.3413 |  | 0.2194 | 0.7615 |  |  | 0 | 0.0621 |  | 0.035 | 0.2476 |  | 0.50640 | 0.4786 | 0.0354 | 0.28920 |  | 0.0362 |  |  | 0.1103 |  |  | 0.3296 |
| 1998 |  |  |  |  |  |  | 0 |  |  | 0.077 |  | 0.04560 | 0 | , | 0.03030 |  | 0 |  | 0.0152 |  |  |  | 0.03510 .0306 |
| 1999 | 0.0482 |  | 0.0969 |  |  |  |  | 0 |  | 0.0735 |  | 0.0158 |  | 0.02040 | 0.05460 |  | 0 |  |  | 0 |  |  | 0.0481 |
| 2000 |  | 1.2248 | 0.0981 | 1.8539 |  |  |  |  |  | 1.1144 |  | 0.0464 | 0.765 | 0.0355 | 0.713 |  | 0 |  | 0.1183 | 0.5095 |  |  | 0.07590 .7676 |
| 2001 | 0.7177 | 1.222 | 0.3093 |  | 0.7215 | 0 |  |  | 0.3706 | 0.3674 |  | 0.1468 | 0.60170 | 0.4524 | 0.53640 |  | 0.0544 |  | 0.063 | 0.1689 |  |  | 0.17580 .501 |
| 20020.6101 | 0.1723 | 0.6763 | 0.3696 | 0.4927 |  | 0.016 | 0 |  | 0.279 | 0.4156 |  | 0.3 | 0.75620 | 0.4433 | 0.55680 |  | 0 |  | 0.0892 | 0.2115 |  |  | 0.3350 .4616 |
| 20030.5556 | 0.1159 | 0.74 | 0.3119 | 0.9253 | 0.12510 | 0 | 0 |  |  | 0.6016 |  | 0.3051 | 0.59490 | 0.38070 | 0.56580 |  | 0 |  | 0.176 | 0.1056 |  |  | 0.58690 .4955 |
| 2004 | 0.0795 | 1.183 | 0.4179 | 1.0674 | 0.1247 | 0.0327 | 0.0209 | 0 | 0.1856 | 0.5464 |  | 0.3537 | 0.8037 | 0.3557 | 0.8264 | 0.1817 | 0.2539 |  | 0.1604 | 0.4907 |  |  | 2.16050 .6336 |
| 20050.2976 | 0.7561 | 0.9693 | 0.7903 | 1.7899 | 0.12370 | 0 | 0 |  | 0.1193 | 0.8005 |  | 0.8884 | 1.1865 | 0.58020 | 0.764 | 0.1651 | 0.2323 |  | 0.1298 | 0.459 |  |  | 1.24190 .8133 |
| 2006 | 0.2774 | 0.9363 |  |  | 0.45570 | 0 | 0 | 0 | 0.3888 | 0.7761 |  | 0.574 | 1.3926 | 0.53230 | 0.7247 | 0.1611 | 0.2833 |  |  | 0.7251 |  |  | 1.42930 .7343 |
| 2007 | 1.0107 | 0.8177 | 0.8063 |  |  |  | 0.0185 |  | 1.273 | 0.5831 |  | 0.61810 | 0.9341 | 1.02270 | 0.6945 |  | , |  |  | 0.1352 |  |  | 0.22170 .7101 |
| 2008 | 0.4129 | 0.3793 | 0.4536 |  |  | 0 |  | 0 | 0.661 | 0.3393 |  | 0.2076 |  | 0.4628 | 0.328 | 0.1862 |  |  | 0.2589 |  |  |  | 0.20660 .3404 |
| 20090 | 0.4118 | 0.4633 | 0.2734 | 0.2305 |  |  | 0 |  | 0.2748 | 0.1477 |  | 0.1385 | 0.05090 | 0.3116 | 0.16690 | 0.0334 | 0.0281 |  |  | 0.0986 |  |  | 0.16110 .1855 |

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

RBT = ROBERTSON CREEK
SAM = SAMISH FALL FING
SPR = SPRING CREEK TULE
SPS = SO SOUND FALL FING

SRH = SALMON RIVER HATCHERY
SUM = COL RIVER SUMMERS
URB = COLUMBIA UPRIVER BRIGHT
UWA = U OF W FALL ACCEL

WSH = WILLAMETTE SPRING CHI $=$ CHILLAWACK

Table J.8. WCVI troll fishery Stratified Proportion Fishery Index (SPFI) values as landed catch, based on CWT data.

| YEAR | SPFI | ER Stock Identifiers: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 1.0948 | Alaska Southeast | Age 4 | Age 5 | Age 6 |
| 1980 | 1.1273 | Quinsam | Age 4 | Age 5 |  |
| 1981 | 0.8666 | Robertson Creek | Age 3 | Age 4 | Age 5 |
| 1982 | 0.9113 | Salmon River Hatchery | Age 4 | Age 5 |  |
| 1983 | 1.0115 | Columbia Upriver Brights | Age 4 | Age 5 |  |
| 1984 | 1.3843 | Willamette Spring Hatchery | Age 4 | Age 5 |  |
| 1985 | 1.2172 |  |  |  |  |
| 1986 | 0.8269 |  |  |  |  |
| 1987 | 1.4084 |  |  |  |  |
| 1988 | 1.7078 |  |  |  |  |
| 1989 | 0.8160 |  |  |  |  |
| 1990 | 1.1833 |  |  |  |  |
| 1991 | 0.5934 |  |  |  |  |
| 1992 | 1.6503 |  |  |  |  |
| 1993 | 0.7391 |  |  |  |  |
| 1994 | 0.5275 |  |  |  |  |
| 1995 | 0.5948 |  |  |  |  |
| 1996 | 0.0000 |  |  |  |  |
| 1997 | 0.4131 |  |  |  |  |
| 1998 | 0.0172 |  |  |  |  |
| 1999 | 0.1793 |  |  |  |  |
| 2000 | 0.7088 |  |  |  |  |
| 2001 | 0.1776 |  |  |  |  |
| 2002 | 0.2317 |  |  |  |  |
| 2003 | 0.5692 |  |  |  |  |
| 2004 | 0.4026 |  |  |  |  |
| 2005 | 0.6248 |  |  |  |  |
| 2006 | 0.4306 |  |  |  |  |
| 2007 | 0.4002 |  |  |  |  |
| 2008 | 0.3791 |  |  |  |  |
| 2009 | 0.1239 |  |  |  |  |

Table J.9. Total mortality exploitation rate indices by stock and age in the WCVI troll fishery, based on CWT data. Base period is 1979-1982.

| Year Age 4 | GAD | $\begin{aligned} & \hline \text { GAD } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { LRH } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { LRH } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { LRW } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { RBT } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { RBT } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { RBT } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | SAM <br> Age 3 | $\begin{aligned} & \hline \text { SAM } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SAM } \\ & \text { Age } 5 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SPR } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SPR } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | SPS <br> Age 3 | $\begin{aligned} & \hline \text { SPS } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SRH } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SRH } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { SUM } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { URB } \\ & \text { Age } 3 \\ & \hline \end{aligned}$ | URB <br> Age 4 | $\begin{aligned} & \hline \text { UWA } \\ & \text { Age } 3 \end{aligned}$ | UWA <br> Age 4 | $\begin{aligned} & \hline \text { WSH } \\ & \text { Age } 4 \\ & \hline \end{aligned}$ | Fishery <br> Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 |  |  | 1.0866 |  |  | 1.2335 | 1.2709 |  |  | 1 | 1 | 0.9389 | 0.8259 |  | 1.1327 | 1.5313 |  |  | 1.3921 | 1.7381 | 0.6843 | 1.2229 | 0.9749 | 1.0459 |
| 1980 |  |  | 0.5725 | 0.9903 |  | 1.3027 | 1.4066 |  |  |  |  | 1.1362 | 1.3864 |  |  |  | 1.1032 |  | 1.328 | 0.9442 | 1.3454 | 0.8633 | 1.0994 | 1.0629 |
| 19810.78720 | 0.7172 |  | 1.1421 | 0.749 | 0.8585 | 0.6831 | 0.582 | 1 |  |  |  | 0.907 | 0.6383 | 0.7493 |  | 0.4687 |  |  | 0.2483 | 0.8775 | 0.8158 | 0.8556 | 0.6477 | 0.8096 |
| 19821.2128 | 1.2828 | 1 | 1.1989 | 1.2607 | 1.1415 | 0.7806 | 0.7406 |  | 1 |  |  | 1.0179 | 1.1493 | 1.2507 | 0.8673 |  | 0.8968 |  | 1.0316 | 0.4402 | 1.1545 | 1.0583 | 1.2781 | 1.0726 |
| 19831.3582 |  | 1.4141 | 1.5558 | 1.5543 | 0.9636 | 0.3037 | 0.66692 | 2.5612 |  | 0.959 |  | 1.3696 | 0.898 | 1.5429 | 0.8946 | 1.2986 |  |  | 0.3467 | 0.4148 | 0.6685 | 1.0638 | 0.2785 | 1.1467 |
| 19841.2924 | 1.6812 |  | 2.0043 | 2.6529 |  | 1.1167 | 1.0251 | 1.7491 |  |  | 1.0753 | 1.2809 | 1.4742 | 1.4184 | 0.9507 |  | 0.378 |  | 0.8169 | 1.2675 | 1.5769 | 0.737 | 0.6406 | 1.3866 |
| 19850.9006 |  | 0.8218 | 1.1764 | 1.0513 |  | 0.62410 | 0 |  |  |  |  | 0.5211 | 0.8897 | 0.7319 | 0.6461 |  |  |  | 0.7172 | 0.9969 | 0.7628 | 1.014 | 0.427 | 0.8305 |
| 19861.2969 |  |  | 1.1132 | 1.0988 | 0.4641 |  | 0.5344 |  |  |  |  | 1.0954 | 0.9581 | 0.8207 | 1.0447 |  | 0.1782 |  | 1.3353 | 0.7123 | 0.7945 | 1.1943 |  | 1.0061 |
| 19870.8761 |  |  | 1.1429 |  | 1.4286 | 0.2706 |  |  |  |  |  | 0.4263 |  | 0.8441 | 0.5143 | 0.269 | 0.2432 |  | 1.102 | 0.8306 | 0.374 | 0.4048 |  | 0.6632 |
| 19880.9074 | 0.4749 |  | 1.2591 | 1.379 | 1.0698 | 0.4464 | 0.5731 |  | 0.6759 |  |  | 0.9332 |  | 0.373 | 0.7109 |  | 0.6662 |  | 0.4616 | 1.9585 |  | 0.7829 | 0.8628 | 0.9192 |
| 19890.5476 | 0.3528 | 0.4922 | 0.3131 | 0.5634 | 0.579 | 0.1704 | 0.33040 | 0 | 0.33670 | 0.605 |  | 0.59 | 0.3884 | 0.3795 | 0.3825 | 0.365 |  |  |  | 0.9313 |  |  | 0.5136 | 0.4682 |
| 19900.7488 | 1.0465 | 0.9346 | 1.1323 | 0.4365 | 1.2129 | 0.6538 | 0.5628 | 1.5941 | 0.45830 | 0.8542 |  | 0.8815 | 0.7183 | 0.8965 | 0.8332 | 0.7453 | 0.4515 |  |  | 1.6279 |  |  | 0.819 | 0.8409 |
| 1991. |  | 0.9619 | 0.7156 |  | 0.7555 | 0.5991 | 0.55090 | 0.7581 | 0.4075 | 0.5796 | 1.0879 | 0.5804 | 0.6201 | 0.5087 | 0.5332 | 0.9112 | 0.373 |  |  |  |  |  | 0.079 | 0.6831 |
| 19921.1501 |  | 0.4686 | 0.7339 |  | 0.3286 | 1.7741 | 2.4558 | 5.285 | 0.91190 | 0.2712 |  | 0.4803 | 0.7394 | 0.7408 | 0.721 | 1.3444 | 2.5807 |  |  |  |  |  | 0.2237 | 0.8299 |
| 1993 |  |  | 1.171 | 0.6996 |  | 1.4064 | 2.2912 | 2.5641 | 1.09330 | 0.4375 |  | 0.5687 | 0.9876 | 1.0533 | 0.5222 | 1.4258 | 1.173 |  | 0.877 | 1.9459 |  |  | 0.4191 | 0.8938 |
| 19940.1135 |  |  |  |  | 0.2384 | 0.6648 | 0.7582 | 1.4466 | 0.23810 | 0.7006 |  | 0.8102 | 0.6414 | 0.2331 | 0.4534 |  | 0.4007 |  |  | 0.9548 |  |  | 0.2484 | 0.5452 |
| 1995 | 0.2881 |  |  |  | 0.472 |  | 0.45720 | 0.4058 | 0.24040 | 0.4189 |  | 0.3783 | 0.371 | 0.3147 | 0.2723 | 0.0883 |  |  |  |  |  |  | 0.1328 | 0.3487 |
| 19960.0334 | 0.0675 | 0.0252 | 0 |  |  | 0.0322 |  |  | 0.0596 | 0.0154 |  | 0.0177 |  | 0.0627 | 0.0209 | 0.0531 | 0.0119 |  | 0 | 0.06 |  |  | 0.0264 | 0.0256 |
| 19970.3303 |  | 0.2234 | 0.8163 |  |  | 0.0045 | 0.0585 |  | 0.09570 | 0.2561 |  | 0.5428 | 0.5002 | 0.1304 | 0.2988 | 0.0156 | 0.0346 |  |  | 0.1043 |  |  | 0 | 0.3526 |
| 1998 |  |  |  |  |  |  | 0 |  |  | 0.0736 |  | 0.0377 | 0 | 0 | 0.029 | 0 | 0 |  | 0.0126 |  |  |  | 0.0289 | 0.0278 |
| 1999 | 0.0355 |  | 0.0802 |  |  |  |  | 0 |  | 0.0702 |  | 0.0131 |  | 0.0156 | 0.0522 | 0 | 0 |  |  | 0 |  |  | 0 | 0.0425 |
| 2000 |  | 1.195 | 0.0812 | 1.7838 |  |  |  |  |  | 1.0641 |  | 0.046 | 0.7138 | 0.0272 | 0.694 | 0 | 0 |  | 0.098 | 0.4817 |  |  | 0.0624 | 0.7074 |
| 2001 | 0.5374 | 1.2344 | 0.2596 |  | 0.6821 | 0 |  |  | 0.28610 | 0.3508 |  | 0.1247 | 0.5614 | 0.3553 | 0.5204 | 0 | 0.052 |  | 0.0608 | 0.1596 |  |  | 0.148 | 0.4573 |
| 20020.6083 | 0.1394 | 0.6549 | 0.3105 | 0.474 |  | 0.013 | 0 |  | 0.20780 | 0.4034 |  | 0.2535 | 0.7165 | 0.3518 | 0.5413 | 0 | 0 |  | 0.0739 | 0.2086 |  |  | 0.2837 | 0.4244 |
| 20030.5377 | 0.0852 | 0.7164 | 0.2654 | 0.8798 | 0.1245 | 0 | 0 |  |  | 0.5745 |  | 0.2582 | 0.5645 | 0.2972 | 0.5501 | 0 | 0 |  | 0.1458 | 0.0999 |  |  | 0.4922 | 0.4554 |
| 2004 | 0.0585 | 1.1534 | 0.3592 | 1.0172 | 0.1179 | 0.0264 | 0.01970 | 0 | 0.13820 | 0.5217 |  | 0.3 | 0.7635 | 0.2811 | 0.8036 | 0.1571 | 0.2465 |  | 0.1328 | 0.4639 |  |  | 1.8201 | 0.5795 |
| 20050.288 | 0.581 | 0.9455 | 0.6546 | 1.7017 | 0.1169 | 0 | 0 |  | 0.08880 | 0.7773 |  | 0.7513 | 1.1249 | 0.453 | 0.7395 | 0.1333 | 0.229 |  | 0.1075 | 0.4339 |  |  | 1.0454 | 0.7455 |
| 2006 | 0.2142 | 0.9139 |  |  | 0.4308 | 0 | 0 | 0 | 0.31080 | 0.741 |  | 0.4867 | 1.3413 | 0.4203 | 0.7025 | 0.13 | 0.2708 |  |  | 0.6855 |  |  | 1.2051 | 0.677 |
| 2007 | 0.7653 | 0.7959 | 0.6679 |  |  |  | 0.0174 |  | 0.9664 | 0.5664 |  | 0.5104 | 0.8716 | 0.7988 | 0.6756 |  | 0 |  |  | 0.1278 |  |  | 0.1825 | 0.642 |
| 2008 | 0.3127 | 0.3635 | 0.3757 |  |  | 0 |  | 0 | 0.50950 | 0.324 |  | 0.1746 |  | 0.3621 | 0.3134 | 0.1503 |  |  | 0.2287 |  |  |  | 0.1701 | 0.302 |
| 20090 | 0.30290 | 0.4528 | 0.2265 | 0.2158 |  |  | 0 |  | 0.2047 | 0.141 |  | 0.1144 | 0.047 | 0.2504 | 0.162 | 0.0269 | 0.0269 |  |  | 0.0932 |  |  | 0.1326 | 0.1693 |

Stock Identifiers

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

RBT = ROBERTSON CREEK
SAM = SAMISH FALL FING SPR = SPRING CREEK TULE SPS = SO SOUND FALL FING

SRH = SALMON RIVER HATCHERY
SUM = COL RIVER SUMMERS
URB $=$ COLUMBIA UPRIVER BRIGHT
UWA = U OF W FALL ACCEL

WSH = WILLAMETTE SPRING
CHI = CHILLAWACK

Table J.10.WCVI troll fishery Stratified Proportion Fishery Index (SPFI) values as total mortality, based on CWT data.

| YEAR | SPFI | ER Stock Identifiers: |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1979 | 1.0662 | Alaska Southeast | Age 4 | Age 5 | Age 6 |
| 1980 | 1.1103 | Quinsam | Age 4 | Age 5 |  |
| 1981 | 0.8885 | Robertson Creek | Age 3 | Age 4 | Age 5 |
| 1982 | 0.9351 | Salmon River Hatchery | Age 4 | Age 5 |  |
| 1983 | 0.9714 | Columbia Upriver Brights | Age 4 | Age 5 |  |
| 1984 | 1.3057 | Willamette Spring Hatchery | Age 4 | Age 5 |  |
| 1985 | 1.1293 |  |  |  |  |
| 1986 | 0.7669 |  |  |  |  |
| 1987 | 1.3694 |  |  |  |  |
| 1988 | 1.6457 |  |  |  |  |
| 1989 | 0.8935 |  |  |  |  |
| 1990 | 1.1387 |  |  |  |  |
| 1991 | 0.6054 |  |  |  |  |
| 1992 | 1.5991 |  |  |  |  |
| 1993 | 0.7151 |  |  |  |  |
| 1994 | 0.5011 |  |  |  |  |
| 1995 | 0.6527 |  |  |  |  |
| 1996 | 0.0000 |  |  |  |  |
| 1997 | 0.3871 |  |  |  |  |
| 1998 | 0.0248 |  |  |  |  |
| 1999 | 0.1590 |  |  |  |  |
| 2000 | 0.6255 |  |  |  |  |
| 2001 | 0.1571 |  |  |  |  |
| 2002 | 0.2052 |  |  |  |  |
| 2003 | 0.5033 |  |  |  |  |
| 2004 | 0.3567 |  |  |  |  |
| 2005 | 0.5524 |  |  |  |  |
| 2006 | 0.3805 |  |  |  |  |
| 2007 | 0.3530 |  |  |  |  |
| 2009 | 0.1092 |  |  |  |  |

Appendix K Issues with ERA and model calibration

## Issues with CWT Data

## Alaska Spring

- As in previous years, the rack return, cost-recovery, personal use and stray recoveries for AKS were imported as auxiliary data.


## Chilkat, Unuk and Taku Spring

- The escapement and stray recoveries for CHK, UNU and TAK were imported as auxiliary data.


## Canadian Stocks

- As in previous years, the escapement, rack return and stray recoveries for ATN, ATS, BQR, CHE, CHI, COW, DOM, HAR, KLM, NAN, NIC, PPS, QUI, RBT and SHU were imported as auxiliary data.


## Cowlitz Fall

- The 2008 escapement for CWF was imported as auxiliary data.


## Elk River

- Corrections to the escapement recoveries from 1983 through 2006 and the terminal sport recoveries from 2000 through 2006 for ELK were imported as auxiliary data.
Lower River Hatchery
- Corrections to the escapement recoveries from 1979 through 1982 for LRH were imported as auxiliary data.


## Lewis River Wild

- The 2008 escapement for LRW was imported as auxiliary data.


## Lyons Ferry Hatchery

- Corrections to the escapement recoveries from 2002 through 2008 for LYF were imported as auxiliary data.


## Queets Fall Fingerling

- Corrections to the escapement recoveries from 1981 through 1997, 2001, and 2004 through 2007 for QUE were imported as auxiliary data.


## Spring Creek Hatchery

- Corrections to the escapement and terminal sport recoveries from 1974 through 1979 for SPR were imported as auxiliary data.


## Salmon River Hatchery

- Corrections to the escapement and terminal sport recoveries from 1979 through 1987, 1993, 1995, 1998 and 2007 for SRH were imported as auxiliary data.


## Stillaguamish Fall Fingerling

- Corrections to the escapement recoveries from 1999 through 2003 for STL were imported as auxiliary data.


## Willamette Spring Hatchery

- Corrections to the escapement and terminal sport recoveries from 1978 through 2008 for WSH were imported as auxiliary data.


## Changes from Previous Calibration Procedures

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

## CNR File

SEAK Troll - SEAK Troll CNR data changes were due to stratifying the estimates by quadrant instead of the previously reported big six areas.

Years with SEAK July Inside Troll strata data changes:
1984, 1989-1997, 2007-2009
Years with SEAK July Outside Troll strata data changes:
1984, 1989-1997, 2007-2009

Years with SEAK Fall Troll strata data changes:
1990, 1992-1997, 2007-2009
SEAK Net - SEAK Net CNR changes were due to a new purse seine encounter estimator developed during the Total Mortality Workgroup investigations.

Years with SEAK Net CNR data changes:
1989-2004, 2007-2009

## Forecast (FCS) File

Southeast Alaska Spring Escapement - The 1998-2009 data was changed because of updates to either the escapement estimate, age composition estimate, or the expansion factor by the project leaders.

The following changes were incorporated into the "SSEAK_ModelStkEsc_thru2010_RB.xls" spreadsheet:

Escapement time series in Escapements worksheet were all updated with correct escapements and expansion factors (John DerHovanisian: King Salmon River, Andrew Creek, Blossom, Keta; Red Weller: Unuk; Todd Johnson: Chickamin)

King Salmon River: The expansion factor was changed from 1.51876 (Excel was hiding digits) to 1.52 to reflect what is used in reports. Estimated the 2010 medium fish by multiplying the 8392 and 98-09 average Med-Large ratio by the estimate of large fish. No ASL data in 2010 so the 2010 ASL was estimated using 83-92 and 98-09 average ASL. 2004 Med spawning grounds number updated to reflect ASL data since there was one more medium fish in reported ASL data.

Andrew Creek: The expansion factor changed from 1.954 to 1.95 to reflect what is used in reports.

Blossom River: An expansion factor of 3.87 was used. No ASL data in 2010 so it was estimated using average ASL from 98-09. The average med-large ratio from 98-09 was used to estimate the number of 2010 medium fish. The 2003 large and med spawning grounds numbers were updated to reflect ASL data since there were more fish in the reported ASL data.

Keta River: The expansion factor was changed from 3.0 to 3.01 to reflect what is used in reports. No ASL data was available in 2010. The average Med-large ratio from 98-09 was used to estimate the 2010 medium abundance. The average ASL from 98-09 was used for 2010.

Unuk River: The escapement time series was updated using an expansion factor of 4.83. The time period 2007-2010 had new Mark-Recapture data. The 1982, 1984-2010 average ASL was used for the years 1975-76. The 2003, 2007-2009 large and medium spawning ground numbers were updated. The 2007-2009 ASL data was updated.

Chickamin River: The escapement time series updated using an expansion factor of 4.75 to reflect what is used in reports. The 2004-2009 large and medium spawning ground numbers were updated. The 2004-2009 ASL data were updated.

Fraser Late Escapement - The 2011 age-specific escapement forecast for the Fraser Late stock using the usual method was not yet available when PSC Chinook Model Calibration \#1106 was performed. Therefore a simpler logarithmic sibling forecast method developed by Chuck Parken was used to generate the 2011 FRL escapement forecast.

Nooksack/Samish Terminal Run - The terminal run estimates for NKS were updated from 1987 onward using a new run reconstruction method that includes freshwater sport.

Puget Sound Fingerling Terminal Run - The terminal run estimates for PSF were updated from 1987 onward using a new run reconstruction method that includes freshwater sport.

Puget Sound Natural Terminal Run - The terminal run estimates for PSN were updated from 1987 onward using a new run reconstruction method that includes freshwater sport.

Snohomish Summer/Fall Terminal Run - The terminal run estimates for SNO were updated from 1987 onward using a new run reconstruction method that includes freshwater sport.

## Maturation and Adult Equivalent (MATAEQ DAT) File

Fraser Late Maturation Rates and AEQ Values - The age 3 and age 4 FRL maturation rates for incomplete broods were changed from the recent 5 year average to the long-term average so that the rates for FRL were consistent with those of the other stocks in the MATAEQ file. The resulted in new age 3 and age 4 adult equivalent values for the incomplete FRL broods as well.


[^0]:    ${ }^{1}$ 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**

[^1]:    ${ }^{1}$ 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.

[^2]:    AKS = ALASKA SPRING QUI = QUINSAM RBT = ROBERTSON CREEK SRH = SALMON RIVER HATCHERY
    URB $=$ COLUMBIA UPRIVER BRIGHT WSH $=$ WILLAMETTE SPRING

