Assessment of Enhanced Chum Salmon (*Oncorhynchus keta*) in Canada: 1980 to 2018 Return Years

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ABSTRACT

Lynch, C., Bateman, J., Ramshaw, B., and Bell, J. 2020. Assessment of Enhanced Chum Salmon (*Oncorhynchus keta*) in Canada: 1980 to 2018 Return Years. Can. Data Rep. Fish. Aquat. Sci. 1319: ix + 535 p.

Marine survival and exploitation rates, enhanced contribution to catch and escapement, and age class composition metrics, with data summaries for Chum (*Oncorhynchus keta)* stocks in Canada, enhanced and marked by the Department of Fisheries and Oceans (DFO), are presented in this report for return years from 1980 through 2018.

Big Qualicum River Hatchery and Spawning Channel (Big Qualicum) produced 4.5 million Chum salmon from the spawning channel in 1960 brood year, the first year of operation. Canadian hatcheries began marking Chum in 1964, when Big Qualicum first clipped 740,000 adipose fins. From 1980 through 2000 brood years, an average of two million Chum were marked annually at Big Qualicum.

Commercial net fisheries were sampled beginning in 1980 return year and escapement was sampled starting in 1967 at Big Qualicum, and expanding to other sites as Chum production and assessment of that production increased.

In 2020 the Salmonid and Enhancement Program (SEP) compiled historic Chum salmon marking and mark recovery data, including data that had been inaccessible in an unmaintained database. Components of this compilation included the following data summaries and metrics:

i) Releases, including numbers marked, from hatcheries and spawning channels
ii) Estimates of catch
iii) Catch samples and sampling rates by gear, statistical week and area
iv) Escapement samples and enumeration of river returns from hatcheries and in rivers and spawning channels
v) Estimates of age class composition in catch and escapement
vi) Enhanced contribution to catch and escapement
vii) Marine survival and exploitation rates

Methods to estimate enhanced contributions of Chum to catch and escapement were developed in the 1980's. Data tables and metrics are provided from 1980 through 2018 return years for all enhanced Chum stocks in Canada.

RÉSUMÉ

Lynch, C., Bateman, J., Ramshaw, B., and Bell, J. 2020. Assessment of Enhanced Chum Salmon (*Oncorhynchus keta*) in Canada: 1980 to 2018 Return Years. Can. Data Rep. Fish. Aquat. Sci. 1319: ix + 535 p.

Le rapport présente des résumés de données concernant les stocks canadiens de saumons kétas (*Oncorhynchus keta),* qui sont mis en valeur et marqués par Pêches et Océans Canada (MPO), pour les années de montaison 1980 à 2018. Plus précisément, il présente des taux de survie en mer et d'exploitation, des contributions de la mise en valeur pour les prises et l'échappée, et des mesures sur la composition selon la classe d'âge.

L'écloserie de la rivière Big Qualicum et son chenal de fraie (ci-après appelés « Big Qualicum ») ont produit 4,5 millions de saumons kétas provenant du chenal de fraie lors de l'année d'éclosion 1960, soit la première année d'activité. Les écloseries canadiennes ont commencé le marquage de saumons kétas en 1964, soit lorsqu'on a coupé la nageoire adipeuse de 740 000 individus de Big Qualicum pour la première fois. Pendant les années d'éclosion 1980 à 2000, on a marqué en moyenne deux millions de saumons kétas chaque année à Big Qualicum.

À partir de l'année de montaison 1980, on a échantillonné les prises issues de la pêche commerciale. On a échantillonné l'échappée en commencant en 1967, à Big Qualicum, puis a été entrepris à d'autres sites, à mesure que la production de saumons kétas et l'évaluation de celle-ci ont augmenté.

Dans le cadre du programme de mise en valeur des salmonidés (PMVS) de 2020, on a compilé les données historiques de marquage de saumons kétas et de recapture d'individus marqués, y compris les données issues d'une base non tenue à jour, qui étaient inaccessibles. Les composantes de cette compilation comprenaient les résumés de données et les mesures suivantes :

i) lâchers de saumons kétas, y compris le nombre d'individus marqués, provenant d'écloseries et de chenaux de fraie;
ii) estimations des prises;
iii) échantillons de prises et taux d'échantillonnage par engin, par semaine statistique et par zone statistique;
iv) échantillons de l'échappée et dénombrements d'individus provenant d'écloseries ou de chenaux de fraie qui ont remonté;
v) estimations de la composition selon la classe d'âge pour les prises et l'échappée;
vi) contributions de la mise en valeur pour les prises et l'échappée;
vii) taux de survie en mer et d'exploitation.

Des méthodes permettant d’estimer les contributions de la mise en valeur du saumon kéta pour les prises et l’échappée ont été élaborées dans les années 1980. Dans le rapport, on présente des tableaux de données et des mesures concernant les années de montaison 1980 à 2018 pour tous les stocks de saumons kétas mis en valeur au Canada.

ACRONYMS USED

AD	Adipose fin clip
ADLV	Adipose and left ventral fin clip
ADRV	Adipose and right ventral fin clip
ADSTLV	Adipose (stubby) and left ventral fin clip
ADSTRV	Adipose (stubby) and right ventral fin clip
BC	British Columbia
CI	Confidence interval
CM	Chum salmon
CU	Conservation Unit
CWT	Coded-wire tag
DBMS	Database management system
DFO	Department of Fisheries and Oceans Canada
DNA	Deoxyribonucleic acid
Enpro	Enhancement program database
EPAD	Enhancement Planning and Assessment Database
FOS	Fisheries Operations System
FSC	Food, Social and Ceremonial catch
GSI	Genetic stock identification
LV	Left ventral fin clip
MFC	Multiple fin clip
MRP	Mark Recovery Program
MS	Microsoft
PacHarv	Pacific Region Harvest database
PSARC	Pacific Stock Assessment Review Committee
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RV	Right ventral fin clip
SEP	Salmonid Enhancement Program
Stat Area	DFO statistical area (became Pacific Fishery Management Areas in 2000)
Std Dev	Standard deviation
US	United States

INTRODUCTION

Marine survival and exploitation rates, enhanced contribution to catch and escapement, and age class composition metrics, with data summaries for Chum (*Oncorhynchus keta)* stocks in Canada, enhanced and marked by the Department of Fisheries and Oceans (DFO), are presented in this report for return years from 1980 through 2018.

Hatcheries in Canada marked Chum salmon (*Oncorhynchus keta)* beginning in 1964, when Big Qualicum River Hatchery and Spawning Channel (Big Qualicum) first clipped fry migrating out of the newly constructed channel. The Big Qualicum Chum spawning channel produced 4.5 million fry in 1960 brood year, the first year of operation (see Table 3 for annual Chum production and marking levels).

The Salmon Enhancement Program (SEP) began in 1977 with the objective of doubling production of salmon using hatcheries and spawning channels to meet harvest goals. The Chum spawning channel at Little Qualicum River, developed by SEP, went into production in 1979. Special shallow keeper channels for rearing large numbers of Chum fry using a Japanese-style techinique were built at Nitinat River (Canada's largest salmon production facility), Conuma River, Puntledge River, Pallant Creek and other hatcheries, to produce Chum at this time (see map of Chum hatchery and channel locations in Figure 1).

Chum production in Canada ramped up from 21 million juveniles in the 1959 brood year to over 100 million in the 1980's, and over 200 million in the 1990's, with the biggest year in 1998 with 252 million produced. After producing 240 million in the 2002 brood year, production was reduced as fishery management objectives changed. Escapement and production targets were not met with poor Chum marine survival rates in some years. An average of 88 million (minimum 59 million and maximum of 147 million) were produced from 2007 through 2018 brood years (see Table 1 for total annual release numbers by release stage).

From 1985 through 2018, southern British Columbia (BC) Chum fisheries were managed under the Canada - United States (US) Pacific Salmon Treaty (The Treaty Between The Government Of Canada And The Government Of The United States Of America Concerning Pacific Salmon), which mandated a Chum Technical Committee to assess and report annually (annual reports available here) to the Pacific Salmon Commission (PSC) on stocks that were caught by both Canadian and US harvesters. Genetic stock identification was the main assessment tool used to manage Chum fisheries, with fin clip mark rates providing supporting data.

Historically, mixed stock fisheries in Johnstone Strait were managed using a plan called the "clockwork", having clear escapement goals and assessment objectives. This became a fixed harvest rate approach, which was the management strategy from 2002 to 2018. The Fraser River Chum fisheries were managed as one

aggregate, with established return abundance benchmarks dictating fisheries opportunities in-season.

Chum produced from enhancement facilities located in mid Vancouver Island had the potential to contribute 900,000 pieces on average annually to inside Chum fisheries, with another 500,000 contributed to these fisheries from facilities located in the Fraser River (TCChum, 1988). Chum production from the lower Fraser River facilities peaked in the early 1980s at 35 million, dropping to 25 million in 1995 and subsequently was reduced to 10 to 15 million in 2014 to 2018 brood years. The east coast of Vancouver Island Chum production facilities released 115 million in 1992 at their peak production level then were reduced to an average of 50 million from 1995 through 2018. Historically, large terminal fisheries harvested surplus to escapement in the fall, after Sockeye, Pink, Chinook and Coho fisheries were finished for the year.

On the west coast of Vancouver Island, only Nitinat River Chum produced from Nitinat River Hatchery was actively managed as a southern British Columbia (BC) Chum stock of interest to the PSC.

From 1980 through 2000 brood years, an average of two million Chum were fin clipped annually in Canada, dropping to 500,000 after 2000 and 300,000 in 2014 brood year (see Table 2 for total annual marked releases by mark type). Coded-wire tags (CWTs) were applied to a few stocks from 1978 through 2001, allowing a larger number of different release groups than applying the standard fin clips. The number of fin clipped Chum stocks declined from a high of seventeen stocks in 1986 to a low of one stock, Snootli Creek, in 2018 brood year.

Thermal marking of otoliths for Chum began in Canada in 1987 brood year. Time series from 1993 and 1998 to 2014 brood year was available for Nitinat River and Conuma River respectively. The recovery of thermally marked otoliths in hatchery removals provided information about hatchery contribution to escapement. In Nootka Sound test fisheries were sampled for otoliths to determine hatchery contribution to those fisheries but other fisheries in Canada were not sampled for otoliths. In this report, marking refers only to fin clipping and coded-wire tagging.

Commercial net fisheries where marks were expected were sampled by statistical area, statistical week and gear, while sampling was more opportunistic in troll and recreational catch. Escapement was sampled for marks at hatcheries and in the river at some sites, while sampling of fisheries was undertaken, for all return years from 1980 to 2018, by a contractor.

In this report years may be defined as: 1) brood years (when the adults were collected and spawned); 2) recovery years (the year a mark was observed); or 3) return years (the year adults from a brood year returned to spawn).

Chum marking data and mark recovery data was managed by SEP in a Chum and Pink DBMS from 1999 to 2009, before an integrated system, the Enhancement Planning and Assessment Database (EPAD), was developed to replace and consolidate several SEP databases. The Chum and Pink mark recovery data was not migrated to the new integrated system and was not maintained.

In 2020, funding was received from the PSC Southern Endowment Fund for resources to resurrect the Chum and Pink system, update data for recent years and publish the compiled data reports generated by the databases.

The Chum and Pink MS Access database was converted from Access 2002 to Access 2010, and updated using DFO data sources, to ensure the most accurate data was used. This database managed historical Chum mark recovery data for recovery years from 1990 to 2008, as well as archived data from 1980 to 1989, included as standalone tables imported from spreadsheets. The converted database was updated with data from recovery years 2009 to 2018. Annual summary reports generated from the system were available for the archived data (1980-1989), while weekly summary reports were available for the recent years (1990-2018). The data tables and figures in this report document the following data summaries and metrics:

i) Releases, including numbers marked, from hatcheries and spawning channels from SEP's Enhancement Planning and Assessment Database (EPAD)

ii) Estimates of catch from DFO Fisheries Operations System (FOS) and Pacific Region Harvest (PacHarv) databases

iii) Catch samples and sampling rates by gear, statistical week and area from the Chum and Pink DBMS

iv) Escapement samples and enumeration of river returns from hatcheries and in rivers and spawning channels, from EPAD and the Salmon Escapement Database (NuSEDs)

v) Estimates of age class composition in catch and escapement from the Chum and Pink DBMS

vi) Enhanced contribution to catch and escapement from the Chum and Pink DBMS

vii) Marine survival and exploitation rates from the Chum and Pink DBMS

Marine survival rates were estimated from release to adult, including estimates of catch and river returns. Exploitation rate was estimated by comparing marked recoveries in catch with total marked recoveries in both catch and escapement. The method for estimating enhanced contributions included allocating marks recovered in fisheries and escapement to appropriate release groups, associating unmarked releases with marked releases where they shared similar life history

attributes, accounting for marking mortality, and expanding sampled strata to unsampled strata.

METHODS

To estimate contribution of enhanced Chum to fisheries and escapement, fin clipping and coded-wire tagging was used for mark and recapture studies. Chum were marked as juveniles before leaving the hatchery or spawning channel. Chum catch was sampled to recover marked Chum in predominantly net, but also some troll and recreational, fisheries in the years from 1980 to 2018. Major Chum net fisheries were sampled at a target rate of 20% for each gear, statistical area and week stratum. Sampling of escapement at hatcheries and in spawning channels was carried out by DFO from 1967 to 2018. Biological data, including scale ages, fish length, sexual maturity and skin colour was collected for both marked and unmarked fish sampled from catch and escapement. Tissue samples were collected in escapement, beginning in the 1980's, for DNA analysis to contribute to the baseline dataset used for Genetic Stock Identification (GSI) to assess stock contributions of Canadian and US Chum stocks in Chum fisheries of interest to the PSC.

A method for allocation of observed mark types in both fisheries and escapement was developed by SEP assessment biologists, using scale ages along with observed marks, to assign recoveries to release groups based on marks expected in each statistical area in each week, or in escapement in a given year. A review of the approach by the Pacific Stock Assessment Review Committee (PSARC) in 1990, recommended further review of "the validity of the present Chum and Pink estimated mark recoveries in the natural escapement" but supported analysis and application of this "soft data" (as compared to "hard data," having fewer assumptions) in stock assessment and fisheries management (Farlinger et al, 1991). This Chum Assessment Methodology was the basis for the design of the MS Access Chum and Pink DBMS developed in 1999. See APPENDICES for the history of Chum data management in SEP, and the equations that were programmed into the Chum and Pink DBMS. APPENDICES 1-7 are based on a methodology report prepared by Don Bailey in 2000, that was unpublished and not citeable.

Juvenile Marking and Release

Fin clips applied to Chum included adipose clips, ventral fin clips, and a combination of adipose and ventral fin clips (MFCs, or multiple fin clips), as well as a very small number of pectoral, adipose plus dorsal, and adipose plus anal clips. Pectoral, anal and dorsal fin clips were thought to have a bigger impact on fish health (SFEC, 1997), and were not routinely applied. Ventral fin clips and MFCs have been shown to have higher mortality from marking than adipose clips (SFEC, 2016). The number of possible unique clips is five, if only adipose and ventral fins are clipped, resulting in duplication of marks between hatcheries.

Juveniles were manually clipped before release or during migration from spawning channels by the hatchery. See APPENDICES 2 and 3 for further description of historical marking and release methods and strategies for Chum in Canada.

Associated Release Groups

A marked release group was associated with unmarked production having similar rearing and release strategies, and expected catch distribution and returning age classes, usually from the same facility. When recovered marks were expanded to unmarked hatchery releases, associated releases could be included in enhanced contribution estimates. See Table 10 for a list of associated stocks.

Unassociated release groups were not included in estimates of enhanced contribution to catch in this report. There weren't assessment programs in river and hatchery escapement to estimate contribution to escapement for these groups in most years, although the groups contributed to both catch and escapement. Unassociated release groups were included in contributions in past SEP evaluations, using biostandard marine survival rates, exploitation rate and age composition to estimate expected returns to catch and escapement. Biostandards were calculated using five or ten year averages from assessed stocks having similar characteristics, such as production area (a spatial boundary used by SEP, defined using statistical area boundaries, to group salmon stocks having similar life histories and migration patterns, see Figure 3) or life history.

Data Sources

Table 7 lists data sources used by the Chum and Pink DBMS to generate assessment metrics.

Release data originated from EPAD, having numbers marked and unmarked for all enhanced Chum releases by brood year, mark type, tagcode, release site, release stage, average weight at release, and release dates.

Mark recovery data from 1980 to 2018 was compiled and analyzed using the Chum and Pink DBMS, and is presented in Table 14 through Table 24. Archived data from recovery years 1980 to 1989, imported from spreadsheets, was stored by year in the database, so was not summarized by week, as was post-1989 data. Data was from hatcheries and spawning channels with recoveries for marked and associated unmarked release groups only for this later time period. Archived data had one expanded number, adjusted for mark mortality but not consistently adjusted for unsampled strata. The archived estimated numbers were back-calculated from expanded (where mark mortality rates were incorporated and associated release groups were included) and then manually checked and edited. Mark mortality is defined in the Chum Assessment Methodology as the reduction in mark rate from time of release to time of return.

Estimated numbers were not available for the calculated strata (i.e. troll and sport) and the associated unmarked, in all years. There were 24 records from recovery

years 1980 to 1984, mostly for Big Qualicum but including three for Inch, where the estimated value was not able to be calculated, (possibly due to a lack of a catch/sample ratio). For the most part, the estimated archived data had the same data constraints as the later data.

Two sources of commercial catch data are referenced in this report: PacHarv and FOS. Catch data for 1990 through 2018 was accessed in January 2020. Commercial catch data in PacHarv contains total weight and total number of pieces from the sales slip database summarized by year, species, gear, midsize fishery area (converted to statistical area by the import routine), and period (statistical week). PacHarv data was used for years where FOS data was not available prior to 1996. For 1996 through 2004, although post season data from FOS was available, it was not used due to inconsistencies in the statistical weeks between the catch and sample data, in some years. In the years without inconsistencies in the FOS data, the FOS estimates of catch were very similar or equal to the estimates in the PacHarv data for areas and statistical weeks. From 2005 to 2018, data is from in-season FOS reports. Net catch, summarized by year, management area (converted to statistical area by the import routine), and statistical week, was imported into the Chum and Pink DBMS from the appropriate catch data source. Troll catch originated from the PacHarv catch database. Test catch, catch from experimental fisheries and First Nations Food, Social and Ceremonial (FSC) catch are included in the net catch data. Sport catch data was provided by the DFO Catch Data Unit. Sport catch was not sampled, but mark rates and mark distributions obtained from sampling of net catch were applied to estimate enhanced contribution. Troll catch, which was generally not sampled for fin clips, or sampled only incidentally to sampling of Coho and Chinook, (because catches and marks are likely to be minimal in troll catch areas), also had mark rates and distributions from net catch sampling applied to estimate enhanced contributions. Troll catch sampled for CWTs was handled the same as net catch sampling for fin clips.

The three party rule, where catch estimates from 1997 onward must not be published when fewer than three vessels report catch in an area in a week, was applied to catch from both PacHarv and FOS. The catch from these affected weeks was used in the calculation of enhanced contribution and is reported where data is rolled up by year, but is not listed in any weekly data tables. In Table 17 and Table 18 weeks affected by the three party rule show “N/A” in the Catch and Sample Rate columns.

Although Chum CWT recovery data is available in the MRP database, this data should not be analyzed using that database since the estimated recoveries are calculated on a catch region basis rather than on an individual statistical area basis. Since specific statistical areas are sampled for Chum, the mark rate between statistical areas within the same catch region may vary considerably due to the terminal nature of Chum fisheries. The exception was for troll catch sampled for CWTs, where it existed, which could be analyzed by catch region.

J.O. Thomas & Associates, was contracted by DFO to co-ordinate and carry out coastwide sampling of commercial salmon catch from 1980 to 2018, including the data recording and reporting. Catch sampling data for commercial fisheries consisted of two files for each year and fishery, a sample summary file and a file containing the sample data. These files were imported into the Chum and Pink DBMS.

Canadian escapement data was taken from EPAD and NuSEDs, the DFO regional salmon escapement database. Estimates of escapement by sex, age and mark were determined from biological sampling. Marks were allocated to specific release groups by return age using EPAD routines to estimate contributions to escapement. River return estimates were compiled in EPAD, from hatchery enumeration activities, or obtained from NuSEDs, where the DFO Stock Assessment division was responsible for enumeration.

Estimation of Enhanced Contribution to Catch

The routines in the Chum and Pink DBMS applied mark rates from samples to catch estimates imported from the catch databases (see Data Sources) to produce enhanced contribution reports. For all years from 1980 to 2014, contribution by hatchery stock to each fishery was calculated by expanding samples to the entire catch, and marked release numbers to the total associated release, however the adjustment for mark mortality was only made for years prior to 1990. Mark mortality is defined in the Chum Assessment Methodology as the reduction in mark rate from time of release to time of return.

Major commercial net fisheries were sampled at a target rate of 20% (in pieces), by statistical area, statistical week and gear. Port samplers interviewed vessel operators weekly at commercial landing sites around the province. In some months and years, creel surveys were in place at boat launches to interview recreational harvesters.

Sample rate was calculated as follows, (Equation 1):

> Sample Rate in Catch = Max(CWT sample size, fin clip sample size) / total catch

Mark rate was calculated as follows, (Equation 2):

> Mark Rate = Avg(CWT mark rate, fin clip mark rate),

where mark rate = observed recoveries/sample size.

Data captured during catch sampling included: sampling date, sampling site, species, vessel/truck/packer and name, statistical week and area of catch sample, number examined, and biological sampling data for all clipped fish plus a representative proportion of unclipped fish. The biological sampling data included:

sampling date, sampling site, species, vessel/truck/packer and name, statistical week and area of the catch sample, fish sex and maturity, fish skin colour, fin regeneration percentage, scale book number and cell numbers, and fork length.

To determine which release group an observed fin clip recovery originated from, it was necessary to specify which stock releases were most likely to be recovered in each fishing area. The database listed each area and the stocks from which fin clip recoveries were likely to have originated. The stocks were prioritized by week within the area by the SEP biologists. Each brood year was entered separately. If there was more than one stock with the same mark assigned the same priority, the recovery would be apportioned between the different stocks or release groups based on the number marked in each release group. For example, if a 3 year old right ventral (RV) clip was recovered in Area 6 in 2000, it would be assigned the mark code RV9701 from Kitimat River Hatchery since Kitimat was designated as priority 1. If there had been no RV clip at Kitimat in 1997, the recovery would have been split between RV9702 from Snootli Creek and RV9709 from Klemtu, which were designated as priority 2 projects having RV releases in 1997. If an unexpected mark/age was found, the recovery could be manually assigned to a release group by a biologist, either assigning it to a different brood year, under the assumption that the scale age was read incorrectly (see Sources of Uncertainty: Assumptions, Data Quality And Data Gaps), or assigning it to a different stock outside of the normal expected stocks, or assigning to a different fin clip. For example, an AD(ST)LV could be considered either an ADLV or an LV.

There were cases where sample sizes were greater than total catch for a gear, area, week stratum. There was uncertainty in both the mark rate (due to missed marks or fin regeneration) from the samples used to expand the observed marks and in the total catch estimate for a stratum. Misreporting of catch was possible, where vessel operators or recreational harvesters may have reported catch from an incorrect area. Packers delivered catch from multiple vessels, both seine and gillnet, reporting the origin of the catch when landed at a processing plant or offloading station. Pooling of both samples and catch for combined areas could have been undertaken manually but was not part of the database routines.

Occasionally the scale age of a fin clip recovery could not be determined, often because of scale regeneration, or the fin clip type was unknown. The “unaged” recoveries were apportioned amongst those of known age in the sample by clip and the unknown clips were apportioned amongst known clips of the same age. The lost pin, and no data recoveries from CWT fish were apportioned amongst known tagcodes by area.

In some cases there was net gear catch recorded in an area for a week in which no sampling was done. This often was the case at the beginning or end of a run in the area. When this occurred, the system estimated the enhanced contribution for the week by creating sample and recovery data based on data from weeks where samples exist. In the reports this data was added to expanded recoveries. The

method for creating this calculated sample and recovery data in the Chum and Pink DBMS system differed from that described for the pre-1990 data in the APPENDICES. The steps were as follows:

1. Calculated sample/recovery data was not created at all for statistical areas 1, 3, 4, and 5 and not for statistical weeks prior to 091 (first week of September) for areas 12 to 29.
2. For statistical area 13 only, the sample rate and mark rate from the prior week in Area 12 if they existed was used, otherwise it continued with the next step.
3. If there was sample data for the statistical area in either the week before or the week after the statistical week with the missing sample, the sample rate from this week was multiplied by the catch from the missing-sample week to get the sample size. Then the calculated sample size was multiplied by the known mark rate to get the observed recoveries for the missing-sample week. The observed recoveries were apportioned out to individual tagcodes (for CWT data) or fin clip type and scale age (for fin clip data) using the same proportions as the known week.
4. If there was sample data in both the week before and the week after, then a weighted average sample rate and mark rate from the two weeks was used to calculate the sample size and observed recoveries, and to apportion the tagcodes or fin clip types and ages.
5. If there was no sample data in both of these two weeks, then a weighted average for the whole year of all existing sample rates and mark rates was used in the statistical area. If there were no samples at all in this year for the statistical area, then no calculated sample/recovery data was created.
6. Sample rates of less than 5% were not used in any of the above steps.
7. For fin clip data only, the calculated recoveries were assigned to release groups using the same automated process as for actual recoveries. However, there was no mechanism available to user-assign any calculated recoveries that could not be automatically assigned.

Expanded estimates were adjusted for mark mortality to obtain the adjusted expanded contribution from 1980 through 1989, but the mark mortality adjustment was set to zero for later years (see discussion on mark mortality on page 14). Mark mortality adjustments were not applied to estimates of fin clip recoveries in data generated for this report in return years from 1990 to 2018.

Assessment biologists using the database could override the selection of samples applied to a given week and area for net fisheries (combined gillnet and seine). The program might select a sample from a combination of areas (termed a “mixed area”), e.g. statistical areas 12 and 13 combined, if there were no other samples from the single areas or the samples from the single areas did not recover any marks, but generally samples from combined areas were not used. A biologist could decide to use a sample from a mixed area if, for example, most of the catch that week was from one area and the sample size and number of observed marks

from the combined sample was larger than a smaller sample from a distinct area. The database kept track of which samples were combined to determine a mark rate and if the database user or assessment biologist chose to override the program determined grouping or use a sample from a combined area.

Detailed below is the methodology used by the Chum and Pink DBMS to determine the default groups in a given statistical week. Because the same groupings are used for both CWT and fin clip recoveries, a single sample rate and mark rate for each statistical area (including mixed statistical areas) was determined.

1. Any invalid mixed-area samples were eliminated. Not all mixed-area samples which may appear in the fin clip and CWT sample tables were considered for this auto-grouping exercise. Mixed-area samples that were invalid for auto grouping could be included in user overrides provided all areas were contained in the same catch region.
2. Single-area samples with a sample rate of 15% or more were each assigned to individual groups. Any mixed-area samples that included these statistical areas were eliminated.
3. Where there were valid mixed-area samples remaining that had only two statistical areas, the sample size and observed recoveries from all samples (mixed-area and single-area) in these two areas was summed along with the catch for the two areas, and from this determined new sample and mark rates. If the sample rate was 15% or more, then a group containing the two areas was created. Any other mixed-area samples that included either of the two statistical areas were eliminated. Note that if there was more than one two-area sample in the catch region, the combination with the largest sample rate was used. Also, a mixed-area sample was not considered unless all CWT and fin clip samples for the two areas were consistent. For example, if there were CWT samples in Area 8 and mixed Area 8,9, but fin clip samples from Area 8 only, then this could cause the catch/sample ratio to be too high when calculating the fin clip estimated recoveries. Therefore the Area 8,9 sample would be eliminated. This condition could be manually overridden however.
4. Step 3 was repeated for valid remaining mixed-area samples that had three statistical areas. In this case, any two-area samples where both statistical areas were within the three-area group were also used.
5. Any remaining single-area samples were each assigned to individual groups and any remaining mixed-area samples were eliminated.

Adjusted expanded recoveries are expanded recoveries that were adjusted for mark mortality using the equation:

AdjExpRec = expanded recoveries / (1 - mark mortality rate),

where mark mortality rate is defined as the reduction in mark rate from time of release to time of return (Equation 3).

The default mark mortality rate was 30%, but this could be overridden for a particular project, species, stock, and recovery year. Different rates could be used for single fin clips, double fin clips, and adipose CWTs, although the same average rate of 30% (from Bailey, 1990), was used in the database for all clip types. In this report, adjustments to expanded recoveries for mark mortality were not made for recovery years 1990 to 2018. The expanded recoveries were adjusted with the mark mortality rate in the archived data from 1980 to 1989 recovery years.

- The default mark mortality of 30% could be overridden by setting the rate to 0% for a specific return.
- Because at Big Qualicum the entire Chum production was considered enhanced, a mark mortality rate was calculated from escapement data in EPAD.
- If the mark mortality calculated for Big Qualicum Chum escapement was exceptionally large this could cause the adjusted expanded recoveries for Big Qualicum to exceed the total catch for statistical areas 12 to 14. In this case the calculated rate could be overridden. For example, in 1998 the calculated factor of 0.412 was overridden by entering the default 0.7 (i.e. 1 – default mark mortality rate) on an override record (see Table 9 for mark mortality rates).

For unmarked release groups that were associated with a marked release group, both expanded and adjusted expanded unmarked recoveries were calculated based on the survival rate of the associated fin clip and/or CWT release groups. Contribution to catch was calculated as follows, (Equation 4):

> Contribution = total number released in unmarked group * (expanded recoveries / total number released in associated marked group) * Prop'n of Code * Prop'n of Surv

The 'Proportion of Code' was used if there was more than one associated marked group and the 'Proportion of Survival Rate' was used if only a fraction of the associated marked group's survival was to be used, for example if an unmarked unfed group was associated with a marked fed group. The same methodology was applied to calculated recovery data from unsampled strata. In this case, however, only a 'Final Expanded' contribution was calculated for the associated unmarked release groups.

Troll recoveries were calculated in two separate pieces. In areas where there were CWT troll samples, estimated, expanded and adjusted expanded recoveries were calculated from the mark rate in the same way as for net samples, the exception being that they were derived by catch region rather than statistical area. In areas without troll sampling for CWTs but with troll catch data, the expanded and

adjusted expanded recoveries were calculated using the annual mark rate of the net recoveries. Contribution to troll catch was calculated as follows, (Equation 5):

> Contribution = troll catch for stat area * (annual expanded net recoveries for stat area / annual net catch for stat area).

Note that because the equation is based on net recoveries, there was no troll contribution calculated in statistical areas where there was troll catch but no net catch. This tended to be a fairly small proportion of the troll catch, ranging from 0% in 1998 to 39% in 2014, with an average from 1990 to 2017 of 8%, based on annual troll catch numbers.

Fin clip and CWT sport expanded and adjusted expanded recoveries were also calculated using the annual mark rate of the net recoveries. Contribution to sport catch was calculated as follows, (Equation 6):

> Contribution = sport catch for stat area * (annual expanded net recoveries for stat area / annual net catch for stat area)

See APPENDICES for further description of the methods used historically for estimation of enhanced contribution of Chum to catch.

Estimation of Enhanced Contribution to Escapement

Contribution by hatchery stocks to river escapement was calculated by expanding samples to the total river return, and marked release numbers to the total associated release. Sampling of escapement was undertaken by hatchery staff and volunteers. The target rate of sampling for escapement was 100%, whenever possible. Depending on infrastructure at a hatchery site, this was more or less achievable, and also related to weather events that year. Some sites were only able to sample removals, if brood were captured in a river and a carcass survey was not undertaken. Staff at Little and Big Qualicum facilities undertook dead pitches in the channels but predation was thought to have introduced bias into those estimates. Big Qualicum had a counting fence, so counts and samples were from above and below the fence. Nitinat had a significant surplus back to the lake most years. Puntledge had a diversion weir and sampled only fish that swam in to the hatchery. Systems that were enhanced by Conuma were sampled on the river (no fence and no hatchery swim ins).

Data captured during sampling included: sampling date, sampling stratum, species, stock and run with number counted and number examined, with biological samples and associated data collected for all clipped fish and a representative proportion of unclipped fish. The biological sampling data included: date, sampling stratum, species, stock and run, fish sex, scalebook and cell numbers, and post orbital hypural (POH) length. Fin regeneration percentage was not recorded in escapement sampling.

Occasionally the scale age of a fin clip recovery could not be determined, often because of scale regeneration, or the fin clip type was unknown. The “unaged” recoveries were apportioned amongst those of known age and the unknown clips were apportioned amongst known clips of the same age.

See APPENDICES for further description of the methods used historically for estimation of enhanced contribution of Chum to escapement.

Marine Survival and Exploitation Rate Estimation

Survival rate and exploitation rate, as a proportion of adults harvested compared to those returning to the river to spawn, were calculated based on expanded adults taken in fisheries, for years with stocks that were marked.

Survival rate was calculated as follows (Equation 7):

$$(Rcatch + Rescapement) / NumRel,$$

where Rcatch is expanded recoveries in catch, Rescapement is expanded recoveries in escapement and NumRel is the total associated with the release group.

Exploitation rate was calculated as follows, (Equation 8):

$$\text{Exploitation Rate} = Rcatch /(Rcatch + Rescapement)$$

where R is expanded recoveries of marks in catch and escapement.

These expanded numbers were not adjusted for mark mortality (except for return years prior to 1990) and were not expanded to include unmarked associated release groups.

Marine survival was calculated where complete and accurate enumeration and mark sampling data was available for all fisheries where a stock was harvested, as well as in all escapement strata. If a stratum was incomplete, marine survival would be biased low.

Stocks with complete enumeration and sampling estimates available are termed ‘Indicator’ stocks, and can be used to develop biostandards, metrics which can be applied to stocks with similar life histories and migration patterns.

Age Class Composition in Catch and Escapement

Scales were collected as a component of sampling in both catch and escapement, for both marked and unmarked fish. In this report, ages for marked fish only are provided. All Chum scales from 1980 to 2018 were read by the DFO Sclerochronology Lab.

Sources of Uncertainty: Assumptions, Data Quality And Data Gaps

Marking, enumeration and sampling of juveniles and adults, as well as assumptions in the assessment methodology, could introduce uncertainty into the Chum data and metrics. See Table 25 for a compilation of these sources of uncertainty.

Estimates of numbers of juveniles marked and released had uncertainty due to inherent error in book estimates for hatchery-reared fry and weight or volume-based enumeration methods, and trap efficiency estimates for downstream surveys.

Unmarked stock and release groups that were associated with a marked release group were expected to have similar migration patterns, age class structure, exposure to harvest and related exploitation and survival rates.

Uncertainty in scale ages often resulted in mark recoveries in years having no valid corresponding release group. Chum can have variable growth rates, so occasionally a scale could have had a poor year with two or three good growth years. Resorption of the scale in escapement samples was a source of error, with loss of an annulus to resorption or misinterpretation of a lost annulus by the technician reading the scale. If a scale reader interpreted resorption one particular way (e.g. underestimated it) then that underestimation could apply to all resorbed samples from a given system (Jeff Till, personal communication).

Sample sizes of 20% of a statistical area and week were expected to ensure the sample was representative of the total catch in that week and area. Determination of appropriate sample sizes in escapement sampling was made using an equation similar to Equation 9 (although the exact equation was missing from the unpublished Chum Assessment Methodology report), and incorporated into annual sampling plans for each hatchery or spawing channel.

Catch estimates may reflect reporting error in numbers of pieces, species, catch week and catch location. There were a small number of cases where sampling rates were greater than 100%. Figures in the report assigned a default value of 100% to these overestimates, for ease of presentation.

Mortality from marking with multiple fin clips, is known to be significant. Mark mortality is defined in the Chum Assessment Methodology as the reduction in mark rate from time of release to time of return. Mark mortality was not applied to estimates of fin clip releases or recoveries in data generated for this report. The authors felt that the 30% default used in the Chum and Pink DBMS was an uncertain estimate, based on one year of sampling (Bailey, 1995), and with a wide range reported in the literature (SFEC, 1997) this adjustment could add uncertainty to expanded estimates reported weekly or by area. Mark mortality adjustments may make sense for ten year means but for the purposes of this data report, the expanded weekly estimates were not adjusted for mark mortality in years 1990 to

2018. The archived annual data from 1980 to 1989 included mark mortality adjustments.

Unexpected marks that did not correspond to any release records from hatcheries in either Canada or the US, were recovered in all years in both fisheries and escapement sampling. Samples of unexpected left ventrally clipped fins collected in 2011 fisheries were analyzed by the DFO Molecular Genetics Lab (MGL) (Table 13) to determine stock origin using GSI. Potential sources of these mark recoveries include: 1) clipping the incorrect fin when marking fry; 2) misreporting or non-reporting of clips released; 3) error recording recovered clip type by samplers; 4) error converting fin clip data codes; 5) misreporting of catch location by vessels; 6) regenerated fins (not recognized as marks); and finally, 7) naturally occurring missing fins (recovered as marks).

Error reports in the Chum and Pink DBMS were used for standard quality assurance and included: Unassociated Unmarked Release Groups, Orphaned Marked Releases (i.e. marked releases with no assigned recovery areas), Samples Not Assigned to Group (Fin Clip), Samples Not Assigned to Group (CWT), Unaged and Unknown Fin Clip Recoveries, Weeks With Samples But No Catch, CWTs With No Release Record, Fin Clips Not Assigned to Hatchery.

See APPENDICES for a historical overview of assumptions, data quality considerations and data gaps in assessment data for enhanced Chum.

RESULTS

Assessment of enhanced chum in Canada began with the 1965 brood year at Big Qualicum and for the 1977 brood year at Inch, with marks recovered in escapement beginning in 1968 and in fisheries beginning in 1980. Stocks having assessment in fisheries and escapement are listed in Table 14 for brood years 1977 through 1990, and Table 15 and Table 16 for later brood years.

Recovery data for the two time periods, prior to 1990 and from 1990 to 2018 recovery years, was handled differently by SEP (see Data Sources). Earlier years were summarized by year, while later years were summarized by week.

Releases by Mark

Release numbers from Canadian hatcheries (see Figure 1 for a map of major Chum hatcheries in BC) by production area (see Figure 3 for a map of SEP production areas), Conservation Unit (see Figure 2 for a map of CUs), brood year, stock, run, release site and marked and unmarked totals for all years is presented in Table 6. Release data for hatcheries in both Canada and the US is available to the public from the RMIS database or to DFO staff from the MRP database.

Big Qualicum first produced 4.5 million channel fry from the spawning channel from the 1960 brood year. Chum production ramped up to 21 million in 1963 brood year, to 106 million in 1980, to 222 million in 1990, with a peak of 252 million in 1998.

After producing 240 million from the 2002 brood year production declined, as fishery objectives changed. Marine productivity declined and historical production targets were not met for many stocks in many years. An average of 88 million (minimum 59 million and maximum of 147 million) were produced from 2007 through 2018 brood years (Table 6).

Chum were enhanced in 24 Chum Conservation Units (CUs), with marked Chum being released from 13 of the 24 in one or more brood years from 1978 to 2014. Most Chum production came from Georgia Strait, Lower Fraser and Southwest Vancouver Island conservation units. Table 6 presents Chum releases by production area, stock CU, hatchery, stock, brood year, release stage, release site and mark code. This data is available to the public in the RMIS database at RMPC.org (accessed January 2020).

From 1980 through 2000 brood years, an average of two million Chum were marked annually. In 1978, Cowichan, Sliammon and Inch Chum were the first Canadian Chum coded-wire tagged and adipose clipped. Inch were tagged with CWTs until 2001 brood year, the last year of CWT Chum tagging in Canada. In 1990, eight stocks were tagged with CWTs, the maximum number across all years. In that brood year, an additional twelve stocks were fin clipped. Over the years from 1980 through 2000, an average of thirteen stocks (with a maximum of seventeen stocks in 1986) were fin clipped each year, with 44 different stocks clipped in one or more years across all years. At the time of writing this report, Snootli Creek Hatchery is the one remaining facility marking Chum in Canada. Table 2 shows total releases coastwide by mark type and by brood year. Figure 4 shows total releases coastwide by clip and brood year.

Table 10 shows the unmarked release groups that were associated with a marked group by brood year and CU. Little Qualicum channel fry were associated with marked Big Qualicum channel fry from 1993 to 2015, when marking ceased at Big Qualicum. Little Qualicum channel fry were marked from 1980 through 1993 and 2000, 2002 and 2003. In Nootka Sound, Canton Creek, Conuma River, Deserted River, Sucwoa River and Tlupana River releases were associated with Conuma River, Sucwoa River and Tlupana River marked release groups from 1985 through 2001, although each of them was marked in some years as well. In the Bella Coola River watershed, Snootli Creek, Fish Creek+Airport Channel, Necleetsconnay River, Saloompt River, and Thorsen Creek were associated with one other from 1985 to 2016 brood years, as well as having marked groups themselves some years. The marked groups were expected to represent the contribution of the unmarked associated groups to catch and escapement, where it was enumerated.

Clipping multiple fins on tiny Chum is difficult, requiring a magnifying glass to see the ventral fins. Based on observed fin clips in escapement, it was not uncommon for clippers to clip the wrong fin. Across all Chum stocks, all years and all fin clips, 3.5% (mean 3.5 and standard deviation of 4.3) were given an incorrect clip (Table 8), where clipped fish were checked for correct and incorrect clips after clipping.

ADLV and ADRV averaged 4% for all stocks for all years, but at Big Qualicum LV and RV clips had an average of 6% incorrect clips for all years, higher than ADRV and ADLV clips. Maximum proportions of incorrect clips to total clips were 19% for an ADRV clip at Big Qualicum (in 1965 and 1984 brood years) and 52% for an ADRV at Pallant Creek (in 1994, LVs had 18% poor clips that year). These maximum values were anomalies. The range of values at Pallant was 1-8% in all other years, and at Big Qualicum, of the 40 years of fin clipping, there were four years where the proportion of poor clips was 10% or greater, two of those years being 1965 (the first year of clipping) and 1984 at 19%.

Differential mortality rates for ventrally clipped Chum were studied using 1989 brood from Nitinat River released to Cook Creek in the Alberni Inlet (Bailey, 1995), with marks recovered from 1992 through 1994. Survival rates were compared between marked (ADRV, LV and ADCWT) and an unmarked control group to determine differential mortality rates and the differences were found to be statistically significant with 95% CI. The average mortality rate of ADRV and LV compared to the unmarked group was 32.7%, which was approximated to 30% for operational purposes. Coho ventral fin marking was found to significantly decrease survival by 0-58% (SFEC, 1997). Ventral fin clips have been shown to have up to 44% fin regeneration in Coho salmon (SFEC, 1997). In the Bailey 1989 brood year study, 40 untagged adipose clipped recoveries could have been either ADCWT no pins or ADRV with regenerated ventral fins. Three of 666 ventral recoveries were an incorrect mark (RV).

Recoveries by Mark

Stocks having assessment in fisheries and escapement are listed in Table 14 for brood years 1977 through 1990, and Table 15 and Table 16 for later brood years.

Observed recoveries in net fisheries from 1990 to 2018 are listed by statistical week and area in Table 17, along with sample sizes, catch, sampling and mark rates. Observed recoveries in troll fisheries from 1990 to 2005 are listed by statistical week and catch region in Table 18. Recovery data for fisheries sampling prior to 1990 was expanded before being added to the database. Data with observed recoveries is available for recovery years 1983 to 1989, but was not included in this report.

Unexpected marks were recovered both in fisheries and in escapement in 24 of 29 years in escapement and 19 of 25 years in net fisheries from 1990 to 2018 (Table 11). An unexpected mark is a clip recovered but not belonging to a return age for a stock expected to be present in the recoveries. Because both ventral and adipose fins can regenerate up to 100% (SFEC, 1997), clipped fins may be different at recovery than at release.

Unexpected marks were observed in both fisheries and escapement at most sampling sites. Ventral clipping of tiny Chum is challenging, with manual clipping resulting in an average of 3.5% incorrect fin clips at release (Table 5 shows poor

clip rates from checks during marking). In years with more stocks marked, there were fewer unexpected marks in fisheries than in years with fewer stocks marked, although unexpected marks did show up in escapement, in similar proportions to those reported at marking. At the time, they were not allocated, in either fisheries or escapement, to release groups, as they made up a small proportion of observed marks in escapement sampling.

However, in recent years, when only Big Qualicum was marking Chum in southern BC and unexpected marks were being recovered in both fisheries and escapement, DNA samples were analyzed from 2011 fisheries samples to help determine the source of the unexpected marks (Table 13). Many were assigned to Big Qualicum based on genetic analysis of samples of LV fin clips, which were compared to a microsatellite DNA baseline dataset, developed using tissue samples collected historically from the spawning grounds of known Chum populations by the DFO MGL (Beacham et al, 2008). Based on the DNA analysis and the consistent recoveries of unexpected fin clips in escapement, these unexpected marks were allocated for all years from 1990 to 2014 in Big Qualicum escapement. Since the Big Qualicum Chum data is the longest time series available for marine survival and exploitation rates and inclusion of the additional unexpected recoveries, this was intended to make the dataset more accurate.

48 DNA samples from left ventrally clipped fish were collected from 2011 net fisheries in areas 12, 13 and 14 for analysis by the DFO Molecular Genetics Lab (Table 13). Of the 22 samples from Area 14 seine, all had a high probability of being Big Qualicum origin. One sample from Area 14 gillnet was Fraser origin, most likely Chehalis or Stave origin. Of the 25 samples from Area 12/13 seine, 13 were most likely Squakum origin, two others were either Squakum or Big Qualicum, and 8 were likely Big Qualicum or Tzoonie. Snootli Creek and Oona River, in the Central Coast, were clipping LV on their Chum releases but only Big Qualicum releases were ventrally fin clipped from 2006 though 2008 on the South Coast (AdRV, not LV).

In fisheries sampling, 43,077 fish with clipped fins were recovered from 1990 through 2018, of which 3,088 (7.2%) were not allocated to clipped release groups (Table 11 Unallocated Clips Observed in Catch by Recovery Year, 1990 - 2016Table 11). 1,153 of the 3,088 had ¾ regenerated ventral fins, and another 824 had 50% regenerated fins, and 374 with 25% regeneration, and 207 with unknown regeneration, leaving 530 with no fin regeneration (Figure 6). The proportion of recoveries having some fin regeneration is higher in the unallocated recoveries than in allocated recoveries in most years.

From 1990 through 2000, 80 unexpected clips were observed in fisheries (of 30,379 or 0.3%), with 38 of these in 1995 (of 1,498 recoveries). From 2001 through 2013, 2,989 unexpected clips (from 10,617 or 23%) were observed in fisheries. This may be partially a result of a reduction in releases of clipped fish from over 2 million in the late 1980's and early 1990's to 300-400,000 from 2004 through 2010

brood years, so more clipped release groups were available for allocating recoveries in earlier years. In later years, with fewer clipped fish released, the unexpected clips became more obvious.

In escapement sampling, Big Qualicum recovered the largest number of unexpected clips (Table 12) across all years (279 from 1992 to 2017, from 3,522 total adjusted observed fin clips). Little Qualicum recovered 192 unexpected clips from 1989 through 2006, from 2,595 total adjusted observed fin clips. Chilliwack recovered 132 unexpected clips from 1990 through 2001 out of 8,547 total adjusted observed clips. Nitinat recovered 41 from 1990 through 2001 out of 4,411 total adjusted observed clips. Snootli recovered 74 from 1990 though 2015 from a total of 3,234 adjusted observed, although most (48) were all in 2002 return year. These 48 clips could have been allocated if the scale age was five but they were all read as four year olds. There is known uncertainty in scale aging results (see Sources of Uncertainty: Assumptions, Data Quality And Data Gaps). Forty-eight five year olds would not fit with the expected age class distribution so they were not allocated as five year olds.

An average of 50 (a minimum of 0 and a maximum of 105) per year, and a total of 893 unexpected clips (from 35,363 observed fin clips, or 2.5%) were recovered from 1989 through 2017, across all hatcheries where Chum were sampled for marks. The number of unexpected clips recovered was not correlated to the number of clips released (Figure 5). The largest number of unexpected clips (105) was recovered in escapement in 2006. Escapement samples did not record fin regeneration.

Unexpected clips in Big Qualicum escapement were assumed to be from Big Qualicum release groups, where the mark was part of the expected clip e.g. AD or RV for ADRVs. LVs recovered at Big Qualicum were allocated to Little Qualicum in years where ADLV clips were expected and to Big Qualcum in years without a Little Qualicum mark returning, since they could be misclips from either Little Qualicum ADLV release groups or Big Qualicum ADRV release groups (as seen in years where Little Qualicum marks were not returning). Unexpected clips from brood year 2000, when there was no Big or Little Qualicum marking, were recovered in Big Qualicum escapement. These marks were assigned in this data compilation to ages where there was marking.

It was decided by the Chum assessment biologists working with the data prior to 2009 to not allocate unexpected clips in escapement. In this report, with the availability of recent years of mark sampling data, where only Big Qualicum stock releases were clipped and LV clips were nonetheless present in escapement, unexpected clips recovered in Big Qualicum escapement were allocated to either Big Qualicum release groups or Little Qualicum release groups. Big Qualicum is one of the few survival rate indicators for Chum, so including these recoveries was important for data accuracy. Unexpected clip recoveries in escapement at sites other than Big Qualicum were not allocated.

Allocation of unexpected clips observed in fisheries was not done historically and was not attempted in the data updates for this report. Uncertain ages in addition to ambiguous clip types made allocation of these recoveries impossible.

Fin regeneration can be related to the accuracy of the clipper, so one sloppy clipper could result in a large number of regenerated fins. Ventral fins may be torn in net fisheries and heal, having a similar appearance to a regenerated fin from clipping. An experienced sampler should have been able to distinguish most regenerated fin clips from healed fins that were torn, but inexperienced samplers might have been second-guessing each clipped fin that was not 100%.

In addition to incorrect fin clips, fin regeneration, duplication of marks between stocks and marking mortality, challenges seeing and recovering marks when sampling can introduce uncertainty into recovery of multiple fin clipped (MFC) Chum. A source of concern is the proportions of clips in Area 14 terminal net fisheries compared with the proportions of clips in escapement to Big and Little Qualicum, and Puntledge escapement (Figure 7). One might expect these proportions to be somewhat similar since these should be at least some of the same fish. There may be Fraser or lower Vancouver Island stocks present but most should be returning to the Qualicum river systems. There are significantly more unexpected clips, and fewer expected clips, in the fisheries samples than in the escapement samples, suggesting possible error in either detecting clips or recording the clip type in fisheries sampling. Codes for fin clips used by samplers changed in 1999, with 10 for ADRV becoming 101, and 9 for LV becoming 10 (ADLV went from 7 to 110 and RV went from 8 to 1). As experienced samplers retired and newer samplers (or office staff) were recruited to sample smaller catches, samplers in later years may have been challenged to differentiate viable clips from regenerated and healed torn fins.

Sampling Rates and Mark Rates in Catch and Escapement

Catch sampling was coordinated to target 20% of the Chum catch in major net fisheries in BC, by statistical week and statistical area. Standard field sampling forms were used to collect data, which was compiled in standard excel files, provided to DFO by the contractor at the end of each season.

Mark and sampling rates in the pre-1990 data were calculated in historical in-season spreadsheets with annual totals summarized in the database. Sampling rates and mark rates were not available for these years, but the assumption was that 20% or more of all net and troll catch was sampled by week and area.

Troll catch was sampled until 1992 at an average annual rate of 20% of the weekly catch by statistical area. From 1990 to 2018, mark rates from samples of net catch were applied to troll catch estimates, except in areas where troll catch CWT samples existed. See Table 18 for sampling rates by gear, catch region and statistical week.

From 1990 through 2018, 9,899,191 Chum were mark sampled in net fisheries (representing 67.3 million pieces in net catch for those years), for an average sampling rate overall of 27% (Figure 8). From 1990 to 1998, when the annual Chum net catch averaged five million pieces, sampling rates ranged from 18% to 23%. In 1998, with a total catch of 6.6 million pieces in net fisheries in BC, 1.2 million were mark sampled, for a sampling rate of 31%. In 2001, a sampling rate of 41% was achieved, however catch that year was 1.2 million and 350,000 were mark sampled in BC net fisheries.

Not all samples were used to calculate metrics by the Chum and Pink DBMS. Samples from mixed areas, or a combination of areas, in net fisheries were not used if there were valid samples from areas that were not mixed. Table 17 and Table 18 show only samples for weeks and areas that were used.

94% of net catch samples (in a week and an area in a given year) did not include mixed areas. Catch from statistical areas 12 and 13 (including mixed-area samples) accounted for 1/3 of the samples collected coastwide. Area 8 accounted for another 20% and Nitinat fisheries accounted for 17%. Area 14 accounted for 9%, and areas 2E, 6, 7, 25 and 29 each accounted for less than 5%.

Not including the troll samples, 925 of 1,488 weeks and areas sampled were over 20% (and under 100%) of the catch in that week and area. 34 samples were greater than 100% of the catch. In most of these cases, both the catch estimates and the numbers sampled were a few hundred and often less than 100 pieces.

Where there were CWT and fin clip samples having different sample sizes, in the same week and area, the fin clip sample rate only was included in Table 17 and Table 18.

1,158 samples were greater than 15% of the catch for a week and area stratum. Of all 3,485 samples, including 34 mixed-area samples, 952 samples from net fisheries were 20% or greater of the catch in that week and area. As the database rejects catch samples of under 5%, 399 samples, or 11% over all years, were not applied to estimates of enhanced contribution, exploitation rates and marine survival rates.

Of 55,395 Chum mark (CWT and fin clip) recoveries, 52,192 were collected from pure catch areas, including 404 recoveries from troll catch (380 CWT recoveries, and 24 fin clip recoveries) for three years from 1990 through 1992.

1,587 estimates of a weekly mark rate (from both CWT and fin clip marks), for a statistical area (pure area) in a net fishery, were compiled from 1990 through 2018 recovery year from catch sampling. 32 samples from net fisheries had no catch in that area (only including pure area samples) and week. 931 samples had a

sampling rate of 20% or greater and 100% or less, with an average mark rate of 0.3% across all areas over the time series from 1990 to 2018.

Sampling of escapement by SEP hatchery crews was planned annually by regional assessment biologists. Standard field sampling forms were used to collect data, which was compiled in standard excel files and provided to the regional biologists at the end of each season, or entered into the hatchery operations database, Enpro.

The average mark rate in all sampled Chum escapement from 1985 through 2018 ranged from 0.5% to 2%. Inch Creek Hatchery recovered the most marks over all years, 8,504 from 400,000 examined with an average mark rate of 2.1%. Samplers recovered 4,101 marks in Snootli Creek from 166,000 examined, for a mark rate of 2.5%. Big Qualicum with a mark rate over all years of 0.4%, examined 972,000 and recovered 3,558 marks, Little Qualicum with the same mark rate, examined 764,000 and recovered 2,749 marks. Chehalis River Hatchery examined 920,000 and recovered 6,642 marks for a mark rate of 0.7%. Chilliwack River Hatchery examined 715,000 and recovered 8,629 for a mark rate of 1.2%. Nitinat River Hatchery examined 683,000 and recovered 5,357 marks for a mark rate of 0.8%.

Enhanced Contribution to Catch

Table 19 presents expanded enhanced catch and total catch estimates by gear and statistical area by return year, for years prior to 1990. Table 20 presents expanded enhanced catch and total catch estimates by gear and statistical area by return year for years from 1990 to 2018. Table 17 presents sample sizes, sampling rates, observed recoveries and mark rate, and total catch estimates by gear, area and week for return years after 1989 for net fisheries. Table 18 presents the same data for troll fisheries. Figure 9 displays trends in annual enhanced contribution to catch by stock.

From 1980 through 1989, average enhanced contribution to catch was 32% from Big Qualicum, ranging from 12% in 1988 to 81% in 1983, 7% from Conuma River, Sucwoa River and Little Qualicum, ranging from 0% to 16%, 56% from Nitinat, ranging from 36% to 70%, and 10% from Pallant Creek, ranging from 1% to 23%. All other stocks, including Snootli Creek, Saloompt River, Puntledge River, Kitimat River, Chilliwack River and Chehalis River had average contributions over this time period of 5% or less.

In 1980, 1981 and 1984, 10% of the sampled catch coastwide originated from Canadian hatcheries and spawning channels, with other years in that decade ranging from 4% to 7%.

From 1990 through 1999, average enhanced contribution to catch was 24% for Nitinat, ranging from 10% to 45%. Pallant Creek averaged 17%, with a range from 6% to 48%. Big Qualicum averaged 11%, with a range from 2% to 20%. Conuma River and Mathers Creek, both averaged 8%, and Sucwoa averaged 6% over this

time period. All other stocks, including Little Qualicum, Snootli Creek, Saloompt River, Puntledge River, Kitimat River, Chilliwack River and Chehalis River had average contributions over this time period of 5% or less. Coastwide in BC, over this time period the average enhanced contribution to catch was 3.5%, ranging from 2.6% in 1994 to 5.5% in 1997.

Table 14, Table 15 and Table 16 show brood years in which stocks were sampled for marks. After 2000, the number of Chum stocks being assessed through mark recovery programs declined to just Big Qualicum and the Snootli Creek Hatchery stocks. As fewer stocks were associated with fewer marked release groups, the apparent estimate of enhanced contribution to catch decreased, although the actual contribution of unmarked and unassociated releases was unknown.

From 2000 through 2009, average enhanced contribution to catch was 61% for Nitinat, with two years of sampling, 2000 and 2001, at 44% and 78% respectively. Pallant Creek averaged 16%, over three years from 2000 through 2002, ranging from 8% to 31%. Conuma River stock averaged 17%, with sampling in 2000, 2001 and 2003. All other stocks, including Big and Little Qualicum, Snootli Creek, Saloompt River, Puntledge River, Kitimat River, Chilliwack River and Chehalis River had average contributions over this time period of 5% or less. Coastwide in BC over this time period the average enhanced contribution to catch was 3.1%, ranging from 1.3% in 2008 to 4.8% in 2001.

From 2010 through 2018 return years, average enhanced contribution to catch was 3% for Big Qualicum, 6% for Snootli Creek, 3% for Saloompt River, 5% for Thorsen Creek, 6% for Fish Creek + Airport Channel, and 4% for McLoughlin Bay Creek. Coastwide in BC the average enhanced contribution rate to catch was 4.1%, ranging from 2% in 2011 to 8% in 2017 (when only northern summer Chum runs from Snootli Creek Hatchery were assessed).

Enhanced Contribution to Escapement

Estimates of total return numbers to the river were made by both SEP hatchery staff and DFO stock assessment biologists. SEP counts were reported in program databases, Enpro and the regional EPAD database. Stock assessment estimates were reported to NuSEDs. In cases where there were estimates in both datasets and the numbers are different, the source of the estimate is noted in the data tables in this report.

Table 21 presents expanded estimates of enhanced catch and escapement, based on samples in these two strata, to estimate enhanced contribution to escapement and marine survival, by return year from 1980 through 1989. Systems like Big Qualicum, Nitinat and Pallant Creek had high rates of enhanced contribution to escapement, over 90% on average. Systems with low rates of enhanced contribution included Chilliwack River and the Bella Coola River.

Table 22 presents expanded estimates of escapement by stock spawning site and return year for years from 1990 through 2018.

From 1990 through 1999, 30 sites were sampled by hatcheries for marked Chum recoveries. Where enhanced contribution was over 100%, it was included in averaging as 100%. Big Qualicum had three of ten years estimated at over 100%, and a 10 year average of 66%. Both Saloompt River and Fish Creek + Airport Channel escapement had multiple years with estimates over 100%, and respective averages of 68% and 84% after adjusting the overestimates down to 100%. Deserted River and Sucwoa River were in a similar situation, with 1995 for both sites being over 100%, and average rates of 38% and 46% respectively.

Of sites having no years with estimates over 100%, Conuma River averaged 74%, Pallant Creek 72%, Thorsen Creek 59%, Mathers Creek 57%, Inch Creek and Little Qualicum both 49%, Nitinat 46%, Snootli Creek 42%, Kitimat River 41%, Chehalis River 39%, Tlupana River 36%, Canton Creek 31%, Chilliwack River 15% and Stave River 12% (Figure 10).

Sampling of Chum escapement ceased at many sites after 2001 return year, leaving Big Qualicum and the four Bella Coola stocks marked and sampled in all years from 2000 through 2009. Big Qualicum averaged 39% enhanced contribution to escapement over this time period, Snootli Creek, 37%, Thorsen Creek 47%, and after reducing one or two years of estimates over 100% down to 100%, Fish Creek + Airport Channel averaged 65% and Saloompt River 64%.

In return years from 2010 through 2017, estimates of enhanced contribution to escapement became more uncertain with two of the eight years at Big Qualicum being over 100% (112 and 130), and five of the six years at Fish Creek + Airport Channel being over 100% (range of 101 to 380), three of four at Saloompt River (range of 168 to 450), one of six years at Snootli Creek (185%) and four of six years at Thorsen Creek (range of 103 to 363).

Big Qualicum in these years had an average of 43% after adjustment of the two overestimates (in 2015 and 2017), and a low of 9% in 2013, which aligns with earlier years. Snootli Creek averaged 65% (with a low of 34% in 2011) after one year (2014) was adjusted to 100%.

Several sites had years with enhanced contribution to escapement estimated at over 100%. Sample sizes were generally counts having little uncertainty, however stratified estimates of returns to the river could have been less certain. Assuming sample sizes were correct, error could arise from either the estimate of total escapement (being biased low), or the mark rate (being biased high). Because enhanced contribution uses expanded numbers, error could also arise from inaccurate estimates of marked and unmarked proportions at release.

Marine Survival and Exploitation Rates

Marine survival and exploitation rates were calculated from expanded catch and escapement data, including adjustments for unsampled net catch and sport and troll estimates of unsampled enhanced fish in catch, based on sampled net catch mark rates for that week and that area. Associated unmarked recovery data was not included in marine survival estimates in this report. Pre-1990 metrics included an adjustment for mark mortality, which was not included in post-1990 calculations. The mark mortality adjustments (which were not applied in the post-1990 survival rate tables and figures in this report) are presented in Table 9. Analysts may choose to apply this adjustment to mark recoveries to compare with earlier years.

Because the calculated annual metrics from pre-1990 data were archived without the raw data, and because the authors agreed not to include the 30% adjustment for mark mortality to returns in the post-1990 data, the two time series for marine survival presented in this report can not be easily compared.

Table 23, Figure 11 and Figure 12 list marine survival and exploitation rates by brood year and stock, as calculated by the Chum and Pink DBMS (see Marine Survival and Exploitation Rate Estimation in the Methods section of this report).

Coastwide in BC, over all brood years from 1978 to 2014, the poorest years were 2005 and 2006 brood years with an average 0.1% survival rate for fed fry. The best survival was in 1981 with 5.2%, followed by 2009 with 4.1%.

From 1978 through 1990 brood years, Chum marine survival averaged 1.6% for fed fry (with a range of 0.1 to 3.6%), 1.3% for seapen (0.6 to 2.1%), 1.2% for unfed fry (1.2 to 1.5%), and 0.6% for channel fry (0.2 to 1.2%).

Average survival rates for fed fry from 1980 through 1990 brood years ranged from 0.3% at Conuma River to 3.6% at Nitinat. The average survival rate for fed fry in summer run Chum was 1.8%, compared to 1% for fall run Chum.

Average exploitation rates from 1980 through 1990 brood years ranged from 21% for Kitimat River, 25% for Conuma River, 32% for Inch Creek, 66% for Little Qualicum spawning channel, 70% for Nitinat River, 75% for Big Qualicum spawning channel and 67% for Puntledge River, to well over 80% with the Snootli Creek Hatchery production.

Coastwide in BC, the lowest exploitation rate was in 1979 brood year with an average of 16% and the highest year was 1984 with an 81% exploitation rate. Coastwide in BC, from 1978 through 1990 brood years, Chum exploitation rates averaged 52% (Table 23), with a range from 16% in 1979 to 81% in 1984.

Average survival rates from 1990 through 1999 brood years ranged from 0.2% at Little and Big Qualicum for channel fry to 2.7% for summer run Chum fed fry from

Fish Creek + Airport Channel in Bella Coola. Kitimat River and Hirsch Creek had 2.4% marine survival for these years.

Coastwide in BC, the poorest year was 1996 brood year with an average 0.5% survival rate and the best survival was in 1994 with 2.6%. From 1990 through 1999 brood years, Chum marine survival averaged 1.1% for fed fry (0.4 to 2.2), 1.0% for seapen (0.2 to 2.9) and 0.2% for channel fry (0.1 to 0.7).

Average exploitation rates from 1990 through 1999 brood years ranged from 10% for Inch Creek and Kitimat River, 21% for Chehalis River, 28% for Conuma River, 42% for Chilliwack River, 45% for Puntledge River, 47-48% for Big and Little Qualicum, 57% for Nitinat, 90% for Deserted River, and over 80% for the Snootli Creek Hatchery production (94% on Fish Creek + Airport Channel).

Coastwide in BC, the poorest exploitation rate was in 1992 brood year with an average of 30% and the best year was 1999 with 55% exploitation rate. Coastwide the Chum exploitation rate was 52% for these years.

Average survival rates from 2000 through 2009 brood years ranged from 0.1% for Big Qualicum channel fry (having a maximum of 0.4% in 2007) to 1.0% for Snootli Creek fed fry (having a maximum of 4.1% in 2009).

Average exploitation rates from 2000 through 2009 brood years ranged from 26% for Big Qualicum (with a high of 40% in 2007 and a low of 13% in 2005) to 65% with the Snootli Creek Hatchery production (with a high of 93% in 2002 and a low of 12% in 2006). The BC coastwide average Chum exploitation rate was 46% for these years, with a high of 56% in 2000 and a low of 25% in 2005.

2013 was the last brood year that Big Qualicum marked Chum. Survival rates for 2010 – 2013 brood years averaged 0.2% for channel fry. Sampling in Johnstone Strait ceased in 2015.

Snootli Creek Chum were adipose clipped until 2018. In recent years, marine survival has averaged 1.1% for the fed fry release. Exploitation was an average of 50% for brood years 2005 thorugh 2010 (up to 82% in 2009 and only 12% in 2006) with terminal fisheries in Area 8.

Age Class Composition in Catch and Escapement

Numbers and percentages of marked recoveries by scale age, stock and recovery year are listed in Table 24 for catch, escapement and catch plus escapement combined. See Figure 13 for stock specific trends in abundance by age in catch, escapement and catch plus escapement by return year.

Combined catch and escapement age class composition for enhanced Chum stocks across the 1980 through 1989 return year time series, was 27% three year olds, 63% four year olds, 9% five year olds and 0.1% six year olds. In catch only,

age class composition for all stocks was 26% three year olds, 63% four year olds, 10% five year olds and 0.1% six year olds. In escapement only, age class composition for all stocks was 29% three year olds, 64% four year olds, 8% five year olds and 0.1% six year olds.

Combined catch and escapement age class composition for enhanced Chum stocks across the 1990 through 1999 return year time series, was 19% three year olds, 67% four year olds, 14% five year olds and 0.4% six year olds. In catch only, age class composition for all stocks, was 19% three year olds, 64% four year olds, 16% five year olds and 0.6% six year olds. In escapement only, age class composition for all stocks, was 18% three year olds, 69% four year olds, 13% five year olds and 0.2% six year olds.

Combined catch and escapement age class composition for enhanced Chum stocks across the 2000 through 2009 return year time series, was 18% three year olds, 72% four year olds, 10% five year olds and 0.4% six year olds. In catch only, age class composition for all stocks was 17% three year olds, 73% four year olds, 10% five year olds. In escapement only, age class composition for all stocks was 19% three year olds, 72% four year olds, 9% five year olds and 0.7% six year olds.

Combined catch and escapement age class composition for enhanced Chum stocks across the 2010 through 2018 return year time series, was 17% three year olds, 70% four year olds, 14% five year olds. In catch only, age class composition for all stocks was 21% three year olds, 67% four year olds, 12% five year olds and less than 0.1% six year olds. In escapement only, age class composition for all stocks was 12% three year olds, 72% four year olds, 15% five year olds.

Big Qualicum, from 1980 to 2017 return year, averaged 16% three year olds, 67% four year olds and 17% five year olds in combined catch and escapement. Snootli from 1980 to 2018 return year, averaged 27% three year olds, 65% four year olds and 8% five year olds in combined catch and escapement (see Table 24).

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TABLES

Table 1 Releases by Brood Year and Release Stage

	Releases				
Brood Year	**Channel Fry**	**Fed Fry**	**Fed Fry Seapen**	**Unfed Fry**	**Grand Total**
1955	75,200				75,200
1956	121,800				121,800
1957	19,600				19,600
1959	21,155,900				21,155,900
1960	4,550,000				4,550,000
1961	4,538,600				4,538,600
1962	6,840,000				6,840,000
1963	21,029,700				21,029,700
1964	15,360,000				15,360,000
1965	11,299,900				11,299,900
1966	22,067,000				22,067,000
1967	34,240,900	176,000			34,416,900
1968	52,303,000	2,088,000			54,391,000
1969	64,649,400	1,601,100			66,250,500
1970	49,310,000			323,026	49,633,026
1971	38,459,700			882,432	39,342,132
1972	56,107,000			972,285	57,079,285
1973	58,721,600			1,944,944	60,666,544
1974	71,212,000	236,648		1,131,153	72,579,801
1975	62,673,800			918,183	63,591,983
1976	59,542,000	874,103		1,722,240	62,138,343
1977	50,088,300	1,904,625		2,038,727	54,031,652
1978	47,880,000	4,638,832	896,734	338,296	53,753,862
1979	66,955,326	8,893,593	298,354	2,594,902	78,742,175
1980	68,741,484	26,672,788	3,011,512	1,863,194	100,288,978
1981	48,152,703	61,193,756	7,786,954	2,556,339	119,689,752
1982	84,508,635	65,066,426	4,298,704	2,421,623	156,295,388
1983	81,594,681	77,898,210	7,681,379	1,671,386	168,845,656
1984	46,882,501	92,245,137	11,534,493	5,642,607	156,304,738
1985	35,563,616	91,334,904	11,129,773	6,044,475	144,072,768
1986	88,426,276	77,203,636	8,639,164	7,847,106	182,116,182
1987	96,975,560	66,920,265	9,059,486	4,435,450	177,390,761
1988	108,840,499	79,279,872	8,748,792	4,529,029	201,298,192
1989	76,210,841	81,767,914	10,446,092	6,797,309	175,222,156
1990	90,315,987	83,122,701	11,636,998	4,109,512	189,185,198
1991	70,901,437	82,016,480	14,822,875	8,141,560	175,882,352
1992	110,699,964	74,283,442	15,002,990	2,683,023	202,669,419
1993	96,757,709	76,615,085	16,785,080	4,736,693	194,894,567
1994	80,715,819	90,856,690	13,141,506	4,473,947	189,187,962
1995	30,670,233	68,385,711	19,279,772	2,553,079	120,888,795
1996	15,439,497	74,113,794	19,543,322	1,222,545	110,319,158

	Releases				
Brood Year	**Channel Fry**	**Fed Fry**	**Fed Fry Seapen**	**Unfed Fry**	**Grand Total**
1997	42,898,326	77,550,679	27,517,246	2,205,707	150,171,958
1998	69,268,792	68,457,439	24,232,813	11,152,063	173,111,107
1999	42,667,256	38,752,106	41,089,036	2,847,989	125,356,387
2000	9,250,009	31,991,218	27,344,931	1,081,978	69,668,136
2001	33,007,596	62,791,760	18,197,304	4,293,574	118,290,234
2002	24,985,533	51,891,218	30,625,425	3,637,658	111,139,834
2003	25,494,583	42,262,614	13,464,016	11,766,348	92,987,561
2004	43,091,836	38,258,080	33,469,703	6,605,355	121,424,974
2005	19,654,116	38,188,028	47,443,049	5,342,556	110,627,749
2006	48,949,512	29,900,093	41,387,124	12,793,741	133,030,470
2007	34,909,258	19,338,174	15,421,158	7,859,519	77,528,109
2008	26,614,576	21,173,102	21,503,180	9,450,286	78,741,144
2009	28,330,973	22,668,284	10,852,254	2,324,872	64,176,383
2010	14,664,056	18,687,337	18,074,364	5,442,320	56,868,077
2011	44,494,137	26,226,593	27,192,604	5,128,857	103,042,191
2012	44,091,531	27,726,449	14,750,720	7,073,425	93,642,125
2013	34,607,706	32,679,996	10,028,185	1,609,889	78,925,776
2014	11,161,482	37,492,848	9,611,476	904,715	59,170,521
2015	33,177,960	35,397,928	10,233,117	2,114,844	80,923,849
2016	74,697,858	39,347,872	17,979,129	1,636,140	133,660,999
2017	24,159,101	24,434,876	11,279,788	1,962,025	61,835,790
2018	8,822,766	32,695,641	10,609,554	1,095,080	53,223,041

Table 2 Releases by Brood Year and Mark Type

Brood Year	Unmarked	CWT	Fin Clip	Thermal	Total
1955	75,200				75,200
1956	121,800				121,800
1957	19,600				19,600
1959	21,155,900				21,155,900
1960	4,550,000				4,550,000
1961	4,538,600				4,538,600
1962	6,840,000				6,840,000
1963	21,029,700				21,029,700
1964	14,621,400		738,600		15,360,000
1965	10,924,100		375,800		11,299,900
1966	21,494,300		572,700		22,067,000
1967	33,588,800		828,100		34,416,900
1968	51,540,568		2,850,432		54,391,000
1969	64,232,700		2,017,800		66,250,500
1970	48,044,626		1,588,400		49,633,026
1971	38,355,832		986,300		39,342,132
1972	55,825,990		1,253,295		57,079,285
1973	60,312,244		354,300		60,666,544
1974	72,210,350		369,451		72,579,801
1975	63,346,160		245,823		63,591,983
1976	60,950,807		1,187,536		62,138,343
1977	52,732,637		1,299,015		54,031,652
1978	51,979,427	157,529	1,616,906		53,753,862
1979	76,708,111	191,041	1,843,023		78,742,175
1980	98,124,845	331,101	1,833,032		100,288,978
1981	117,401,782	461,912	1,826,058		119,689,752
1982	154,004,025	617,463	1,673,900		156,295,388
1983	166,213,700	617,337	1,964,019		168,845,656
1984	152,850,364	1,019,252	2,360,250		156,304,738
1985	141,502,347	559,918	2,010,503		144,072,768
1986	179,462,908	370,709	2,282,565		182,116,182
1987	175,027,226	500,794	2,112,741	2,238,000	177,640,761
1988	200,407,831	518,630	2,192,231		203,118,692
1989	173,851,504	694,969	2,204,683		176,751,156
1990	187,922,069	626,720	2,060,391		190,609,180
1991	173,573,745	422,439	2,061,773		176,057,957
1992	201,101,028	549,101	1,959,680		203,609,809
1993	193,173,373	344,541	2,060,433	28,363,894	195,578,347
1994	187,209,578	348,303	1,630,081	30,831,080	189,187,962
1995	118,829,306	337,994	1,724,195	24,649,925	120,891,495
1996	108,015,877	549,572	1,753,709	26,718,854	110,319,158
1997	148,335,133	468,585	1,575,205	34,389,143	150,378,923
1998	171,375,588	249,665	1,485,854	40,546,174	173,111,107
1999	123,851,614	149,879	1,375,894	31,498,315	125,377,387
2000	68,874,476	149,374	644,286	9,410,587	69,668,136
2001	117,510,596	49,931	821,034	34,409,581	118,381,561
2002	110,690,788		628,046	30,188,426	111,318,834
2003	92,701,184		286,377	27,473,326	92,987,561
2004	121,720,101		87,420	39,834,145	121,807,521
2005	110,467,070		210,079	41,813,907	110,677,149
2006	133,020,719		309,751	31,818,582	133,330,470
2007	77,334,160		300,804	13,449,428	77,634,964
2008	78,630,072		286,072	9,608,610	78,916,144
2009	64,421,916		293,915	9,183,411	64,715,831
2010	56,609,233		317,868	17,950,173	56,927,101
2011	103,588,853		471,504	27,200,377	104,060,357
2012	93,692,669		449,456	17,570,623	94,142,125
2013	78,668,123		411,018	13,543,600	79,079,141

Brood Year	Unmarked	CWT	Fin Clip	Thermal	Total
2014	59,428,794		300,186	22,800,930	59,728,980
2015	80,577,549		356,300	22,154,668	80,933,849
2016	133,566,700		104,299	32,603,776	133,670,999
2017	61,741,071		104,719	11,885,038	61,845,790
2018	53,109,880		113,161	22,821,359	53,223,041

Table 3 Releases for Projects with Chum Production Over 500,000 Most Years by Brood Year and Mark

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Alouette R	1979				60,290
Alouette R	1980	26,359	1,006		222,635
Alouette R	1981	58,270	4,682		2,828
Alouette R	1982	92,068	1,688		1,688
Alouette R	1983				147,000
Alouette R	1984				249,000
Alouette R	1985				1,190,000
Alouette R	1986				1,037,205
Alouette R	1987				1,097,556
Alouette R	1988				554,225
Alouette R	1989				720,929
Alouette R	1990				1,960,000
Alouette R	1991				768,742
Alouette R	1992				861,000
Alouette R	1993				1,680,573
Alouette R	1994				1,358,798
Alouette R	1995				293,292
Alouette R	1996				170,546
Alouette R	1997				1,200,000
Alouette R	1998				1,676,000
Alouette R	1999				661,000
Alouette R	2000				855,904
Alouette R	2001				134,979
Alouette R	2004				200,000
Alouette R	2005				195,013
Alouette R	2006				198,000
Alouette R	2007				257,049
Alouette R	2008				366,481
Alouette R	2009				470,000
Alouette R	2010				314,191
Alouette R	2011				635,945
Alouette R	2012				594,362
Alouette R	2013				646,168
Alouette R	2014				347,519
Alouette R	2015				360,112
Alouette R	2016				312,798
Alouette R	2017				428,199
Alouette R	2018				385,868
Big Qualicum	1959				21,120,000
Big Qualicum	1960				4,550,000
Big Qualicum	1961				4,510,000
Big Qualicum	1962				6,840,000
Big Qualicum	1963				20,930,000
Big Qualicum	1964		738,600		14,621,400
Big Qualicum	1965		375,800		9,898,200
Big Qualicum	1966		572,700		21,267,300
Big Qualicum	1967		828,100		33,107,900
Big Qualicum	1968		2,856,292		48,900,048
Big Qualicum	1969		2,017,800		60,983,300
Big Qualicum	1970		1,588,400		46,481,600
Big Qualicum	1971		986,300		35,713,700
Big Qualicum	1972		995,940		42,604,060
Big Qualicum	1973		101,400		54,138,600
Big Qualicum	1974		111,500		64,918,500
Big Qualicum	1975		107,351		56,312,649
Big Qualicum	1976		753,759		52,926,241

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Big Qualicum	1977		875,519		47,424,481
Big Qualicum	1978		917,895		44,572,105
Big Qualicum	1979		687,637		57,132,363
Big Qualicum	1980		604,042		62,772,207
Big Qualicum	1981		349,777		45,475,808
Big Qualicum	1982		293,440		61,240,033
Big Qualicum	1983		315,969		57,846,493
Big Qualicum	1984		321,396		23,668,484
Big Qualicum	1985		284,975		25,713,026
Big Qualicum	1986		305,762		47,770,380
Big Qualicum	1987		296,772		56,267,697
Big Qualicum	1988		291,662		65,666,889
Big Qualicum	1989		254,351		46,856,932
Big Qualicum	1990		264,508		45,261,952
Big Qualicum	1991		279,679		35,274,878
Big Qualicum	1992		265,983		66,571,887
Big Qualicum	1993		257,439		63,279,936
Big Qualicum	1994		258,901		45,775,992
Big Qualicum	1995		265,041		16,862,532
Big Qualicum	1996		325,865		7,971,706
Big Qualicum	1997		326,229		31,133,929
Big Qualicum	1998		263,282		49,966,270
Big Qualicum	1999		255,239		26,422,017
Big Qualicum	2000				931,572
Big Qualicum	2001		254,390		42,727,488
Big Qualicum	2002		262,619		34,841,499
Big Qualicum	2003		256,795		22,477,570
Big Qualicum	2004		267,945		23,265,778
Big Qualicum	2005		262,360		17,426,129
Big Qualicum	2006		258,869		29,441,789
Big Qualicum	2007		260,800		13,549,846
Big Qualicum	2008		210,210		8,541,627
Big Qualicum	2009		259,073		11,967,188
Big Qualicum	2010		257,847		8,317,249
Big Qualicum	2011		250,337		28,925,853
Big Qualicum	2012		249,654		28,022,062
Big Qualicum	2013		251,121		18,189,107
Big Qualicum	2014		191,823		4,141,898
Big Qualicum	2015		250,000		12,669,520
Big Qualicum	2016				28,213,058
Big Qualicum	2017				14,676,938
Big Qualicum	2018				2,642,746
Blaney	1972		258,924		257,355
Blaney	1973		252,900		1,029,328
Blaney	1974		190,784		190,033
Blaney	1975		139,683		138,472
Blaney	1976				158,837
Blaney	1977				1,171,710
Blaney	1978		175,715		163,867
Blaney	1979				262,260
Chehalis Band	1979				1,240,000
Chehalis Band	1980				1,563,564
Chehalis Band	1981				2,277,121
Chehalis Band	1982				629,742
Chehalis Band	1983				660,125
Chehalis Band	1984				912,200
Chehalis Band	1985				1,630,847
Chehalis Band	1986				2,936,000
Chehalis Band	1987				3,063,750

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Chehalis Band	1988				3,582,500
Chehalis Band	1989				2,540,593
Chehalis R	1982	156,981	6,165		8,100,804
Chehalis R	1983	161,879	3,109		13,464,988
Chehalis R	1984	233,862	5,081		13,751,782
Chehalis R	1985	148,884	2,628		16,813,127
Chehalis R	1986	80,013	85,792		13,457,769
Chehalis R	1987	80,407	80,319		12,186,326
Chehalis R	1988	104,409	311		14,134,210
Chehalis R	1989	102,887	2,313		10,913,644
Chehalis R	1990	106,647	493		12,714,065
Chehalis R	1991	102,672	7,484		12,320,223
Chehalis R	1992	96,665	4,977		10,275,805
Chehalis R	1993	98,887	3,747		10,772,816
Chehalis R	1994	103,939	4,142		8,804,134
Chehalis R	1995	89,473	5,616		10,894,248
Chehalis R	1996	106,731	391		9,137,332
Chehalis R	1997	102,633	3,038		8,687,213
Chehalis R	1998	102,182	536		3,902,166
Chehalis R	1999				1,226,653
Chehalis R	2000				3,949,094
Chehalis R	2001				5,885,195
Chehalis R	2002				5,853,743
Chehalis R	2003				5,912,133
Chehalis R	2004				6,162,391
Chehalis R	2005				3,051,646
Chehalis R	2006				7,406,243
Chehalis R	2007				6,087,316
Chehalis R	2008				5,866,344
Chehalis R	2009				2,295,646
Chehalis R	2010				3,964,605
Chehalis R	2011				5,900,817
Chehalis R	2012				7,097,055
Chehalis R	2013				3,614,769
Chehalis R	2014				3,474,701
Chehalis R	2015				3,453,979
Chehalis R	2016				3,416,998
Chehalis R	2017				3,444,269
Chehalis R	2018				3,588,751
Chilliwack R	1980		159,597		685,582
Chilliwack R	1981		205,580		3,728,252
Chilliwack R	1982		199,944		3,952,609
Chilliwack R	1983		170,224		1,005,036
Chilliwack R	1984		200,298		3,209,794
Chilliwack R	1985		200,045		3,912,439
Chilliwack R	1986		201,289		4,278,723
Chilliwack R	1987		147,559		2,617,129
Chilliwack R	1988		148,835		2,450,267
Chilliwack R	1989		148,595		4,780,994
Chilliwack R	1990		149,485		5,224,362
Chilliwack R	1991		147,461		5,220,350
Chilliwack R	1992		141,830		3,743,610
Chilliwack R	1993		147,309		3,631,002
Chilliwack R	1994		99,513		4,645,722
Chilliwack R	1995		99,572		4,634,764
Chilliwack R	1996		98,616		2,367,904
Chilliwack R	1997		99,920		3,281,780
Chilliwack R	1998				3,899,000
Chilliwack R	1999				1,314,928

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Chilliwack R	2000				1,809,284
Chilliwack R	2001				1,612,557
Chilliwack R	2002				1,623,937
Chilliwack R	2003				1,742,687
Chilliwack R	2004				2,026,803
Chilliwack R	2005				1,403,135
Chilliwack R	2006				2,045,707
Chilliwack R	2007				1,493,816
Chilliwack R	2008				3,461,574
Chilliwack R	2009				1,092,451
Chilliwack R	2010				2,412,351
Chilliwack R	2011				1,512,114
Chilliwack R	2012				2,627,841
Chilliwack R	2013				1,894,246
Chilliwack R	2014				1,879,763
Chilliwack R	2015				3,033,314
Chilliwack R	2016				2,851,369
Chilliwack R	2017				2,529,152
Chilliwack R	2018				2,740,812
Conuma R	1978		143,007		745,693
Conuma R	1979	5,284	390,685		2,306,727
Conuma R	1980	98,729	315,830		8,743,787
Conuma R	1981	153,652	180,733		12,389,415
Conuma R	1982	73,628	225,439		18,496,333
Conuma R	1983		257,035		18,706,965
Conuma R	1984	486,547	250,696		18,834,184
Conuma R	1985		273,370		19,539,989
Conuma R	1986		298,828		14,768,260
Conuma R	1987	96,824	160,103		10,477,681
Conuma R	1988	101,506	164,295		12,235,781
Conuma R	1989	105,447	286,585		13,921,674
Conuma R	1990	55,243	233,956		12,058,290
Conuma R	1991		281,515		13,285,652
Conuma R	1992		268,180		13,134,810
Conuma R	1993		257,762		10,431,393
Conuma R	1994		250,163		14,282,081
Conuma R	1995		251,231		3,878,538
Conuma R	1996		249,355		7,091,358
Conuma R	1997		271,269		9,822,977
Conuma R	1998		257,818		6,478,230
Conuma R	1999		259,114		
Conuma R	2000		242,124		
Conuma R	2001		256,521		
Conuma R	2002				
Conuma R	2003				
Conuma R	2004				
Conuma R	2005				
Conuma R	2006				
Conuma R	2007				
Conuma R	2008				
Conuma R	2009				
Conuma R	2010				
Conuma R	2011				
Conuma R	2012				
Conuma R	2013				
Conuma R	2014				
Conuma R	2015				
Conuma R	2016				
Conuma R	2017				

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Conuma R	2018				
Cowichan R	1976				298,000
Cowichan R	1977				828,498
Cowichan R	1978	41,060	7,133		424,807
Cowichan R	1979	29,679	1,894		174,427
Cowichan R	1980	49,570	2,776		619,855
Cowichan R	1981	7,158	2,636		680,206
Cowichan R	1982				700,000
Cowichan R	1983				999,143
Cowichan R	1984				971,923
Cowichan R	1985				190,886
Cowichan R	1993				13,057
Glendale Ch	1988				4,802,805
Glendale Ch	1990				134,232
Glendale Ch	1991				2,585,776
Goldstream R	1979				15,300
Goldstream R	1987				14,000
Goldstream R	1990				10,000
Goldstream R	1991				15,150
Goldstream R	1992				32,800
Goldstream R	1993				7,800
Goldstream R	1994				25,000
Goldstream R	1995				39,448
Goldstream R	1996				52,572
Goldstream R	1997				84,962
Goldstream R	1998				243,730
Goldstream R	1999				865,520
Goldstream R	2000				5,601
Goldstream R	2001				75,000
Goldstream R	2002				185,000
Goldstream R	2003				84,336
Goldstream R	2004				30,000
Goldstream R	2005				60,000
Goldstream R	2006				98,783
Goldstream R	2007				153,331
Goldstream R	2008				415,561
Goldstream R	2009				83,859
Goldstream R	2010				77,370
Goldstream R	2011				177,231
Goldstream R	2012				142,368
Goldstream R	2013				100,876
Goldstream R	2014				115,740
Goldstream R	2015				55,067
Goldstream R	2016				11,598
Goldstream R	2017				10,967
Goldstream R	2018				188,963
Gwa'ni	1979				57,580
Gwa'ni	1980				170,000
Gwa'ni	1981		50,857		182,936
Gwa'ni	1982				288,078
Gwa'ni	1983				402,387
Gwa'ni	1984				103,475
Gwa'ni	1985				900,458
Gwa'ni	1986				886,921
Gwa'ni	1987				429,260
Gwa'ni	1988				1,103,316
Gwa'ni	1989	80,323			938,794
Gwa'ni	1990	80,146	680		833,388
Gwa'ni	1991				1,217,934

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Gwa'ni	1992	81,991	828		1,085,196
Gwa'ni	1993				1,277,247
Gwa'ni	1994				2,775,581
Gwa'ni	1995				3,212,503
Gwa'ni	1996				412,546
Gwa'ni	1997				4,053,026
Gwa'ni	1998				4,386,103
Gwa'ni	1999				35,200
Gwa'ni	2000				15,523
Gwa'ni	2001				5,526,105
Gwa'ni	2002				4,075,392
Gwa'ni	2004				481,315
Gwa'ni	2005				5,786,695
Gwa'ni	2006				3,934,320
Gwa'ni	2008				1,433,051
Gwa'ni	2009				740,046
Gwa'ni	2010				374,385
Gwa'ni	2011				11,601
Gwa'ni	2012				123,294
Gwa'ni	2013				473,825
Gwa'ni	2014				473,722
Gwa'ni	2015				12,341
Gwa'ni	2016				
Gwa'ni	2017				
Gwa'ni	2018				
Halalt Band	1994				18,000
Halalt Band	1996				32,080
Halalt Band	1997				286,733
Halalt Band	1998				700,000
Halalt Band	1999				185,000
Halalt Band	2000				230,000
Halalt Band	2001				500,000
Halalt Band	2002				569,746
Halalt Band	2003				132,000
Halalt Band	2004				224,000
Halalt Band	2006				300,000
Halalt Band	2007				106,355
Halalt Band	2008				179,000
Halalt Band	2009				22,000
Halalt Band	2010				41,000
Halalt Band	2011				80,000
Halalt Band	2012				500,000
Halalt Band	2013				153,365
Halalt Band	2014				21,668
Heiltsuk	1980				150,000
Heiltsuk	1981				528,000
Heiltsuk	1982		24,385		395,615
Heiltsuk	1983				80,589
Heiltsuk	1984				1,061,709
Heiltsuk	1985				1,214,210
Heiltsuk	1986				212,552
Heiltsuk	1987		149,752		1,103,336
Heiltsuk	1988		200,370		1,084,108
Heiltsuk	1989				1,120,647
Heiltsuk	1990	103,811	1,049		381,669
Heiltsuk	1991	104,881	63,723		569,432
Heiltsuk	1992				1,119,164
Heiltsuk	1993		179,463		605,088
Heiltsuk	1994				1,078,355

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Heiltsuk	1995		141,883		1,039,897
Heiltsuk	1996	99,763	59,245		765,402
Heiltsuk	1997	98,974	1,000		956,916
Heiltsuk	1998	98,830	1,403		370,024
Heiltsuk	1999				1,015,301
Heiltsuk	2000				929,674
Heiltsuk	2001				1,079,608
Heiltsuk	2002				650,371
Heiltsuk	2003				567,957
Heiltsuk	2004				1,191,465
Heiltsuk	2005				1,015,000
Heiltsuk	2006				1,257,133
Heiltsuk	2007				1,031,062
Heiltsuk	2008				1,896,995
Heiltsuk	2009				2,146,598
Heiltsuk	2010				1,339,169
Heiltsuk	2011		161,662		2,073,182
Heiltsuk	2012		146,657		1,853,941
Heiltsuk	2013		168,786		1,801,646
Heiltsuk	2014				1,098,856
Heiltsuk	2015				975,106
Heiltsuk	2016				1,511,975
Heiltsuk	2017				1,230,078
Heiltsuk	2018				1,015,125
Inch Cr	1970				323,026
Inch Cr	1971				882,432
Inch Cr	1972				713,361
Inch Cr	1973				662,716
Inch Cr	1974				940,369
Inch Cr	1975				778,500
Inch Cr	1976		275,305		960,098
Inch Cr	1977		452,908		494,849
Inch Cr	1978	90,593	12,353		852,982
Inch Cr	1979	109,574	7,683		974,020
Inch Cr	1980	49,136	51,075		827,705
Inch Cr	1981	73,634	4,899		3,025,123
Inch Cr	1982	100,193	106,334		5,084,125
Inch Cr	1983	94,817	56,071		6,182,013
Inch Cr	1984		200,107		7,187,203
Inch Cr	1985	137,205	72,150		7,946,913
Inch Cr	1986	148,032	153,637		7,107,358
Inch Cr	1987	76,863	78,543		4,792,782
Inch Cr	1988	97,654	76,697		6,047,120
Inch Cr	1989	153,869	3,273		6,090,763
Inch Cr	1990	153,584	2,801		5,049,123
Inch Cr	1991	148,547	4,183		5,462,414
Inch Cr	1992	118,027	4,668		5,034,121
Inch Cr	1993	150,149	2,654		5,936,929
Inch Cr	1994	143,744	5,282		5,786,173
Inch Cr	1995	149,450	3,168		5,637,431
Inch Cr	1996	143,319	7,184		4,053,268
Inch Cr	1997	99,339	1,054		3,200,880
Inch Cr	1998	48,653	1,922		1,070,913
Inch Cr	1999	49,826	98		952,769
Inch Cr	2000	49,759	264		926,658
Inch Cr	2001	49,931	100		1,124,599
Inch Cr	2002				1,179,829
Inch Cr	2003				831,643
Inch Cr	2004				962,847

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Inch Cr	2005				1,035,282
Inch Cr	2006				1,096,694
Inch Cr	2007				1,105,850
Inch Cr	2008				1,216,110
Inch Cr	2009				1,033,325
Inch Cr	2010				735,302
Inch Cr	2011				2,305,151
Inch Cr	2012				3,084,417
Inch Cr	2013				2,665,791
Inch Cr	2014				2,553,468
Inch Cr	2015				1,400,581
Inch Cr	2016				1,606,819
Inch Cr	2017				1,876,040
Inch Cr	2018				1,839,980
Kitasoo Cr	1980				1,500
Kitasoo Cr	1981				2,000
Kitasoo Cr	1982				31,167
Kitasoo Cr	1983				89,500
Kitasoo Cr	1984				337,552
Kitasoo Cr	1985				184,649
Kitasoo Cr	1986				330,461
Kitasoo Cr	1987				426,680
Kitasoo Cr	1988				139,123
Kitasoo Cr	1989		99,016		376,574
Kitasoo Cr	1990		166,782		167,614
Kitasoo Cr	1991		97,099		244,778
Kitasoo Cr	1992		125,669		182,584
Kitasoo Cr	1993		109,524		372,986
Kitasoo Cr	1994		155,369		302,546
Kitasoo Cr	1995		179,719		381,721
Kitasoo Cr	1996		159,417		275,066
Kitasoo Cr	1997		119,314		504,663
Kitasoo Cr	1998		222,075		603,383
Kitasoo Cr	1999		224,171		862,631
Kitasoo Cr	2001				768,521
Kitasoo Cr	2002				730,282
Kitasoo Cr	2003				1,011,253
Kitasoo Cr	2004				1,267,482
Kitasoo Cr	2005				1,218,779
Kitasoo Cr	2006				1,126,482
Kitasoo Cr	2007				1,001,023
Kitasoo Cr	2008				1,227,453
Kitasoo Cr	2009				956,931
Kitasoo Cr	2010				714,709
Kitasoo Cr	2011				1,350,179
Kitasoo Cr	2012				826,609
Kitasoo Cr	2013				1,177,465
Kitasoo Cr	2014				1,171,221
Kitasoo Cr	2015				545,307
Kitasoo Cr	2016				705,013
Kitasoo Cr	2017				525,000
Kitimat R	1981				30,345
Kitimat R	1984		206,271		1,789,266
Kitimat R	1985	36,062	153,325		4,739,504
Kitimat R	1986		205,577		939,335
Kitimat R	1987		200,814		4,129,559
Kitimat R	1988		205,749		6,544,647
Kitimat R	1989		206,132		5,200,939
Kitimat R	1990		205,127		5,782,191

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Kitimat R	1991		205,512		6,216,818
Kitimat R	1992		102,853		4,251,186
Kitimat R	1993		204,334		5,690,109
Kitimat R	1994		180,129		5,208,995
Kitimat R	1995		180,195		5,468,890
Kitimat R	1996		161,983		4,835,642
Kitimat R	1997		179,466		5,647,656
Kitimat R	1998		211,842		6,129,609
Kitimat R	1999		200,263		4,141,409
Kitimat R	2000		201,679		4,336,637
Kitimat R	2001				4,921,186
Kitimat R	2002				4,957,773
Kitimat R	2003				4,338,437
Kitimat R	2004				4,334,899
Kitimat R	2005				4,809,420
Kitimat R	2006				4,622,504
Kitimat R	2007				3,380,600
Kitimat R	2008				1,457,826
Kitimat R	2009				3,675,243
Kitimat R	2010				1,688,600
Kitimat R	2011				2,214,441
Kitimat R	2012				1,778,747
Kitimat R	2013				1,701,765
Kitimat R	2014				
Kitimat R	2015				
Kitimat R	2016				
Kitimat R	2017				
Kitimat R	2018				1,635,975
L Qualicum R	1979		503,020		5,557,506
L Qualicum R	1980		242,134		7,362,881
L Qualicum R	1981		351,300		3,817,780
L Qualicum R	1982		280,757		25,287,050
L Qualicum R	1983		284,582		21,198,800
L Qualicum R	1984		296,003		24,000,187
L Qualicum R	1985		297,162		9,422,973
L Qualicum R	1986		250,618		43,731,909
L Qualicum R	1987		250,435		39,174,956
L Qualicum R	1988		252,049		37,247,379
L Qualicum R	1989		250,586		27,763,827
L Qualicum R	1990		250,269		42,433,479
L Qualicum R	1991		251,185		31,852,858
L Qualicum R	1992		251,074		42,216,634
L Qualicum R	1993				30,550,740
L Qualicum R	1994				31,937,880
L Qualicum R	1995				11,041,160
L Qualicum R	1996				8,897,163
L Qualicum R	1997				9,424,480
L Qualicum R	1998				15,812,240
L Qualicum R	1999		255,692		12,510,308
L Qualicum R	2000				5,817,520
L Qualicum R	2001		274,125		21,755,609
L Qualicum R	2002		250,007		10,941,493
L Qualicum R	2003				12,927,540
L Qualicum R	2004				28,972,400
L Qualicum R	2005				9,865,420
L Qualicum R	2006				23,886,500
L Qualicum R	2007				21,720,120
L Qualicum R	2008				14,774,280
L Qualicum R	2009				14,341,780

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
L Qualicum R	2010				7,721,140
L Qualicum R	2011				31,579,920
L Qualicum R	2012				31,175,740
L Qualicum R	2013				23,121,060
L Qualicum R	2014				4,247,761
L Qualicum R	2015				17,938,440
L Qualicum R	2016				45,304,800
L Qualicum R	2017				4,522,163
L Qualicum R	2018				4,910,020
Nanaimo R	1979				301,000
Nanaimo R	1980				901,000
Nanaimo R	1981				845,600
Nanaimo R	1982				724,000
Nanaimo R	1983				845,000
Nanaimo R	1984				774,078
Nanaimo R	1985				354,891
Nanaimo R	1987				470,037
Nanaimo R	1993				1,026,534
Nanaimo R	1994				132,650
Nanaimo R	1995				110,406
Nanaimo R	1996				381,968
Nanaimo R	1997				265,553
Nanaimo R	1998				456,727
Nanaimo R	1999				611,531
Nanaimo R	2000				622,000
Nanaimo R	2001				498,706
Nanaimo R	2002				649,387
Nanaimo R	2003				554,687
Nanaimo R	2004				793,184
Nanaimo R	2005				139,963
Nanaimo R	2006				463,202
Nanaimo R	2007				470,459
Nanaimo R	2008				491,482
Nanaimo R	2009				373,022
Nanaimo R	2010				216,901
Nanaimo R	2011				455,613
Nanaimo R	2012				409,069
Nanaimo R	2013				471,025
Nanaimo R	2014				963,030
Nanaimo R	2015				435,122
Nanaimo R	2016				463,337
Nanaimo R	2017				388,300
Nanaimo R	2018				399,712
Nitinat R	1980		159,338		2,180,530
Nitinat R	1981		295,788		26,882,744
Nitinat R	1982		181,894		8,250,244
Nitinat R	1983		292,022		16,991,964
Nitinat R	1984		255,908		25,970,817
Nitinat R	1985		201,020		17,386,810
Nitinat R	1986		307,550		16,269,130
Nitinat R	1987	53,201	252,537		11,866,862
Nitinat R	1988	77,072	304,836		16,286,800
Nitinat R	1989	141,644	430,781		23,356,068
Nitinat R	1990	50,285	259,685		23,122,279
Nitinat R	1991		250,367		30,281,966
Nitinat R	1992	102,813	268,151		23,839,296
Nitinat R	1993		264,101		
Nitinat R	1994		266,083		
Nitinat R	1995		256,402		

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Nitinat R	1996		264,940		
Nitinat R	1997		255,669		
Nitinat R	1998		354,957		
Nitinat R	1999				
Nitinat R	2000				
Nitinat R	2001				
Nitinat R	2002				
Nitinat R	2003				
Nitinat R	2004				
Nitinat R	2005				
Nitinat R	2006				
Nitinat R	2007				
Nitinat R	2008				
Nitinat R	2009				
Nitinat R	2010				
Nitinat R	2011				
Nitinat R	2012				
Nitinat R	2013				
Nitinat R	2014				
Nitinat R	2015				
Nitinat R	2016				
Nitinat R	2017				
Nitinat R	2018				
Orford R	1992	95,499	1,949		408,105
Orford R	1993	95,505	5,238		1,701,031
Orford R	1996				555,113
Orford R	1997				1,009,614
Orford R	1998				1,100,000
Orford R	1999				1,380,000
Orford R	2000				1,100,000
Orford R	2001				3,050,000
Orford R	2002				350,000
Orford R	2003				1,046,482
Orford R	2004				1,719,433
Orford R	2005				16,467
Orford R	2006				64,045
Orford R	2011				41,500
Orford R	2012				90,000
Orford R	2013				321,708
Orford R	2015				90,000
Orford R	2016				90,000
Pallant Cr	1978		199,718		928,273
Pallant Cr	1979		95,401		202,953
Pallant Cr	1980		100,076		2,911,436
Pallant Cr	1981	60,919	1,928		7,144,867
Pallant Cr	1982		165,597		3,681,940
Pallant Cr	1983	180,612	147,491		7,492,135
Pallant Cr	1984	149,437	182,870		10,001,540
Pallant Cr	1985	133,675	46,831		11,498,680
Pallant Cr	1986	87,032	99,883		9,656,486
Pallant Cr	1987	138,382	103,774		11,867,544
Pallant Cr	1988	137,989	99,862		12,832,673
Pallant Cr	1989	110,799	106,583		13,786,126
Pallant Cr	1990		295,520		13,049,721
Pallant Cr	1991		256,428		11,217,395
Pallant Cr	1992		295,238		8,985,785
Pallant Cr	1993		308,571		8,992,131
Pallant Cr	1994		114,758		13,889,623
Pallant Cr	1995		151,592		12,487,808

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Pallant Cr	1996		133,527		12,898,903
Pallant Cr	1997		31,803		13,685,840
Pallant Cr	1998				14,188,996
Pallant Cr	1999				22,222,545
Pallant Cr	2000				22,258,366
Pallant Cr	2001				9,964,496
Pallant Cr	2002				18,946,084
Pallant Cr	2003				9,151,688
Pallant Cr	2004				3,487,128
Pallant Cr	2005				14,057,962
Pallant Cr	2006				14,196,813
Pallant Cr	2007				22,830
Pallant Cr	2008				9,859,199
Powell R	1984				52,226
Powell R	1985				123,200
Powell R	1986				94,996
Powell R	1987				307,506
Powell R	1988				170,776
Powell R	1989				853,332
Powell R	1990				438,389
Powell R	1991				668,210
Powell R	1992				297,380
Powell R	1994	50,501			397,805
Powell R	1995				1,125,296
Powell R	1996	49,348	248		909,871
Powell R	1997	50,876	256		717,900
Powell R	1998				516,801
Powell R	1999				683,399
Powell R	2000				468,703
Powell R	2001				696,553
Powell R	2002				497,957
Powell R	2003				393,146
Powell R	2004				567,596
Powell R	2005				703,563
Powell R	2006				651,570
Powell R	2007				732,685
Powell R	2008				720,121
Powell R	2009				683,852
Powell R	2010				776,574
Powell R	2011				762,764
Powell R	2012				685,553
Powell R	2013				761,635
Powell R	2014				736,048
Powell R	2015				781,260
Powell R	2016				786,316
Powell R	2017				684,156
Powell R	2018				78,138
Puntledge R	1979				1,471,316
Puntledge R	1980	102,360	1,086		3,224,388
Puntledge R	1981	108,279	1,171		2,259,628
Puntledge R	1982	107,375	2,297		7,272,260
Puntledge R	1983	97,716	2,589		6,406,038
Puntledge R	1984	149,406	4,674		7,230,495
Puntledge R	1985	104,092	703		5,326,152
Puntledge R	1986	55,632	73,960		4,854,993
Puntledge R	1987	55,117	84,395		3,996,408
Puntledge R	1988		143,866		3,086,823
Puntledge R	1989		164,234		2,682,749
Puntledge R	1990	77,004	3,628		5,082,530

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Puntledge R	1991	66,339	7,287		5,123,326
Puntledge R	1992	54,106	30,434		4,830,465
Puntledge R	1993		100,188		3,683,428
Puntledge R	1994		99,862		4,932,769
Puntledge R	1995		100,763		4,521,260
Puntledge R	1996	100,939	11,465		3,777,382
Puntledge R	1997	68,848	12,566		5,688,034
Puntledge R	1998				4,534,410
Puntledge R	1999				3,910,758
Puntledge R	2000				3,811,529
Puntledge R	2001				3,505,768
Puntledge R	2002				3,587,387
Puntledge R	2003				3,666,560
Puntledge R	2004				2,982,699
Puntledge R	2005				3,771,550
Puntledge R	2006				3,934,536
Puntledge R	2007				2,842,105
Puntledge R	2008				1,745,365
Puntledge R	2009				2,986,351
Puntledge R	2010				2,871,036
Puntledge R	2011				3,204,635
Puntledge R	2012				2,660,844
Puntledge R	2013				2,683,984
Puntledge R	2014				2,664,720
Puntledge R	2015				2,490,411
Puntledge R	2016				2,635,535
Puntledge R	2017				2,430,138
Puntledge R	2018				2,197,122
Sechelt	1979				1,267,602
Sechelt	1982				38,000
Sechelt	1983				45,000
Sechelt	1984				44,800
Sechelt	1985				38,719
Sechelt	1986				60,799
Sechelt	1987				142,302
Sechelt	1988				131,495
Sechelt	1990				558,216
Sechelt	1991				105,771
Sechelt	1992				387,030
Sechelt	1993				139,445
Sechelt	1994				28,340
Sechelt	1995				9,195
Sechelt	1996				99,051
Sechelt	1997				5,140
Sechelt	1998				136,019
Sechelt	1999				75,010
Sechelt	2000				180,000
Sechelt	2001				331,250
Sechelt	2002				111,119
Sechelt	2004				574,830
Sechelt	2005				419,862
Sechelt	2008				48,797
Sechelt	2009				514,503
Sechelt	2011				16,831
Sliammon R	1977				30,380
Sliammon R	1978	25,876	3,165		849,959
Sliammon R	1979	46,504	7,320		696,176
Sliammon R	1980				940,000
Sliammon R	1981				990,000

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Sliammon R	1982				1,390,000
Sliammon R	1983		100,539		867,746
Sliammon R	1984		93,031		775,969
Sliammon R	1985		181,302		738,698
Sliammon R	1986				960,000
Sliammon R	1987				254,000
Sliammon R	1988				580,000
Sliammon R	1989				509,000
Sliammon R	1990				496,080
Sliammon R	1991				627,800
Sliammon R	1992				806,440
Sliammon R	1993		75,923		558,487
Sliammon R	1994	50,119	252		711,729
Sliammon R	1995	99,071	499		589,412
Sliammon R	1996	49,472	500		734,235
Sliammon R	1997	47,915	484		1,014,658
Sliammon R	1998				1,113,782
Sliammon R	1999	100,053			1,373,130
Sliammon R	2000	99,615	879		500,628
Sliammon R	2001				1,141,716
Sliammon R	2002		101,329		842,582
Sliammon R	2003				583,759
Sliammon R	2004				1,068,681
Sliammon R	2005				923,946
Sliammon R	2006				1,548,097
Sliammon R	2007				892,635
Sliammon R	2008				1,052,294
Sliammon R	2009				938,566
Sliammon R	2010				722,576
Sliammon R	2011				1,005,930
Sliammon R	2012				978,809
Sliammon R	2013				1,375,000
Sliammon R	2014				18,500
Sliammon R	2015				1,458,224
Sliammon R	2016				1,210,900
Sliammon R	2017				1,390,630
Sliammon R	2018				918,575
Snootli Cr	1978		72,234		77,550
Snootli Cr	1979		150,000		1,925,000
Snootli Cr	1980		212,000		2,606,400
Snootli Cr	1981		220,800		1,912,176
Snootli Cr	1982		180,461		3,579,849
Snootli Cr	1983		378,110		7,030,222
Snootli Cr	1984		418,787		8,011,996
Snootli Cr	1985		296,992		7,066,393
Snootli Cr	1986		300,386		7,125,751
Snootli Cr	1987		334,007		7,195,518
Snootli Cr	1988		303,699		7,475,942
Snootli Cr	1989		253,469		7,190,734
Snootli Cr	1990		226,408		7,119,571
Snootli Cr	1991		219,058		6,553,874
Snootli Cr	1992		223,009		6,968,662
Snootli Cr	1993		198,627		7,319,511
Snootli Cr	1994		197,247		6,495,212
Snootli Cr	1995		172,436		6,615,590
Snootli Cr	1996		293,950		6,332,728
Snootli Cr	1997		295,144		6,318,844
Snootli Cr	1998		204,194		6,317,022
Snootli Cr	1999		211,256		6,145,621

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Snootli Cr	2000		172,630		6,294,043
Snootli Cr	2001		195,690		6,665,138
Snootli Cr	2002		200,355		7,014,250
Snootli Cr	2003		201,578		6,689,194
Snootli Cr	2004				6,599,170
Snootli Cr	2005		122,489		7,205,228
Snootli Cr	2006		120,543		6,651,538
Snootli Cr	2007		105,444		6,994,768
Snootli Cr	2008		125,005		7,388,060
Snootli Cr	2009		112,564		5,896,250
Snootli Cr	2010		122,217		4,164,630
Snootli Cr	2011		134,606		6,738,121
Snootli Cr	2012		128,041		5,190,105
Snootli Cr	2013		116,671		6,562,505
Snootli Cr	2014		108,363		6,741,931
Snootli Cr	2015		106,300		6,738,902
Snootli Cr	2016		104,299		7,039,788
Snootli Cr	2017		104,719		6,863,776
Snootli Cr	2018		113,161		6,423,157
Tenderfoot Cr	1991				66,667
Tenderfoot Cr	1992				117,511
Tenderfoot Cr	1993				150,837
Tenderfoot Cr	1994				130,433
Tenderfoot Cr	1995				76,656
Tenderfoot Cr	1998				17,886
Tenderfoot Cr	1999				44,360
Tenderfoot Cr	2000				84,981
Tenderfoot Cr	2002				54,872
Tenderfoot Cr	2003				147,654
Tenderfoot Cr	2004				12,543
Tenderfoot Cr	2005				5,991
Tenderfoot Cr	2006				54,838
Tenderfoot Cr	2007				120,111
Tenderfoot Cr	2008				421,037
Tenderfoot Cr	2009				385,626
Tenderfoot Cr	2010				67,175
Tenderfoot Cr	2011				292,136
Tenderfoot Cr	2012				1,090,505
Tenderfoot Cr	2013				1,155,795
Tenderfoot Cr	2014				1,068,235
Tenderfoot Cr	2015				889,562
Tenderfoot Cr	2016				1,346,134
Tenderfoot Cr	2017				1,372,825
Tenderfoot Cr	2018				1,170,423
Thornton Cr	1976		158,472		776,101
Thornton Cr	1977		188,477		966,129
Thornton Cr	1978		145,038		1,242,054
Thornton Cr	1981		76,568		1,226,302
Thornton Cr	1982	87,218	5,499		281,856
Thornton Cr	1983	82,313	4,409		38,037
Thornton Cr	1984				288,960
Thornton Cr	1992				89,790
Thornton Cr	1993				90,511
Thornton Cr	1994				114,629
Thornton Cr	1995				5,186
Thornton Cr	1996				30,091
Thornton Cr	1997				260,000
Thornton Cr	1998				616,493
Thornton Cr	1999				223,017

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Thornton Cr	2000				47,254
Thornton Cr	2001				607,678
Thornton Cr	2002				636,951
Thornton Cr	2003				181,052
Thornton Cr	2004				718,135
Thornton Cr	2005				656,227
Thornton Cr	2006				109,617
Thornton Cr	2007				16,689
Thornton Cr	2008				234,173
Thornton Cr	2009				605,219
Thornton Cr	2010				204,936
Thornton Cr	2011				642,888
Thornton Cr	2012				43,742
Thornton Cr	2013				529,741
Thornton Cr	2014				685,921
Thornton Cr	2015				572,083
Thornton Cr	2016				274,816
Thornton Cr	2017				74,248
Thornton Cr	2018				376,543
Weaver Sp Ch	1965				982,000
Weaver Sp Ch	1966				227,000
Weaver Sp Ch	1967				471,000
Weaver Sp Ch	1968				2,703,000
Weaver Sp Ch	1969				3,230,000
Weaver Sp Ch	1970				1,240,000
Weaver Sp Ch	1971				1,758,000
Weaver Sp Ch	1972				12,507,000
Weaver Sp Ch	1973				4,294,000
Weaver Sp Ch	1974				6,182,000
Weaver Sp Ch	1975				6,239,000
Weaver Sp Ch	1976				5,862,000
Weaver Sp Ch	1977				1,649,000
Weaver Sp Ch	1978				2,390,000
Weaver Sp Ch	1979				3,060,000
Weaver Sp Ch	1980				1,872,000
Weaver Sp Ch	1981				2,810,000
Weaver Sp Ch	1982				3,670,000
Weaver Sp Ch	1983				4,430,000
Weaver Sp Ch	1984				1,684,893
Weaver Sp Ch	1985				1,978,135
Weaver Sp Ch	1986				234,765
Weaver Sp Ch	1987				774,942
Weaver Sp Ch	1988				579,715
Weaver Sp Ch	1989				931,467
Weaver Sp Ch	1990				1,971,547
Weaver Sp Ch	1991				364,458
Weaver Sp Ch	1992				1,394,386
Weaver Sp Ch	1993				2,669,594
Weaver Sp Ch	1994				2,743,046
Weaver Sp Ch	1995				2,501,500
Weaver Sp Ch	1996				1,852,603
Weaver Sp Ch	1997				3,308,542
Weaver Sp Ch	1998				3,227,000
Weaver Sp Ch	1999				3,224,000
Weaver Sp Ch	2000				2,500,917
Weaver Sp Ch	2001				1,484,980
Weaver Sp Ch	2002				1,910,384
Weaver Sp Ch	2003				1,658,827
Weaver Sp Ch	2004				1,557,606

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Weaver Sp Ch	2005				1,743,583
Weaver Sp Ch	2006				3,392,490
Weaver Sp Ch	2007				3,435,397
Weaver Sp Ch	2008				3,808,013
Weaver Sp Ch	2009				3,225,677
Weaver Sp Ch	2010				2,446,000
Weaver Sp Ch	2011				2,060,000
Weaver Sp Ch	2012				2,329,000
Weaver Sp Ch	2013				3,150,000
Weaver Sp Ch	2014				2,580,000
Weaver Sp Ch	2015				2,320,000
Weaver Sp Ch	2016				1,180,000
Weaver Sp Ch	2017				4,960,000
Weaver Sp Ch	2018				1,270,000
Other	1955				75,200
Other	1956				121,800
Other	1957				19,600
Other	1959				35,900
Other	1961				28,600
Other	1963				99,700
Other	1965				43,900
Other	1967				9,900
Other	1969				19,400
Other	1971				1,700
Other	1973				187,600
Other	1974				236,648
Other	1975				14,800
Other	1976				30,000
Other	1977				274,300
Other	1978				97,000
Other	1979				88,800
Other	1980				573,994
Other	1981				1,275,143
Other	1982				941,487
Other	1983				1,429,613
Other	1984				2,461,735
Other	1985				3,923,397
Other	1986				3,345,209
Other	1987				2,915,087
Other	1988				1,991,177
Other	1989				2,500,975
Other	1990				2,984,456
Other	1991				3,814,927
Other	1992				3,890,471
Other	1993				4,361,694
Other	1994				5,525,383
Other	1995				3,577,443
Other	1996				3,178,787
Other	1997				4,322,374
Other	1998				3,989,419
Other	1999				2,690,054
Other	2000				2,056,835
Other	2001				2,629,608
Other	2002				3,432,558
Other	2003				2,783,406
Other	2004				3,094,392
Other	2005				2,610,908
Other	2006				2,681,711
Other	2007				2,462,150

Project	Brood Year	Releases			
		CWT	Fin Clipped	Thermally Marked	Unmarked
Other	2008				3,087,030
Other	2009				2,189,395
Other	2010				1,615,712
Other	2011				1,871,992
Other	2012				2,574,669
Other	2013				2,719,855
Other	2014				1,643,162
Other	2015				2,203,550
Other	2016				2,105,969
Other	2017				2,553,873
Other	2018				826,179

Table 4 Number of Marked Chum Stocks and Release Numbers by Brood Year

Brood Year	Releases with Fin Clips	# Stocks with Fin Clips	Releases with CWT	# Stocks with CWT
1964	738,600	1		
1965	311,800	1		
1966	547,800	1		
1967	799,700	1		
1968	2,748,340	1		
1969	1,967,360	1		
1970	1,563,600	1		
1971	971,600	1		
1972	1,238,355	2		
1973	354,300	2		
1974	369,451	3		
1975	245,823	2		
1976	1,187,536	3		
1977	1,299,015	3		
1978	1,624,978	7	157,529	3
1979	1,821,654	8	191,041	4
1980	1,879,603	11	331,101	7
1981	1,746,875	12	461,912	7
1982	1,639,481	11	617,463	7
1983	1,944,387	14	617,337	7
1984	2,234,860	14	1,019,252	7
1985	1,985,404	13	559,918	7
1986	2,251,718	17	370,709	4
1987	2,083,122	16	500,794	6
1988	2,154,901	16	518,630	5
1989	2,146,144	12	694,969	6
1990	2,299,890	12	626,720	8
1991	2,105,493	13	422,439	5
1992	2,012,014	11	549,101	7
1993	2,021,012	15	344,541	4
1994	1,732,132	15	348,303	5
1995	1,896,444	16	337,994	4
1996	1,704,447	14	549,572	7
1997	1,530,179	12	468,585	7
1998	1,465,483	10	249,665	3
1999	1,358,141	10	149,879	2
2000	638,543	8	149,374	2
2001	991,317	8	49,931	1
2002	814,531	6		
2003	474,117	4		
2004	280,566	2		
2005	397,074	3		
2006	380,559	3		
2007	369,573	3		
2008	343,726	4		
2009	363,256	2		
2010	374,591	2		
2011	546,605	3		
2012	524,352	3		
2013	536,578	3		
2014	300,186	2		
2015	356,300	2		
2016	104,299	1		
2017	104,719	1		
2018	113,161	1		

Table 5 Average of % Poor Clips Released Across all Years

Stock	Adipose	LV	RV	ADLV	ADRV
Big Qualicum R	4%	6%	6%	4%	5%
Chilliwack R		0.3%	0.2%	0.2%	
Conuma R		2%	4%	5%	3%
Deserted R/NWVI			5%	10%	5%
Fish Cr+Airport Ch		6%	2%	3%	1%
Hirsch Cr		1%	1%	5%	3%
Humphreys Cr				10%	7%
Kildala R			10%	6%	4%
Kildala+Dala				8%	8%
Kimsquit R				2%	
Kitasoo Cr		3%	3%	2%	
Kitimat Low+Hirsch		8%	3%		
Kitimat R		4%	2%		8%
L Qualicum R		6%		4%	4%
Mathers Cr		2%	4%		
Necleetsconnay R			2%	1%	3%
Nitinat R		1%	1%	1%	1%
Pallant Cr		4%	2%	4%	11%
Puntledge R				2%	
Saloompt R		3%	2%		3%
Snootli Cr	2%	2%	4%	6%	5%
Sucwoa R		2%	4%	7%	1%
Thornton Cr		4%	1%		
Thorsen Cr/CCST		5%	5%	1%	
Tlupana R		13%	4%		4%

Table 6 Enhanced Releases (Marked and Unmarked) by Production Area, Conservation Unit, Project, Stock and Brood Year

Note: Release Code is an internationally standard (RMIS) unique identifier assigned to a release group, which includes either the fin clip code, the CWT code or, if unmarked and untagged, the letters NO, followed by the species code and the last two digits of the brood year.

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
YUKN	DONJEK-KLUANE	Kluane Sch	Kluane R	Summer	1989	NOCM8999	990	-	990
					1990	NOCM9077	270	-	270
					1991	NOCM91125	450	-	450
					1992	NOCM92159	500	-	500
					1993	NOCM93129	490	-	490
					1994	NOCM9448	850	-	850
					1996	NOCM96147	800	-	800
					1997	NOCM97126	942	-	942
					1998	NOCM9839	800	-	800
					1999	NOCM99148	300	-	300
					2001	NOCM0183	624	-	624
					2002	NOCM02179	196	-	196
					2003	NOCM0364	100	-	100
					2004	NOCM0458	360	-	360
					2005	NOCM05202	340	-	340
					2008	NOCM08126	975	-	975
					2017	NOCM17145	489	-	489
					2018	NOCM18145	535	-	535
TRAN	(blank)	Old Crow Sch	Porcupine R	Fall	1991	NOCM91126	40	-	40
					1993	NOCM93128	280	-	280
					1997	NOCM97156	350	-	350
					2017	NOCM17146	60	-	60
NASS	PORTLAND CANAL-OBSERVATORY	Kincolith R	Kincolith R	Fall	1996	NOCM9606	5,282	-	5,282
					1997	NOCM9770	2,000	-	2,000
					1998	NOCM98155	3,905	-	3,905
					2002	NOCM02162	6,624	-	6,624
					2005	NOCM05191	15,581	-	15,581
					1991	NOCM91148	5,000	-	5,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NASS	PORTLAND CANAL-OBSERVATORY	Kincolith R	Stagoo Cr	Summer	1994	NOCM94121	160,000	-	160,000
					1995	NOCM95144	10,000	-	10,000
QCI	EAST HG	Lyell Is	Powrivco Cr	Fall	1980	NOCM8028	30,000	-	30,000
					1981	NOCM8135	25,600	-	25,600
					1982	NOCM8256	20,000	-	20,000
					1985	NOCM8582	18,500	-	18,500
						NOCM8583	5,000	-	5,000
					1986	NOCM8650	11,500	-	11,500
						NOCM8651	11,500	-	11,500
		Mathers Cr	Mathers Cr	Fall	1980	ADLV8004	50,567	46,039	96,606
						ADRV8002	47,511	47,536	95,047
						NOCM8005	200,252	-	200,252
					1981	LV8107	396,316	43,281	439,597
						RV8108	38,279	40,676	78,955
					1982	NOCM8214	267,500	-	267,500
		Pallant Cr	Mathers Cr	Fall	1983	LV8312	528,306	80,642	608,948
					1985	LV8507	313,677	17,760	331,437
						NOCM8516	993,497	-	993,497
						RV8506	421,569	25,544	447,113
					1986	LV8605	486,949	49,882	536,831
						RV8607	399,094	49,937	449,031
					1987	LV8706	505,064	50,898	555,962
						RV8704	290,763	51,022	341,785
					1988	LV8808	464,339	49,179	513,518
						RV8807	656,830	49,365	706,195
					1989	LV8904	2,410,317	50,484	2,460,801
						RV8904	2,562,422	50,114	2,612,536
					1990	NOCM9011	1,843,703	-	1,843,703
						RV9002	2,014,032	80,497	2,094,529
					1991	RV9104	920,812	79,188	1,000,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Pallant Cr	Mathers Cr	Fall	1992	NOCM9210	415,807	-	415,807
						RV9206	1,975,302	73,601	2,048,903
					1993	RV9307	2,854,966	76,673	2,931,639
					1994	NOCM9440	2,342,530	-	2,342,530
						RV9409	2,016,372	78,170	2,094,542
					1995	RV9505	2,651,003	75,218	2,726,221
					1996	RV9608	2,527,287	76,698	2,603,985
					1997	NOCM9766	4,282,152	-	4,282,152
					1998	NOCM98198	3,171,827	-	3,171,827
					1999	NOCM99200	3,553,791	-	3,553,791
					2000	NOCM00166	4,056,005	-	4,056,005
					2001	NOCM01193	410,365	-	410,365
					2002	NOCM0294	718,445	-	718,445
			Pallant Cr	Fall	1978	ADRV7802	16,781	76,515	93,296
						LV7804	821,035	75,699	896,734
						RV7802		30,723	30,723
					1979	LV7903	202,953	95,401	298,354
					1980	LV8006	344,316	49,694	394,010
						NOCM8006	2,229,614	-	2,229,614
						RV8006	337,506	50,382	387,888
					1981	022144	362,669	30,593	393,262
						022146	371,832	25,817	397,649
						022148		6,437	6,437
						NOCM8109	6,410,041	-	6,410,041
					1982	ADLV8206	890,866	52,556	943,422
						ADRV8204	871,653	55,983	927,636
						LV8207	1,600,098	57,381	1,657,479
						NOCM8215	319,000	-	319,000
						022733	351,998	40,208	392,206
					1983	022734	363,955	18,738	382,693

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Pallant Cr	Pallant Cr	Fall	1983	022735	354,159	39,603	393,762
						022736	357,535	38,293	395,828
						022737	371,478	36,693	408,171
						022738	361,462	32,153	393,615
						NOCM8315	4,448,705	-	4,448,705
						RV8310	353,627	42,683	396,310
					1984	023236	435,444	37,290	472,734
						023237	452,449	42,464	494,913
						023238	455,926	42,425	498,351
						023239	1,515,935	40,600	1,556,535
						ADLV8405	449,963	45,202	495,165
						ADRV8404	432,179	42,134	474,313
						LV8406	463,123	40,933	504,056
						NOCM8416	2,055,365	-	2,055,365
						NOCM8417	525,755	-	525,755
						NOCM8423	1,738,583	-	1,738,583
						RV8406	1,475,031	43,046	1,518,077
					1985	023507	262,228	15,463	277,691
						023508	256,395	15,119	271,514
						023509	264,348	15,588	279,936
						023510	326,596	15,594	342,190
						023511	336,062	16,046	352,108
						023512	289,170	13,807	302,977
						023908	61,833	15,090	76,923
						024002	62,583	15,273	77,856
						024003	63,759	15,560	79,319
					1985	NOCM8517	6,460,138	-	6,460,138
						NOCM8518	495,063	-	495,063
						NOCM8519	149,162	-	149,162
						NOCM8520	742,262	-	742,262

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Pallant Cr	Pallant Cr	Fall	1986	024462	255,761	13,078	268,839
						024463	250,004	12,758	262,762
						024501	309,444	15,791	325,235
						024502	275,136	15,326	290,462
						024503	277,812	15,538	293,350
						024504	278,813	15,468	294,281
						NOCM8609	19,018	-	19,018
						NOCM8610	1,993,012	-	1,993,012
						NOCM8611	1,342,180	-	1,342,180
						NOCM8612	3,768,400	-	3,768,400
					1987	024633	360,266	14,701	374,967
						024634	392,746	15,847	408,593
						024635	395,775	16,002	411,777
						024636	375,971	15,721	391,692
						025315	378,287	15,125	393,412
						025316	410,056	16,228	426,284
						025317	405,239	15,832	421,071
						025318	379,278	15,853	395,131
						025411	390,326	16,230	406,556
						NOCM8709	490,926	-	490,926
						NOCM8710	1,160,094	-	1,160,094
						NOCM8711	1,374,946	-	1,374,946
						NOCM8712	3,488,723	-	3,488,723
						NOCM87132	1,067,781	-	1,067,781
					1988	024622	359,146	13,859	373,005
						024623	391,830	15,276	407,106
						024624	422,821	16,152	438,973
						024625	503,575	15,834	519,409
						024626	506,724	15,933	522,657
						024627	526,390	16,220	542,610

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Pallant Cr	Pallant Cr	Fall	1988	024641	379,893	15,309	395,202
						024642	384,079	15,478	399,557
						024643	395,259	16,091	411,350
						NOCM8816	204,629	-	204,629
						NOCM8817	797,135	-	797,135
						NOCM8818	414,516	-	414,516
						NOCM8819	822,288	-	822,288
						NOCM8820	1,254,405	-	1,254,405
						NOCM8821	1,596,925	-	1,596,925
						NOCM8822	422,334	-	422,334
						NOCM8823	384,678	-	384,678
						NOCM8824	1,944,032	-	1,944,032
					1989	020821	2,099,141	50,194	2,149,335
						020822	2,918,998	54,305	2,973,303
						020823	2,512,747	13,218	2,525,965
						NOCM8920	848,252	-	848,252
						NOCM8921	433,316	-	433,316
					1990	ADLV9003	2,459,976	68,402	2,528,378
						ADRV9004	3,029,629	69,046	3,098,675
						LV9002	2,934,876	80,773	3,015,649
						NOCM9009	381,682	-	381,682
						NOCM9010	382,625	-	382,625
					1991	ADLV9104	1,885,343	74,001	1,959,344
						ADRV9103	2,724,513	25,982	2,750,495
						LV9105	2,740,179	79,247	2,819,426
						NOCM9113	2,944,558	-	2,944,558
					1992	ADLV9202	1,918,552	76,022	1,994,574
						ADRV9201	2,402,039	78,916	2,480,955
						LV9202	2,264,844	75,940	2,340,784
					1993	ADLV9304	1,935,413	78,021	2,013,434

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Pallant Cr	Pallant Cr	Fall	1993	ADRV9303	1,963,570	82,306	2,045,876
						LV9312	2,234,989	74,764	2,309,753
					1994	ADRV9405	3,887,697	12,086	3,899,783
						LV9410	4,004,002	62,490	4,066,492
						NOCM9438	135,668	-	135,668
						NOCM9439	1,465,366	-	1,465,366
					1995	LV9505	4,266,664	39,422	4,306,086
						LV9506	5,565,908	41,185	5,607,093
					1996	LV9605	9,853,710	59,376	9,913,086
						NOCM96103	515,359	-	515,359
					1997	LV9702	4,659,501	31,803	4,691,304
						NOCM9765	4,744,187	-	4,744,187
					1998	NOCM98197	11,017,169	-	11,017,169
					1999	NOCM99201	18,668,754	-	18,668,754
					2000	NOCM00167	18,202,361	-	18,202,361
					2001	NOCM01195	9,554,131	-	9,554,131
					2002	NOCM0295	18,227,639	-	18,227,639
					2003	NOCM0340	9,151,688	-	9,151,688
					2004	NOCM0444	3,487,128	-	3,487,128
					2005	NOCM05207	14,057,962	-	14,057,962
					2006	NOCM06142	14,196,813	-	14,196,813
					2007	NOCM0737	22,830	-	22,830
					2008	NOCM0801	9,859,199	-	9,859,199
		Sachs Cr	Haans Cr	Fall	1984	NOCM8462	990	-	990
					1985	NOCM8572	3,000	-	3,000
		Sewell In Strms	Big Goose Cr	Fall	1980	NOCM8025	800	-	800
					1982	NOCM8244	75,000	-	75,000
					1983	NOCM8343	40,000	-	40,000
					1984	NOCM8452	20,000	-	20,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Sewell In Strms	Big Goose Cr	Fall	1985	NOCM8560	49,000	-	49,000
					1986	NOCM8636	30,000	-	30,000
					1987	NOCM8771	135,000	-	135,000
						NOCM8772	10,000	-	10,000
			Clint Cr/ QCI	Fall	1980	NOCM8026	74,800	-	74,800
					1981	NOCM8126	25,000	-	25,000
					1991	NOCM91124	25,090	-	25,090
					1992	NOCM92142	29,000	-	29,000
					1993	NOCM9331	45,878	-	45,878
			Dana Cr	Fall	2002	NOCM02208	45,000	-	45,000
					2003	NOCM0336	12,500	-	12,500
			Dass Cr	Fall	2002	NOCM02209	24,600	-	24,600
					2003	NOCM0337	17,000	-	17,000
					2004	NOCM0475	20,497	-	20,497
					2005	NOCM05205	12,147	-	12,147
					2006	NOCM06133	3,500	-	3,500
			L Goose Cr	Fall	1983	NOCM8344	41,500	-	41,500
					1984	NOCM8453	20,000	-	20,000
					1985	NOCM8559	46,000	-	46,000
					1986	NOCM8635	33,000	-	33,000
			Sewell Hd Cr	Fall	1983	NOCM8345	15,000	-	15,000
					1984	NOCM8454	20,000	-	20,000
					1985	NOCM8561	15,000	-	15,000
					1986	NOCM8637	47,000	-	47,000
			Sewell In Strms	Fall	1989	NOCM8947	78,841	-	78,841
					1990	NOCM9068	70,000	-	70,000
					1991	NOCM9171	25,000	-	25,000
			Thorsen Cr/QCI	Fall	2001	NOCM01105	58,900	-	58,900
					2002	NOCM02207	37,000	-	37,000
					2003	NOCM0338	4,000	-	4,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	EAST HG	Sewell In Strms	Thorsen Cr/QCI	Fall	2004	NOCM0476	12,147	-	12,147
					2005	NOCM05206	20,497	-	20,497
			Waterfall Cr	Fall	1979	NOCM7916	25,000	-	25,000
					1980	NOCM8024	25,000	-	25,000
					1988	NOCM8882	135,000	-	135,000
					1995	NOCM9591	25,000	-	25,000
						NOCM9592	6,000	-	6,000
					1996	NOCM96124	52,000	-	52,000
	SKIDEGATE	Gore Brk	Gore Brk	Fall	1981	NOCM8134	9,500	-	9,500
		Haida Gwaii Sch	Honna R	Fall	1987	NOCM8764	3,000	-	3,000
						NOCM8765	64	-	64
			Tarundl Cr	Fall	1986	NOCM8681	7,500	-	7,500
						RV8621		70	70
						RV8622		65	65
		Jarvis Cr	Tarundl Cr	Fall	1984	NOCM8469	1,650	-	1,650
		Northern Trollers	Cameron Cr	Fall	2002	NOCM02205	9,000	-	9,000
					2004	NOCM04104	7,862	-	7,862
						NOCM04105	10,000	-	10,000
					2007	NOCM07156	6,494	-	6,494
					2008	NOCM0843	7,739	-	7,739
			Crabapple Cr	Fall	1996	NOCM96148	100,232	-	100,232
						NOCM96149	15,625	-	15,625
						NOCM96150	22,878	-	22,878
					2006	NOCM06137	800	-	800
					2007	NOCM07157	2,554	-	2,554
					2008	NOCM0844	595	-	595
			Deena Cr	Fall	2004	NOCM0470	9,495	-	9,495
						NOCM0471	13,800	-	13,800
					2006	NOCM06134	22,667	-	22,667
						NOCM06135	35,366	-	35,366

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	SKIDEGATE	Northern Trollers	Deena Cr	Fall	2006	NOCM06136	35,164	-	35,164
					2007	NOCM07158	57,028	-	57,028
					2008	NOCM0845	31,035	-	31,035
						NOCM0846	31,072	-	31,072
						NOCM0847	9,507	-	9,507
					2010	NOCM1011	35,569	-	35,569
						NOCM1012	13,005	-	13,005
					2011	NOCM1196	28,800	-	28,800
					2012	NOCM1268	50,443	-	50,443
						NOCM1269	34,978	-	34,978
					2014	NOCM1479	21,783	-	21,783
						NOCM1480	15,400	-	15,400
					2015	NOCM1530	43,310	-	43,310
						NOCM1531	29,931	-	29,931
					2016	NOCM16101	29,364	-	29,364
						NOCM16102	32,917	-	32,917
					2017	NOCM17131	22,500	-	22,500
						NOCM17132	23,034	-	23,034
						NOCM17133	36,414	-	36,414
					2018	NOCM1855	22,500	-	22,500
						NOCM1856	16,595	-	16,595
					2018	NOCM1857	45,000	-	45,000
			MacMillan Cr	Fall	2001	NOCM01106	12,000	-	12,000
					2002	NOCM02206	9,000	-	9,000
					2004	NOCM0469	550	-	550
			Slatechuck Cr	Fall	1989	NOCM8995	26,801	-	26,801
					1990	NOCM9095	50,000	-	50,000
					1991	NOCM91123	59,000	-	59,000
						NOCM9172	88,000	-	88,000
					1992	NOCM92143	60,000	-	60,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	SKIDEGATE	Northern Trollers	Slatechuck Cr	Fall	1992	NOCM92144	84,000	-	84,000
					1993	NOCM9332	75,021	-	75,021
					1994	NOCM94105	52,250	-	52,250
						NOCM94106	69,000	-	69,000
					1995	NOCM9593	47,800	-	47,800
						NOCM9594	87,200	-	87,200
					1997	NOCM97129	60,472	-	60,472
					1998	NOCM98162	35,000	-	35,000
					2011	NOCM1197	28,570	-	28,570
					2012	NOCM1270	36,498	-	36,498
						NOCM1271	10,116	-	10,116
					2015	NOCM1532	22,500	-	22,500
						NOCM1533	26,875	-	26,875
						NOCM1534	22,301	-	22,301
					2016	NOCM16103	45,060	-	45,060
						NOCM16104	24,037	-	24,037
					2017	NOCM17134	50,843	-	50,843
						NOCM17135	22,500	-	22,500
					2018	NOCM1858	33,660	-	33,660
						NOCM1859	25,103	-	25,103
					1985	NOCM8571	4,500	-	4,500
					1986	NOCM8644	60,000	-	60,000
					1987	NOCM8770	75,000	-	75,000
					1988	NOCM88103	33,000	-	33,000
		Sewell In Strms	MacMillan Cr	Fall	2000	NOCM00129	15,135	-	15,135
		Skidegate	Deena Cr	Fall	1986	NOCM8629	23,640	-	23,640
					1987	NOCM8743	23,222	-	23,222
					1988	NOCM8899	86,911	-	86,911
					1989	NOCM8976	31,492	-	31,492
					1990	NOCM90142	71,000	-	71,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
QCI	SKIDEGATE	Skidegate	Deena Cr	Fall	1993	NOCM9342	70,000	-	70,000
					1994	NOCM94104	410,000	-	410,000
			Honna R	Fall	1985	NOCM8551	10,476	-	10,476
					1986	NOCM8628	34,227	-	34,227
					1987	NOCM8741	96,545	-	96,545
					1988	NOCM88100	31,872	-	31,872
					1990	NOCM90143	51,000	-	51,000
					1993	NOCM9343	40,000	-	40,000
			Tarundl Cr	Fall	1984	NOCM8445	500	-	500
					1985	NOCM8550	27,508	-	27,508
					1986	NOCM8630	2,257	-	2,257
					1987	NOCM8742	113,441	-	113,441
					1988	NOCM8898	18,117	-	18,117
					1989	NOCM8955	14,263	-	14,263
					1990	NOCM90144	70,000	-	70,000
					1993	NOCM9341	45,000	-	45,000
	WEST HAIDA GWAII	Gold Cr	Gold Cr	Fall	1990	NOCM9094	20,000	-	20,000
					1993	NOCM9330	37,100	-	37,100
					1994	NOCM94103	97,000	-	97,000
					1995	NOCM9548	88,000	-	88,000
	(blank)	Charlie Hartie Cr	Charlie Hartie Cr	Fall	1982	NOCM8257	3,700	-	3,700
		Haida Gwaii Sch	Charlie Hartie Cr	Fall	1984	NOCM8484	3,500	-	3,500
					1985	NOCM85109	1,000	-	1,000
		Jarvis Cr	Charlie Hartie Cr	Fall	1983	NOCM8364	3,200	-	3,200
			Jarvis Cr	Fall	1985	NOCM8581	19,950	-	19,950
SKNA	LOWER SKEENA	Eby Street	Zymacord R	Fall	1988	NOCM8897	19,000	-	19,000
					1989	NOCM8954	8,000	-	8,000
		Kitsumkalum	Andesite Cr	Fall	1998	NOCM98169	115,943	-	115,943
					1999	NOCM99187	20,679	-	20,679
		Kitsumkalum R	Andesite Cr	Fall	1986	NOCM8622	98,509	-	98,509

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SKNA	LOWER SKEENA	Kitsumkalum R	Andesite Cr	Fall	1987	NOCM8725	131,834	-	131,834
					1988	NOCM8874	165,657	-	165,657
					1989	NOCM8942	49,235	-	49,235
	(blank)	Eby Street	Kofoed Brk	Fall	1988	NOCM8896	19,000	-	19,000
					1989	NOCM8975	3,000	-	3,000
RIVR	WANNOCK	Oweekeno	Wannock R	Fall	1984	NOCM8447	74,167	-	74,167
					1986	NOCM8697	18,181	-	18,181
						NOCM8698	252,819	-	252,819
NCST	DOUGLAS-GARDNER	Kitimat R	Bish Cr	Summer	1985	NOCM8513	712,921	-	712,921
					1986	NOCM8606	232,122	-	232,122
					1987	NOCM8704	315,184	-	315,184
					1988	NOCM8813	647,806	-	647,806
					1989	NOCM8908	373,827	-	373,827
					1990	NOCM9006	775,949	-	775,949
					1991	NOCM9105	346,484	-	346,484
					1992	NOCM9202	943,476	-	943,476
			Dala R	Summer	1984	NOCM8414	420,000	-	420,000
					1985	NOCM8514	793,548	-	793,548
					1987	NOCM8705	408,770	-	408,770
					1988	NOCM8814	503,095	-	503,095
					1989	NOCM8909	695,976	-	695,976
					1990	NOCM9007	118,025	-	118,025
					1991	NOCM9106	364,230	-	364,230
					1992	NOCM9203	762,645	-	762,645
			Hirsch Cr	Summer	1984	NOCM8413	312,745	-	312,745
					1985	NOCM8511	833,333	-	833,333
					1988	ADRV8802	801,401	53,067	854,468
					1989	NOCM8911	682,127	-	682,127
					1990	ADRV9003	832,140	105,069	937,209
					1991	ADLV9102	808,797	105,407	914,204

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NCST	DOUGLAS-GARDNER	Kitimat R	Hirsch Cr	Summer	1992	RV9201	787,791	104,211	892,002
					1993	ADRV9301	1,339,159	102,856	1,442,015
					1994	ADRV9401	912,846	103,603	1,016,449
					1995	NOCM9523	1,327,860	-	1,327,860
					1996	NOCM9625	1,275,273	-	1,275,273
					1997	NOCM9764	1,247,823	-	1,247,823
					1998	LV9801	1,314,656	100,049	1,414,705
					1999	LV9901	759,488	100,903	860,391
					2000	LV0001	748,756	101,947	850,703
					2001	NOCM0130	1,118,088	-	1,118,088
					2002	NOCM0289	973,911	-	973,911
					2003	NOCM0314	962,699	-	962,699
					2004	NOCM0487	884,912	-	884,912
					2005	NOCM0518	1,112,264	-	1,112,264
					2006	NOCM0669	1,025,497	-	1,025,497
					2007	NOCM0731	990,066	-	990,066
					2009	NOCM0978	1,067,932	-	1,067,932
			Humphreys Cr	Summer	1984	ADLV8403	155,328	28,319	183,647
						ADRV8402	174,364	26,998	201,362
					1985	NOCM8512	436,207	-	436,207
					1988	NOCM8815	864,053	-	864,053
					1989	NOCM8910	322,336	-	322,336
			Kildala R	Summer	1984	NOCM8415	295,000	-	295,000
					1985	RV8504	741,826	83,434	825,260
					1987	ADLV8702	367,263	53,894	421,157
					1988	ADLV8802	691,603	52,661	744,264
					1989	ADRV8903	572,435	106,934	679,369
					1990	NOCM9008	263,633	-	263,633
					1991	NOCM9107	436,665	-	436,665
					1992	NOCM9204	776,686	-	776,686

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NCST	DOUGLAS-GARDNER	Kitimat R	Kildala R	Summer	1993	NOCM9312	681,289	-	681,289
					1994	NOCM9408	596,142	-	596,142
					1995	ADRV9502	635,613	104,246	739,859
					1996	ADRV9603	591,725	103,787	695,512
					1997	ADRV9701	650,809	102,502	753,311
					1998	NOCM9829	793,004	-	793,004
			Kildala+Dala	Summer	1986	ADLV8603		50,901	50,901
						ADRV8604		54,485	54,485
			Kitimat Low+Hirsch	Summer	1986	LV8603	301,990	54,739	356,729
						RV8605	301,991	51,718	353,709
					1987	NOCM8706	972,533	-	972,533
			Kitimat R	Summer	1981	NOCM8108	30,345	-	30,345
					1984	LV8403	75,000	79,853	154,853
						RV8404	347,645	80,285	427,930
					1985	023660	214,328	37,761	252,089
						ADRV8502	230,698	40,645	271,343
						LV8506	218,784	38,546	257,330
						NOCM8510	546,860	-	546,860
					1987	ADRV8702	1,158,683	46,865	1,205,548
						LV8704	901,863	105,318	1,007,181
					1988	LV8806	3,033,825	102,885	3,136,710
					1989	LV8902	2,551,575	101,861	2,653,436
					1990	RV9003	3,790,797	101,705	3,892,502
					1991	LV9103	4,258,724	102,023	4,360,747
					1992	NOCM9201	979,230	-	979,230
					1993	RV9302	3,669,521	101,618	3,771,139
					1994	RV9402	3,699,425	77,108	3,776,533
					1995	RV9504	3,503,411	77,955	3,581,366
					1996	RV9603	2,968,351	58,489	3,026,840
					1997	RV9701	3,749,024	76,964	3,825,988

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NCST	DOUGLAS-GARDNER	Kitimat R	Kitimat R	Summer	1998	RV9802	4,020,702	113,040	4,133,742
					1999	RV9901	3,380,279	101,002	3,481,281
					2000	RV0001	3,587,881	99,732	3,687,613
					2001	NOCM0129	3,803,098	-	3,803,098
					2002	NOCM0288	3,983,862	-	3,983,862
					2003	NOCM0312	3,375,738	-	3,375,738
					2004	NOCM0486	3,449,987	-	3,449,987
					2005	NOCM0519	3,697,156	-	3,697,156
					2006	NOCM0668	3,597,007	-	3,597,007
					2007	NOCM0743	2,390,534	-	2,390,534
					2008	NOCM0826	1,457,826	-	1,457,826
					2009	NOCM0979	2,607,311	-	2,607,311
					2010	NOCM1001	1,688,600	-	1,688,600
					2011	NOCM1109	2,214,441	-	2,214,441
					2012	NOCM1202	1,778,747	-	1,778,747
					2013	NOCM1315	1,701,765	-	1,701,765
					2014	NOCM14101	848,671	-	848,671
						NOCM14102	786,079	-	786,079
					2015	NOCM1587	1,631,143	-	1,631,143
					2016	NOCM1642	1,766,658	-	1,766,658
					2017	NOCM1740	882,536	-	882,536
					2018	NOCM1815	1,635,975	-	1,635,975
	HECATE LOWLANDS	Oona R	Kumealon Cr	Fall	2005	NOCM0536	278	-	278
					2006	NOCM0682	3,718	-	3,718
						NOCM0683	3,717	-	3,717
					2007	RV0701		12,800	12,800
					2008	LV0802		920	920
			Pa'aat R	Fall	2004	NOCM04123	250	-	250
	LOWER SKEENA	Oldfield Cr	Ecstall Cr	Fall	1986	NOCM8670	6,000	-	6,000
	PORTLAND INLET	Oldfield Cr	Lachmach R	Fall	2013	NOCM1349	8,500	-	8,500

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NCST	SKEENA ESTUARY	Oldfield Cr	Silver Cr/NCST	Fall	2009	NOCM0954	5,249	-	5,249
CCST	BELLA COOLA RIVER-LATE	Bella Coola R	Bella Coola R Low	Fall	1983	NOCM8355	42,000	-	42,000
					1984	NOCM8478	2,700	-	2,700
					1991	NOCM9143	9,725	-	9,725
					1992	NOCM9241	985	-	985
					1993	NOCM9301	16,347	-	16,347
					1994	NOCM9413	19,376	-	19,376
					1995	NOCM9509	6,419	-	6,419
					1996	NOCM96110	36,000	-	36,000
					1997	NOCM9701	1,506	-	1,506
					1998	NOCM9807	17,236	-	17,236
		Snootli Cr	Fish Cr	Summer	1979	LV7904	624,000	75,000	699,000
			Fish Cr+Airport Ch	Summer	1980	ADLV8005	192,767	50,000	242,767
						LV8007	239,033	62,000	301,033
					1981	ADLV8105	208,004	34,950	242,954
						LV8108	208,005	35,500	243,505
					1982	NOCM8217	25,000	-	25,000
					1983	NOCM8301	1,628,763	-	1,628,763
					1984	NOCM8418	486,828	-	486,828
						NOCM8419	2,022,712	-	2,022,712
					1985	ADLV8503	840,158	75,067	915,225
						ADRV8505	588,654	75,195	663,849
						NOCM8522	300,000	-	300,000
					1986	NOCM8619	522,412	-	522,412
						NOCM8620	155,175	-	155,175
						NOCM8621	1,143,442	-	1,143,442
					1987	NOCM87126	410,000	-	410,000
						NOCM87127	1,037,442	-	1,037,442
						NOCM8713	500,000	-	500,000
					1988	NOCM8834	500,000	-	500,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Fish Cr+Airport Ch	Summer	1988	NOCM8835	310,000	-	310,000
						NOCM8836	1,044,367	-	1,044,367
					1989	NOCM8928	500,000	-	500,000
						NOCM8929	370,000	-	370,000
						NOCM8930	988,549	-	988,549
					1990	NOCM9018	496,948	-	496,948
						NOCM9019	349,067	-	349,067
						NOCM9020	1,074,147	-	1,074,147
					1991	NOCM9120	460,905	-	460,905
						NOCM9121	254,715	-	254,715
						NOCM9122	1,197,183	-	1,197,183
					1992	NOCM9218	467,914	-	467,914
						NOCM9219	144,045	-	144,045
						NOCM9220	1,208,251	-	1,208,251
					1993	NOCM9325	531,067	-	531,067
						NOCM9326	1,401,853	-	1,401,853
					1994	NOCM9411	399,354	-	399,354
						NOCM9412	1,305,085	-	1,305,085
					1995	NOCM9526	428,045	-	428,045
						NOCM9527	1,307,458	-	1,307,458
					1996	NOCM96109	1,668,297	-	1,668,297
					1997	NOCM9777	1,693,892	-	1,693,892
					1998	RV9804	1,507,653	100,690	1,608,343
					1999	LV9903	1,367,282	106,106	1,473,388
					2000	LV0002	1,634,546	100,346	1,734,892
					2001	NOCM0127	1,654,083	-	1,654,083
					2002	NOCM02109	1,800,834	-	1,800,834
					2003	NOCM0316	1,776,924	-	1,776,924
					2004	NOCM04126	1,586,063	-	1,586,063
					2005	NOCM0523	1,763,205	-	1,763,205

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Fish Cr+Airport Ch	Summer	2006	NOCM0656	1,718,416	-	1,718,416
					2007	NOCM0722	1,698,025	-	1,698,025
					2008	NOCM0819	1,898,849	-	1,898,849
					2009	NOCM0921	1,726,691	-	1,726,691
					2010	NOCM1035	842,464	-	842,464
					2011	NOCM1177	1,733,691	-	1,733,691
					2012	NOCM1249	549,497	-	549,497
						NOCM1250	1,114,139	-	1,114,139
					2013	NOCM13103	2,481,786	-	2,481,786
					2014	NOCM1451	2,614,318	-	2,614,318
					2015	NOCM1504	1,660,631	-	1,660,631
					2016	NOCM1601	1,753,874	-	1,753,874
					2017	NOCM1737	1,739,662	-	1,739,662
					2018	NOCM1880	2,433,735	-	2,433,735
			Noohalk Cr	Summer	1979	NOCM7902	201,000	-	201,000
					1980	NOCM8008	520,100	-	520,100
			Snootli Cr	Summer	1978	LV7805		72,234	72,234
						NOCM7805	5,316	-	5,316
					1979	NOCM7903	567,000	-	567,000
					1980	NOCM8007	756,000	-	756,000
					1981	NOCM8110	620,667	-	620,667
					1982	ADLV8207	188,876	51,625	240,501
						ADRV8205	209,239	52,215	261,454
						NOCM8218	260,383	-	260,383
					1983	ADLV8305	919,453	75,270	994,723
						RV8311	320,211	125,200	445,411
					1984	ADD8401		74,872	74,872
						ADLV8407	889,078	74,854	963,932
						LV8410	799,693	99,975	899,668
					1985	NOCM8525	1,029,742	-	1,029,742

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Snootli Cr	Summer	1985	NOCM8526	1,004,000	-	1,004,000
						NOCM8527	90,317	-	90,317
					1986	NOCM8613	924,230	-	924,230
						NOCM8614	216,335	-	216,335
						NOCM8615	649,096	-	649,096
					1987	NOCM87128	360,000	-	360,000
						NOCM87129	944,901	-	944,901
						NOCM8714	500,000	-	500,000
					1988	ADRV8804	1,090,249	101,877	1,192,126
						NOCM8826	500,000	-	500,000
						NOCM8827	300,000	-	300,000
					1989	RV8905	434,479	65,521	500,000
						RV8906	305,609	64,391	370,000
						RV8907	886,270	126,142	1,012,412
					1990	ADLV9004	1,127,999	75,497	1,203,496
						LV9005	307,375	75,979	383,354
						RV9006	251,297	75,563	326,860
					1991	ADLV9107	1,111,351	75,437	1,186,788
						LV9107	330,160	75,665	405,825
						RV9105	166,851	75,794	242,645
					1992	ADLV9203	1,140,554	75,252	1,215,806
						LV9204	266,333	76,203	342,536
						RV9207	161,521	75,072	236,593
					1993	ADLV9303	1,783,736	99,979	1,883,715
					1994	ADLV9401	335,719	22,403	358,122
						ADLV9402	1,239,496	77,719	1,317,215
					1995	ADLV9502	315,097	16,218	331,315
						ADLV9503	1,299,108	85,778	1,384,886
					1996	ADLV9605	721,878	74,920	796,798
						ADRV9607	807,684	74,281	881,965

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Snootli Cr	Summer	1997	ADLV9701	732,010	75,065	807,075
						ADRV9702	731,553	78,209	809,762
					1998	LV9804	1,497,586	106,244	1,603,830
					1999	RV9903	1,565,636	106,211	1,671,847
					2000	RV0002	1,458,055	101,492	1,559,547
					2001	RV0101	1,655,395	103,868	1,759,263
					2002	RV0201	1,744,295	105,522	1,849,817
					2003	RV0301	1,587,608	102,545	1,690,153
					2004	NOCM04124	1,693,393	-	1,693,393
					2005	LV0503	1,717,633	122,489	1,840,122
					2006	LV0601	1,566,071	120,543	1,686,614
					2007	LV0701	1,700,514	105,444	1,805,958
					2008	AD0829	1,716,005	125,005	1,841,010
					2009	AD0943	1,606,660	112,564	1,719,224
					2010	AD1010	1,590,825	124,925	1,715,750
					2011	AD1123	1,591,924	134,606	1,726,530
					2012	AD1220	1,460,679	128,041	1,588,720
					2013	AD1330	1,568,330	116,671	1,685,001
					2014	AD1416	1,600,319	108,363	1,708,682
					2015	AD1510	1,548,802	106,300	1,655,102
					2016	AD1601		104,299	104,299
						NOCM1603	1,726,553	-	1,726,553
					2017	AD1711		104,719	104,719
						NOCM1747	1,641,996	-	1,641,996
					2018	AD1821	1,504,526	113,161	1,617,687
	BELLA COOLA-DEAN RIVERS	Snootli Cr	Kimsquit R	Summer	1988	ADLV8804	270,026	101,644	371,670
			Necleetsconnay R	Summer	1981	ADRV8103	390,045	51,600	441,645
					1982	NOCM8220	676,726	-	676,726
					1983	ADRV8305	223,120	76,880	300,000
						NOCM8316	1,038,983	-	1,038,983

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA-DEAN RIVERS	Snootli Cr	Necleetsconnay R	Summer	1984	RV8409	979,587	74,606	1,054,193
					1985	NOCM85131	450,000	-	450,000
					1986	LV8610	801,348	74,495	875,843
					1987	ADLV8704	29,069	76,153	105,222
						ADRV8704	745,585	75,527	821,112
					1988	NOCM8825	155,781	-	155,781
						RV8810	405,301	101,551	506,852
					1990	NOCM9021	734,044	-	734,044
					1991	NOCM9117	592,730	-	592,730
			Saloompt R	Summer	1979	RV7903	533,000	75,000	608,000
					1980	RV8007	898,500	100,000	998,500
					1981	RV8109	484,105	100,100	584,205
					1982	RV8207	1,477,909	79,270	1,557,179
					1983	ADD8301		50,600	50,600
						LV8311	1,913,265	50,160	1,963,425
					1984	ADRV8406	1,807,986	99,730	1,907,716
					1985	LV8509	636,706	75,135	711,841
						NOCM8523	300,000	-	300,000
						RV8508	836,901	75,363	912,264
					1986	ADRV8606	573,356	75,609	648,965
						NOCM8618	543,083	-	543,083
						RV8611	573,601	75,356	648,957
					1987	LV8710		3,816	3,816
						NOCM87125	360,000	-	360,000
						NOCM8716	500,000	-	500,000
						RV8708	815,508	150,017	965,525
					1988	NOCM8831	450,000	-	450,000
						NOCM8832	275,000	-	275,000
						NOCM8833	1,151,132	-	1,151,132
					1989	NOCM8925	500,000	-	500,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA-DEAN RIVERS	Snootli Cr	Saloompt R	Summer	1989	NOCM8926	325,000	-	325,000
						NOCM8927	1,061,166	-	1,061,166
					1990	NOCM9015	343,735	-	343,735
						NOCM9016	341,824	-	341,824
						NOCM9017	1,127,883	-	1,127,883
					1991	NOCM9118	95,493	-	95,493
						NOCM9119	1,408,457	-	1,408,457
					1992	NOCM9215	171,429	-	171,429
						NOCM9216	218,745	-	218,745
						NOCM9217	1,374,770	-	1,374,770
					1993	LV9304	1,689,542	100,507	1,790,049
					1994	LV9402	321,288	18,001	339,289
						LV9403	1,226,804	82,118	1,308,922
					1995	NOCM9524	330,567	-	330,567
						NOCM9525	1,340,463	-	1,340,463
					1996	NOCM96108	1,644,178	-	1,644,178
					1997	NOCM9778	1,659,276	-	1,659,276
					1998	NOCM9852	1,650,190	-	1,650,190
					1999	NOCM99109	1,597,678	-	1,597,678
					2000	NOCM0096	1,627,066	-	1,627,066
					2001	LV0102	1,619,160	101,610	1,720,770
					2002	LV0204	1,728,331	105,379	1,833,710
					2003	LV0303	1,584,302	104,202	1,688,504
					2004	NOCM04127	1,706,337	-	1,706,337
					2005	NOCM0524	1,893,340	-	1,893,340
					2006	NOCM0657	1,681,488	-	1,681,488
					2007	NOCM0725	1,801,651	-	1,801,651
					2008	NOCM0818	1,863,057	-	1,863,057
					2009	NOCM0922	796,909	-	796,909
					2010	NOCM1036	894,387	-	894,387

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA-DEAN RIVERS	Snootli Cr	Saloompt R	Summer	2011	NOCM1178	1,676,848	-	1,676,848
					2012	NOCM1251	601,602	-	601,602
					2013	NOCM13104	819,923	-	819,923
					2014	NOCM1450	878,125	-	878,125
					2015	NOCM1505	1,825,685	-	1,825,685
					2016	NOCM1602	1,743,918	-	1,743,918
					2017	NOCM1738	1,713,426	-	1,713,426
					2018	NOCM1881	844,503	-	844,503
			Thorsen Cr/CCST	Summer	1984	NOCM8420	948,240	-	948,240
					1985	NOCM8524	986,147	-	986,147
					1986	ADLV8606	574,622	74,926	649,548
						NOCM8616	449,051	-	449,051
					1987	NOCM87130	180,000	-	180,000
						NOCM87131	511,966	-	511,966
						NOCM8715	250,000	-	250,000
					1988	NOCM8828	250,000	-	250,000
						NOCM8829	180,000	-	180,000
						NOCM8830	592,713	-	592,713
					1989	NOCM8922	500,000	-	500,000
						NOCM8923	320,000	-	320,000
						NOCM8924	997,076	-	997,076
					1990	NOCM9012	313,056	-	313,056
						NOCM9013	156,489	-	156,489
						NOCM9014	495,076	-	495,076
					1991	NOCM9114	188,889	-	188,889
						NOCM9115	100,000	-	100,000
						NOCM9116	639,302	-	639,302
					1992	NOCM9212	274,419	-	274,419
						NOCM9213	192,294	-	192,294
						NOCM9214	1,344,869	-	1,344,869

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA-DEAN RIVERS	Snootli Cr	Thorsen Cr/CCST	Summer	1993	NOCM9323	530,815	-	530,815
						NOCM9324	1,380,639	-	1,380,639
					1994	NOCM9409	407,132	-	407,132
						NOCM9410	1,257,340	-	1,257,340
					1995	LV9507	381,741	18,722	400,463
						LV9508	1,207,809	57,020	1,264,829
					1996	LV9608	736,323	75,123	811,446
						RV9610	748,734	75,260	823,994
					1997	LV9703	749,664	75,080	824,744
						RV9702	744,332	74,907	819,239
					1998	NOCM9851	1,658,853	-	1,658,853
					1999	NOCM99108	1,613,964	-	1,613,964
					2000	NOCM0095	1,545,168	-	1,545,168
					2001	NOCM0126	1,726,712	-	1,726,712
					2002	NOCM02108	1,730,244	-	1,730,244
					2003	NOCM0315	1,735,191	-	1,735,191
					2004	NOCM04125	1,613,377	-	1,613,377
					2005	NOCM0525	1,831,050	-	1,831,050
					2006	NOCM0658	1,685,563	-	1,685,563
					2007	NOCM0723	1,794,578	-	1,794,578
					2008	NOCM0817	1,910,149	-	1,910,149
					2009	NOCM0924	1,765,990	-	1,765,990
					2010	NOCM1037	834,246	-	834,246
					2011	NOCM1180	1,735,658	-	1,735,658
					2012	NOCM1252	1,464,188	-	1,464,188
					2013	NOCM13106	1,692,466	-	1,692,466
					2014	NOCM1449	1,649,169	-	1,649,169
					2015	NOCM1506	1,703,784	-	1,703,784
					2016	NOCM1604	1,711,144	-	1,711,144
					2017	NOCM1739	1,663,973	-	1,663,973

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	BELLA COOLA-DEAN RIVERS	Snootli Cr	Thorsen Cr/CCST	Summer	2018	NOCM1882	1,640,393	-	1,640,393
			Thorsen+Noohalk Cr	Summer	1982	NOCM8219	739,067	-	739,067
					1983	NOCM8318	935,827	-	935,827
	HECATE LOWLANDS	Kitasoo Cr	Kitasoo Cr	Fall	1982	NOCM8242	31,167	-	31,167
					1983	NOCM8341	89,500	-	89,500
					1984	NOCM8446	337,552	-	337,552
					1985	NOCM8552	46,180	-	46,180
						NOCM8553	138,469	-	138,469
					1986	NOCM8631	330,461	-	330,461
					1987	NOCM8726	426,680	-	426,680
					1988	NOCM88101	139,123	-	139,123
					1989	ADLV8911	376,574	99,016	475,590
					1990	LV9016	162,456	171,940	334,396
					1991	RV9117	242,547	99,330	341,877
					1992	LV9216	24,285	101,384	125,669
						NOCM9251	82,078	-	82,078
					1993	LV9309	372,986	109,524	482,510
					1994	LV9405		80,984	80,984
						RV9405	221,664	75,903	297,567
					1995	LV9502	308,959	79,045	388,004
						RV9501	31,488	71,687	103,175
					1996	LV9603	197,469	75,029	272,498
						RV9606	6,791	77,597	84,388
					1997	ADLV9706	418,588	27,836	446,424
						RV9709	4,572	86,906	91,478
					1998	LV9803	517,021	113,104	630,125
						RV9803	27,216	86,538	113,754
					1999	LV9905	778,632	114,483	893,115
						RV9905	25,350	86,463	111,813
					2001	NOCM0133	768,521	-	768,521

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	HECATE LOWLANDS	Kitasoo Cr	Kitasoo Cr	Fall	2002	NOCM02112	730,282	-	730,282
					2003	NOCM0352	1,011,253	-	1,011,253
					2004	NOCM0402	1,267,482	-	1,267,482
					2005	NOCM0568	1,218,779	-	1,218,779
					2006	NOCM0626	1,126,482	-	1,126,482
					2007	NOCM0738	1,001,023	-	1,001,023
					2008	NOCM0837	1,227,453	-	1,227,453
					2009	NOCM0931	956,931	-	956,931
					2010	NOCM1014	714,709	-	714,709
					2011	NOCM1163	1,350,179	-	1,350,179
					2012	NOCM1273	826,609	-	826,609
					2013	NOCM1354	1,177,465	-	1,177,465
					2014	NOCM1477	1,171,221	-	1,171,221
					2015	NOCM1529	545,307	-	545,307
					2016	NOCM16125	705,013	-	705,013
					2017	NOCM17137	525,000	-	525,000
		Kitasoo PIP	Kitasoo Cr	Fall	1980	NOCM8027	1,500	-	1,500
					1981	NOCM8128	2,000	-	2,000
	SPILLER-FITZ HUGH-BURKE	Heiltsuk	Howyette R	Fall	1981	NOCM8113	10,000	-	10,000
						NOCM8114	10,000	-	10,000
						NOCM8115	508,000	-	508,000
			Kwakusdis R	Fall	1991	LV9118	9,208	53,590	62,798
					1993	RV9309	53,357	126,106	179,463
					1995	ADRV9501	51,008	90,875	141,883
					1996	ADRV9601	6,186	52,431	58,617
					1997	NOCM97107	48,532	-	48,532
			McLoughlin Bay Cr	Fall	1984	NOCM8431	585,160	-	585,160
						NOCM8432	476,549	-	476,549
					1985	NOCM8536	4,000	-	4,000
						NOCM8537	1,210,210	-	1,210,210

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	SPILLER-FITZ HUGH-BURKE	Heiltsuk	McLoughlin Bay Cr	Fall	1986	NOCM8625	212,552	-	212,552
					1987	LV8720		149,752	149,752
						NOCM8718	953,584	-	953,584
					1988	LV8818	1,084,108	200,370	1,284,478
					1989	NOCM8945	1,120,647	-	1,120,647
					1990	025649	381,669	104,860	486,529
					1991	180453	128,961	26,473	155,434
						180454	128,961	26,517	155,478
						180455	128,960	26,433	155,393
						180456	128,960	26,383	155,343
					1992	NOCM92153	1,119,164	-	1,119,164
					1993	NOCM93102	480,072	-	480,072
					1994	NOCM9486	1,078,355	-	1,078,355
					1995	NOCM9534	949,022	-	949,022
					1996	181821	178,809	25,146	203,955
						181822	179,023	25,050	204,073
						182259	355,139	50,195	405,334
					1997	181563	908,384	99,974	1,008,358
					1998	184217	370,024	100,233	470,257
					1999	NOCM9994	1,015,301	-	1,015,301
					2000	NOCM0012	929,674	-	929,674
					2001	NOCM0141	1,079,608	-	1,079,608
					2002	NOCM02171	650,371	-	650,371
					2003	NOCM0351	567,957	-	567,957
					2004	NOCM0453	1,191,465	-	1,191,465
					2005	NOCM0567	1,015,000	-	1,015,000
					2006	NOCM06113	1,257,133	-	1,257,133
					2007	NOCM0741	706	-	706
						NOCM0742	1,030,356	-	1,030,356
					2008	NOCM0803	1,593,692	-	1,593,692

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
CCST	SPILLER-FITZ HUGH-BURKE	Heiltsuk	McLoughlin Bay Cr	Fall	2008	NOCM0804	303,303	-	303,303
					2009	NOCM0930	2,146,598	-	2,146,598
					2010	NOCM1013	1,339,169	-	1,339,169
					2011	AD1132		161,662	161,662
						NOCM1162	1,911,520	-	1,911,520
					2012	AD1222		146,657	146,657
						NOCM1272	1,707,284	-	1,707,284
					2013	AD1316		168,786	168,786
						NOCM1353	1,632,860	-	1,632,860
					2014	NOCM1478	1,098,856	-	1,098,856
					2015	NOCM1528	975,106	-	975,106
					2016	NOCM16124	1,511,975	-	1,511,975
					2017	NOCM17136	1,230,078	-	1,230,078
					2018	NOCM18114	1,015,125	-	1,015,125
			Neekas R	Fall	1980	NOCM8014	125,000	-	125,000
						NOCM8015	25,000	-	25,000
					1982	LV8209	395,615	24,385	420,000
					1983	NOCM8329	80,589	-	80,589
		Ocean Falls	Martin R	Fall	1991	NOCM9164	3,943	-	3,943
					1992	NOCM9250	7,273	-	7,273
					1994	NOCM9423	6,827	-	6,827
					1995	NOCM95106	2,369	-	2,369
					1996	NOCM9678	2,586	-	2,586
JNST	BUTE INLET	Homalco-Taggares	Orford R	Summer	1992	0201010315	407,352	60,559	467,911
						281601	753	36,889	37,642
					1993	0201010501	1,019,037	62,027	1,081,064
						281603	681,994	38,716	720,710
					2000	NOCM00177	1,100,000	-	1,100,000
					2001	NOCM01197	1,100,000	-	1,100,000
						NOCM01198	1,500,000	-	1,500,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	BUTE INLET	Homalco-Taggares	Orford R	Summer	2001	NOCM01206	450,000	-	450,000
		Orford R	Orford R	Summer	1996	NOCM96179	555,113	-	555,113
					1997	NOCM97196	1,009,614	-	1,009,614
					1998	NOCM98211	1,100,000	-	1,100,000
					1999	NOCM99209	1,380,000	-	1,380,000
					2002	NOCM02224	350,000	-	350,000
					2003	NOCM03178	1,046,482	-	1,046,482
					2004	NOCM04218	1,719,433	-	1,719,433
					2005	NOCM05225	16,467	-	16,467
					2006	NOCM06207	64,045	-	64,045
					2011	NOCM11129	41,500	-	41,500
					2012	NOCM12135	90,000	-	90,000
					2013	NOCM13141	321,708	-	321,708
					2015	NOCM15132	90,000	-	90,000
					2016	NOCM16144	90,000	-	90,000
	GEORGIA STRAIT	Cortez Is	Hansen Cr	Fall	1984	NOCM8468	24,500	-	24,500
					1985	NOCM8580	37,000	-	37,000
					1988	NOCM8852	2,700	-	2,700
		Poulton Bay Cr	Campbell R	Fall	2004	NOCM0473	24,500	-	24,500
					2005	NOCM0538	34,500	-	34,500
					2006	NOCM0687	18,998	-	18,998
					2007	NOCM07120	15,000	-	15,000
					2008	NOCM0822	15,800	-	15,800
					2009	NOCM0951	17,750	-	17,750
					2011	NOCM1176	22,379	-	22,379
			Hyacinthe Cr	Fall	1999	NOCM99124	40,000	-	40,000
					2001	NOCM01203	24,000	-	24,000
					2002	NOCM02173	24,000	-	24,000
			Quinsam R	Fall	2003	NOCM0358	24,000	-	24,000
		Quadra Isl Enh	Drew Hb Cr	Fall	1992	NOCM92146	180,000	-	180,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	GEORGIA STRAIT	Quadra Isl Enh	Drew Hb Cr	Fall	1994	NOCM94115	180,000	-	180,000
			Hyacinthe Cr	Fall	1979	NOCM7920	4,000	-	4,000
					1980	NOCM8031	25,000	-	25,000
					1981	NOCM8140	25,000	-	25,000
					1982	NOCM8265	49,000	-	49,000
						NOCM8266	68,000	-	68,000
					1983	NOCM8357	25,000	-	25,000
						NOCM8358	78,000	-	78,000
					1991	NOCM9147	244,000	-	244,000
					1992	NOCM92112	200,000	-	200,000
					1994	NOCM94116	180,000	-	180,000
					1995	NOCM9576	85,000	-	85,000
					1996	NOCM96118	165,000	-	165,000
					1997	NOCM97138	360,000	-	360,000
					1998	NOCM98100	200,000	-	200,000
					1999	NOCM99162	42,000	-	42,000
		Quinsam R	Campbell R	Fall	2004	NOCM0472	22,000	-	22,000
						NOCM0477	32,000	-	32,000
					2005	NOCM0527	98,617	-	98,617
						NOCM0537	96,704	-	96,704
						NOCM0539	75,696	-	75,696
					2006	NOCM0686	29,535	-	29,535
					2007	NOCM07179	37,437	-	37,437
						NOCM07184	32,274	-	32,274
					2008	NOCM0820	38,949	-	38,949
						NOCM0821	49,006	-	49,006
					2009	NOCM0952	84,455	-	84,455
						NOCM0953	83,122	-	83,122
						NOCM0977	93,048	-	93,048
					2011	NOCM1131	86,898	-	86,898

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	GEORGIA STRAIT	Quinsam R	Campbell R	Fall	2011	NOCM1132	59,616	-	59,616
						NOCM1133	68,473	-	68,473
			Cold Cr	Fall	1981	NOCM8104	71,565	-	71,565
			Quinsam R	Fall	1974	AD7401	168,730	67,918	236,648
					1997	NOCM97102	26,666	-	26,666
						NOCM97103	31,870	-	31,870
					1998	NOCM9830	11,766	-	11,766
						NOCM9831	13,633	-	13,633
						NOCM9832	28,000	-	28,000
					1999	NOCM9982	13,780	-	13,780
						NOCM9983	13,311	-	13,311
						NOCM9984	13,419	-	13,419
					2000	NOCM0011	25,201	-	25,201
		Surge Narrows	Birdcove Cr	Fall	1989	NOCM8998	11,500	-	11,500
					1990	NOCM9076	32,000	-	32,000
					1991	NOCM9148	40,000	-	40,000
					1992	NOCM92113	30,000	-	30,000
					1993	NOCM93130	40,000	-	40,000
					1994	NOCM94117	36,000	-	36,000
					1995	NOCM9584	8,000	-	8,000
					1996	NOCM96119	4,800	-	4,800
	LOUGHBOROUGH	Cortez Is	Quadra Is Strms	Fall	1990	NOCM9072	20,000	-	20,000
		Granite Bay Cr	Granite Bay Cr	Fall	1981	NOCM8129	2,400	-	2,400
		Quadra Isl Enh	Quadra Is Strms	Fall	1984	NOCM8481	60,000	-	60,000
					1985	NOCM85106	52,000	-	52,000
					1986	NOCM8673	36,000	-	36,000
					1988	NOCM88109	10,000	-	10,000
					1989	NOCM8960	100,000	-	100,000
					1990	NOCM9059	200,000	-	200,000
					1993	NOCM93131	450,000	-	450,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	NORTHEAST VANCOUVER ISLAND	Bear (Mills) Cr	Bear (Mills) Cr	Fall	1987	NOCM87119	20,000	-	20,000
		Gwa'ni	Nimpkish R Low	Fall	1979	NOCM7909	57,580	-	57,580
					1980	NOCM8012	170,000	-	170,000
					1981	RV8110	182,936	50,857	233,793
					1982	NOCM8229	288,078	-	288,078
					1983	NOCM8325	200,169	-	200,169
						NOCM8326	202,218	-	202,218
					1984	NOCM8430	103,475	-	103,475
					1985	NOCM8534	387,235	-	387,235
						NOCM8535	513,223	-	513,223
					1986	NOCM8682	467,607	-	467,607
						NOCM8683	419,314	-	419,314
					1987	NOCM8728	4,000	-	4,000
						NOCM8729	425,260	-	425,260
					1988	NOCM8877	1,103,316	-	1,103,316
					1989	020456	82,331	26,895	109,226
						020457	82,331	27,106	109,437
						020458	82,331	26,322	108,653
						NOCM8944	516,198	-	516,198
						NOCM8963	175,603	-	175,603
					1990	180234	102,746	26,569	129,315
						180235	102,746	27,385	130,131
						180236	102,746	26,872	129,618
						NOCM90145	183,230	-	183,230
						NOCM90146	284,445	-	284,445
						NOCM90147	53,975	-	53,975
						NOCM90148	3,500	-	3,500
					1991	NOCM91149	1,012,320	-	1,012,320
						NOCM91150	199,644	-	199,644
						NOCM91152	5,970	-	5,970

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	NORTHEAST VANCOUVER ISLAND	Gwa'ni	Nimpkish R Low	Fall	1992	181239	1,085,196	82,819	1,168,015
					1993	NOCM9317	842,956	-	842,956
						NOCM9319	416,484	-	416,484
						NOCM9320	17,807	-	17,807
					1994	NOCM9417	173,316	-	173,316
						NOCM9418	469,796	-	469,796
						NOCM9419	63,124	-	63,124
						NOCM9420	2,039,282	-	2,039,282
						NOCM9421	30,063	-	30,063
					1995	NOCM95140	3,212,503	-	3,212,503
					1996	NOCM9698	412,546	-	412,546
					1997	NOCM9761	4,053,026	-	4,053,026
					1998	NOCM9895	4,226,103	-	4,226,103
						NOCM9896	160,000	-	160,000
					1999	NOCM9990	35,200	-	35,200
					2000	NOCM00116	15,523	-	15,523
					2001	NOCM0178	5,526,105	-	5,526,105
					2002	NOCM02168	4,075,392	-	4,075,392
					2004	NOCM0401	481,315	-	481,315
					2005	NOCM0501	5,786,695	-	5,786,695
					2006	NOCM06144	64,080	-	64,080
						NOCM06145	3,870,240	-	3,870,240
					2008	NOCM0885	712,048	-	712,048
						NOCM0886	721,003	-	721,003
					2009	NOCM0942	740,046	-	740,046
					2010	NOCM1008	374,385	-	374,385
					2011	NOCM1122	11,601	-	11,601
					2012	NOCM1247	123,294	-	123,294
					2013	NOCM1383	473,825	-	473,825
					2014	NOCM1431	473,722	-	473,722

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	NORTHEAST VANCOUVER ISLAND	Gwa'ni	Nimpkish R Low	Fall	2015	NOCM1562	12,341	-	12,341
					2016	NOCM1691	99,744	-	99,744
						NOCM1692	74,460	-	74,460
					2017	NOCM17139	8,974	-	8,974
						NOCM17140	5,082	-	5,082
		Kokish R	Kokish R	Fall	1995	NOCM9559	7,300	-	7,300
					1996	NOCM96111	7,925	-	7,925
					1997	NOCM9709	28,036	-	28,036
					1998	NOCM98101	30,004	-	30,004
					2000	NOCM00170	3,000	-	3,000
					2001	NOCM0143	12,000	-	12,000
					2002	NOCM02170	31,492	-	31,492
					2003	NOCM0346	17,600	-	17,600
					2005	NOCM05179	4,468	-	4,468
					2009	NOCM0992	1,200	-	1,200
					2010	NOCM1009	210	-	210
					2011	NOCM1116	11,698	-	11,698
					2012	NOCM12125	11,500	-	11,500
					2013	NOCM13111	1,200	-	1,200
					2014	NOCM1432	1,200	-	1,200
		P Hardy/Quatse	Cluxewe R	Fall	1984	NOCM8450	11,300	-	11,300
					1988	NOCM88105	1,200	-	1,200
			Quatse R	Fall	1984	NOCM8449	79,800	-	79,800
					1985	NOCM8555	70,500	-	70,500
					1986	NOCM8694	101,307	-	101,307
						NOCM8695	80,000	-	80,000
					1987	NOCM8730	44,864	-	44,864
						NOCM8731	17,350	-	17,350
					1988	NOCM88104	92,001	-	92,001
					1989	NOCM8957	184,586	-	184,586

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	NORTHEAST VANCOUVER ISLAND	P Hardy/Quatse	Quatse R	Fall	1990	NOCM90133	128,082	-	128,082
					1991	NOCM9141	88,679	-	88,679
					1992	NOCM92152	16,352	-	16,352
					1993	NOCM9352	231,086	-	231,086
					1994	NOCM9404	12,183	-	12,183
						NOCM9405	81,961	-	81,961
					1995	NOCM9504	7,027	-	7,027
						NOCM9505	17,861	-	17,861
					1996	NOCM9602	2,148	-	2,148
					1997	NOCM9702	46,790	-	46,790
					1998	NOCM9823	99,538	-	99,538
					1999	NOCM9901	37,509	-	37,509
					2000	NOCM0001	4,582	-	4,582
					2001	NOCM0139	75,767	-	75,767
					2002	NOCM02111	126,112	-	126,112
					2003	NOCM0339	99,213	-	99,213
					2004	NOCM0412	11,715	-	11,715
					2005	NOCM0509	101,541	-	101,541
					2006	NOCM06141	113,017	-	113,017
					2007	NOCM0716	37,384	-	37,384
					2008	NOCM0808	110,313	-	110,313
					2011	NOCM1117	33,361	-	33,361
					2014	NOCM1430	4,896	-	4,896
					2015	NOCM1563	29,842	-	29,842
					2016	NOCM1690	30,016	-	30,016
					2017	NOCM1783	77,580	-	77,580
					2018	NOCM1849	43,119	-	43,119
		Rough Bay Cr	Nimpkish R	Fall	1984	NOCM8472	25,000	-	25,000
					1985	NOCM8586	16,000	-	16,000
					1986	NOCM8654	25,000	-	25,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	NORTHEAST VANCOUVER ISLAND	Rough Bay Cr	Nimpkish R	Fall	1987	NOCM8769	8,016	-	8,016
		Vanc Is North Sch	Nimpkish R	Fall	1987	NOCM8779	180	-	180
					1988	NOCM8863	270	-	270
					1989	NOCM89101	450	-	450
					1990	NOCM90139	450	-	450
					1991	NOCM9150	350	-	350
					1992	NOCM92116	300	-	300
					1993	NOCM9378	490	-	490
					1994	NOCM94110	490	-	490
					1995	NOCM95138	320	-	320
					1996	NOCM96141	400	-	400
					1997	NOCM97127	400	-	400
					2004	NOCM0442	83	-	83
					2009	NOCM09110	100	-	100
					2010	NOCM1010	100	-	100
					2011	NOCM11116	186	-	186
						NOCM11117	95	-	95
			Nimpkish R Low	Fall	2016	NOCM1694	98	-	98
					2017	NOCM17141	50	-	50
			Quatse R	Fall	1988	NOCM8870	90	-	90
					1989	NOCM89110	270	-	270
					1990	NOCM90141	270	-	270
					1991	NOCM9151	270	-	270
					1992	NOCM92117	240	-	240
					1993	NOCM9379	240	-	240
					1994	NOCM94111	240	-	240
	SOUTHERN COASTAL STREAMS	Charles Cr	Viner Sd Cr	Fall	1982	NOCM8263	45,000	-	45,000
					1983	NOCM8356	48,600	-	48,600
					1984	NOCM8479	201,000	-	201,000
					1985	NOCM8597	99,000	-	99,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
JNST	SOUTHERN COASTAL STREAMS	Scott Cv Cr	Viner Sd Cr	Fall	2002	NOCM02196	179,000	-	179,000
						NOCM02197	20,000	-	20,000
					2003	NOCM0347	100,000	-	100,000
					2004	NOCM0441	3,643	-	3,643
					2005	NOCM05180	14,928	-	14,928
						NOCM05181	17,135	-	17,135
						NOCM05192	49,400	-	49,400
		Simoom Sd Cr	Simoom Sd Cr	Fall	1983	NOCM8365	18,800	-	18,800
					1984	NOCM8470	20,000	-	20,000
					1985	NOCM8584	20,000	-	20,000
			Viner Sd Cr	Fall	1986	NOCM8652	30,000	-	30,000
		Vanc Is North Sch	Viner Sd Cr	Fall	2004	NOCM0443	30	-	30
	(blank)	Klahoose Band	Basil Brk	Fall	1998	NOCM9892	4,000	-	4,000
GSVI	GEORGIA STRAIT	Big Qualicum R	Big Qualicum R	Fall	1960	NOCM6001	4,550,000	-	4,550,000
					1961	NOCM6101	4,510,000	-	4,510,000
					1962	NOCM6201	6,840,000	-	6,840,000
					1963	NOCM6301	20,930,000	-	20,930,000
					1964	AD6401	14,621,400	738,600	15,360,000
					1965	ADLV6501	501,700	192,300	694,000
						ADRV6501	9,396,500	183,500	9,580,000
					1966	ADLV6601	986,100	153,900	1,140,000
						ADRV6601	20,281,200	418,800	20,700,000
					1967	AD6701	158,600	17,400	176,000
						ADLV6701	11,207,400	392,600	11,600,000
						ADRV6701	21,181,900	418,100	21,600,000
						NOCM6703	560,000	-	560,000
					1968	AD6801		74,200	74,200
						ADAN6801	1,900,400	113,400	2,013,800
						ADLV6801	32,078,008	2,221,992	34,300,000
						ADRV6801	14,853,300	446,700	15,300,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Big Qualicum R	Big Qualicum R	Fall	1969	ADAN6901	1,528,000	73,100	1,601,100
						ADLV6901	40,641,000	1,259,000	41,900,000
						ADRV6901	18,814,300	685,700	19,500,000
					1970	ADLV7001	26,755,400	914,600	27,670,000
						ADRV7001	19,726,200	673,800	20,400,000
					1971	ADRV7101	35,713,700	986,300	36,700,000
					1972	ADRV7201	42,604,060	995,940	43,600,000
					1973	ADRV7301	54,138,600	101,400	54,240,000
					1974	ADRV7401	64,918,500	111,500	65,030,000
					1975	ADRV7501	56,312,649	107,351	56,420,000
					1976	ADRV7601	52,926,241	753,759	53,680,000
					1977	ADRV7701	47,424,481	875,519	48,300,000
					1978	ADRV7803	44,572,105	917,895	45,490,000
					1979	ADRV7902	57,132,363	687,637	57,820,000
					1980	ADRV8003	60,228,094	506,075	60,734,169
						D8001	2,544,113	97,967	2,642,080
					1981	ADRV8106	43,410,200	259,832	43,670,032
						RV8102	2,065,608	89,945	2,155,553
					1982	ADRV8208	57,793,645	196,740	57,990,385
						NOCM8282	957,008	-	957,008
						RV8202	2,482,566	103,514	2,586,080
					1983	ADRV8302	43,109,495	159,676	43,269,171
						RV8302	14,730,065	163,226	14,893,291
					1984	ADRV8407	21,204,935	165,749	21,370,684
						RV8401	2,463,549	155,647	2,619,196
					1985	LV8502	25,671,742	326,259	25,998,001
					1986	LV8601	47,744,604	304,166	48,048,770
						RV8601		14,112	14,112
					1987	LV8702	56,258,812	305,657	56,564,469
					1988	LV8803	65,653,273	305,278	65,958,551

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Big Qualicum R	Big Qualicum R	Fall	1989	ADRV8901	46,856,932	254,351	47,111,283
					1990	ADRV9001	45,261,952	264,508	45,526,460
					1991	ADRV9101	35,273,168	281,389	35,554,557
					1992	ADRV9204	66,570,091	267,779	66,837,870
					1993	ADRV9305	63,279,563	257,812	63,537,375
					1994	ADRV9403	45,775,992	258,901	46,034,893
					1995	ADRV9503	16,862,532	265,041	17,127,573
					1996	ADLV9601	1,454,601	102,856	1,557,457
						ADRV9605	6,517,105	223,009	6,740,114
					1997	ADLV9704	1,223,185	71,669	1,294,854
						ADRV9703	29,910,744	254,560	30,165,304
					1998	ADRV9801	49,966,270	263,282	50,229,552
					1999	ADRV9901	26,422,017	255,239	26,677,256
					2000	NOCM00188	6,136,072	-	6,136,072
						NOCM0092	931,572	-	931,572
					2001	ADRV0101	9,429,284	63,598	9,492,882
						ADRV0103	33,298,204	190,792	33,488,996
						NOCM01205	3,641,780	-	3,641,780
					2002	ADRV0201	11,817,994	65,655	11,883,649
						ADRV0203	23,023,505	196,964	23,220,469
						NOCM02223	3,666,465	-	3,666,465
					2003	ADRV0301	10,844,017	64,199	10,908,216
						ADRV0302	11,633,553	192,596	11,826,149
						NOCM03176	1,779,078	-	1,779,078
					2004	ADRV0401	12,493,610	68,220	12,561,830
						ADRV0403	10,389,621	199,725	10,589,346
						NOCM04215	382,547	-	382,547
						NOCM04216	1,842,608	-	1,842,608
					2005	ADRV0503	7,979,523	65,590	8,045,113
						ADRV0504	9,446,606	196,770	9,643,376

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Big Qualicum R	Big Qualicum R	Fall	2005	NOCM05222	1,257,267	-	1,257,267
					2006	ADRV0601	21,489,314	181,208	21,670,522
						ADRV0602	7,952,475	77,661	8,030,136
						NOCM06204	1,120,617	-	1,120,617
					2007	ADRV0701	9,571,181	182,560	9,753,741
						ADRV0702	3,978,665	78,240	4,056,905
						NOCM07181	1,035,039	-	1,035,039
					2008	ADRV0801	7,885,136	147,147	8,032,283
						ADRV0802	656,491	63,063	719,554
						NOCM0865	298,086	-	298,086
					2009	ADRV0901	10,582,165	181,351	10,763,516
						ADRV0902	1,385,023	77,722	1,462,745
					2010	ADLV1001	747,854	50,550	798,404
						ADRV1002	5,441,044	145,101	5,586,145
						ADRV1003	2,128,351	62,196	2,190,547
					2011	AD1128	10,676,174	178,043	10,854,217
						AD1129	17,307,503	76,304	17,383,807
						NOCM1101	938,166	-	938,166
					2012	AD1213	10,409,488	177,303	10,586,791
						AD1249	17,608,938	75,987	17,684,925
					2013	AD1331	8,211,085	125,561	8,336,646
						AD1346	9,978,022	125,560	10,103,582
					2014	AD1420	4,141,898	191,823	4,333,721
						NOCM1484	2,619,291	-	2,619,291
					2015	AD1522	12,669,520	250,000	12,919,520
						NOCM1537	11,889,614	-	11,889,614
					2016	NOCM1610	28,213,058	-	28,213,058
						NOCM1611	13,962,715	-	13,962,715
					2017	NOCM1735	14,676,938	-	14,676,938
						NOCM1736	1,018,910	-	1,018,910

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Big Qualicum R	Big Qualicum R	Fall	2018	NOCM1812	2,642,746	-	2,642,746
						NOCM1813	1,085,292	-	1,085,292
		Comox Valley Sch	Big Qualicum R	Fall	1990	NOCM90138	80	-	80
					1995	NOCM95124	100	-	100
						NOCM95125	282	-	282
					1996	NOCM9611	49	-	49
					1997	NOCM9797	161	-	161
					2000	NOCM00187	90	-	90
					2001	NOCM0171	75	-	75
					2002	NOCM02150	90	-	90
			Puntledge R	Fall	1985	NOCM85128	800	-	800
		Cowichan Lk SES	Cowichan Lk Tribs	Fall	1991	NOCM91129	166,600	-	166,600
					1995	NOCM95112	400	-	400
					1996	NOCM96107	41	-	41
			Cowichan R	Fall	1993	NOCM9359	110,000	-	110,000
					1994	NOCM9447	50,000	-	50,000
					2002	NOCM02199	20,287	-	20,287
					2003	NOCM03177	385,300	-	385,300
					2004	NOCM04217	382,225	-	382,225
					2005	NOCM05223	255,000	-	255,000
						NOCM05224	100,000	-	100,000
					2006	NOCM06205	333,000	-	333,000
						NOCM06206	65,000	-	65,000
					2007	NOCM07185	286,000	-	286,000
						NOCM07186	100,000	-	100,000
					2008	NOCM08100	267,500	-	267,500
						NOCM08101	100,000	-	100,000
					2010	NOCM1055	37,960	-	37,960
					2012	NOCM1243	101,000	-	101,000
					2013	NOCM1343	198,000	-	198,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Cowichan Lk SES	Cowichan R	Fall	2013	NOCM1344	101,000	-	101,000
					2014	NOCM1418	8,608	-	8,608
					2015	NOCM1555	166,750	-	166,750
					2016	NOCM1643	193,040	-	193,040
					2017	NOCM1768	6,050	-	6,050
					2018	NOCM1824	25,000	-	25,000
			Goldstream R	Fall	2009	NOCM0932	180,000	-	180,000
			Robertson R	Fall	2002	NOCM02198	3,429	-	3,429
		Cowichan R	Cowichan R	Fall	1976	NOCM7602	298,000	-	298,000
					1977	NOCM7705	828,498	-	828,498
					1978	H20203	424,807	48,193	473,000
					1979	H20207	174,427	31,573	206,000
					1980	H20104	619,855	52,346	672,201
					1981	021910	680,206	9,794	690,000
					1982	NOCM8228	700,000	-	700,000
					1983	NOCM8324	999,143	-	999,143
					1984	NOCM8429	971,923	-	971,923
					1985	NOCM8533	190,886	-	190,886
					1991	NOCM91128	41,500	-	41,500
					1993	NOCM9303	13,057	-	13,057
					1994	NOCM9428	79,236	-	79,236
					1995	NOCM95111	44,750	-	44,750
					1996	NOCM96106	9,820	-	9,820
					1997	NOCM97146	62,900	-	62,900
					1998	NOCM98163	42,726	-	42,726
					1999	NOCM99143	130,345	-	130,345
			Koksilah R	Fall	1994	NOCM9429	53	-	53
					1998	NOCM98164	1,400	-	1,400
		Cowichan Valley Sch	Chemainus R	Fall	2004	NOCM0431	197	-	197
					2005	NOCM05217	143	-	143

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Cowichan Valley Sch	Chemainus R	Fall	2007	NOCM07106	186	-	186
						NOCM07107	98	-	98
						NOCM07108	100	-	100
						NOCM07109	87	-	87
						NOCM07122	94	-	94
						NOCM07124	99	-	99
					2009	NOCM09103	400	-	400
					2010	NOCM1020	463	-	463
					2012	NOCM1278	511	-	511
					2013	NOCM13114	199	-	199
						NOCM13115	90	-	90
					2014	NOCM1492	378	-	378
			Cowichan R	Fall	1991	NOCM9165	5,250	-	5,250
					1992	NOCM92134	4,000	-	4,000
					1993	NOCM93169	1,130	-	1,130
					1999	NOCM99208	720	-	720
					2000	NOCM00144	650	-	650
					2004	NOCM0427	612	-	612
						NOCM0428	293	-	293
						NOCM0429	188	-	188
						NOCM0430	97	-	97
					2005	NOCM05209	701	-	701
						NOCM05210	195	-	195
						NOCM05211	100	-	100
						NOCM05212	97	-	97
						NOCM05213	127	-	127
						NOCM05214	198	-	198
						NOCM05215	100	-	100
						NOCM05216	100	-	100
					2007	NOCM07110	914	-	914

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Cowichan Valley Sch	Cowichan R	Fall	2009	NOCM09104	1,602	-	1,602
					2010	NOCM1021	680	-	680
						NOCM1022	194	-	194
						NOCM1023	193	-	193
						NOCM1024	197	-	197
						NOCM1025	98	-	98
						NOCM1026	100	-	100
						NOCM1027	100	-	100
					2011	NOCM1143	403	-	403
						NOCM1144	197	-	197
						NOCM1145	75	-	75
						NOCM1146	96	-	96
						NOCM1147	108	-	108
						NOCM1148	97	-	97
						NOCM1149	103	-	103
					2012	NOCM1244	777	-	777
						NOCM1279	100	-	100
						NOCM1280	295	-	295
						NOCM1281	102	-	102
					2013	NOCM13116	879	-	879
						NOCM13117	399	-	399
						NOCM13118	100	-	100
						NOCM13119	200	-	200
						NOCM13120	101	-	101
						NOCM13121	100	-	100
					2014	NOCM14100	100	-	100
						NOCM1493	583	-	583
						NOCM1494	170	-	170
						NOCM1495	97	-	97
						NOCM1496	150	-	150

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Cowichan Valley Sch	Cowichan R	Fall		NOCM1497	276	-	276
						NOCM1498	90	-	90
						NOCM1499	200	-	200
					2016	NOCM1644	60	-	60
						NOCM1645	1,083	-	1,083
						NOCM1646	295	-	295
						NOCM1647	97	-	97
						NOCM1648	95	-	95
						NOCM1650	105	-	105
						NOCM1651	100	-	100
					2017	NOCM1769	100	-	100
						NOCM1770	103	-	103
						NOCM1771	690	-	690
						NOCM1772	298	-	298
						NOCM1773	197	-	197
						NOCM1774	103	-	103
						NOCM1775	260	-	260
						NOCM1776	88	-	88
					2018	NOCM1825	100	-	100
						NOCM1826	98	-	98
						NOCM1827	100	-	100
						NOCM1828	757	-	757
						NOCM1829	200	-	200
						NOCM1830	100	-	100
						NOCM1831	198	-	198
						NOCM1832	10	-	10
						NOCM1833	300	-	300
						NOCM1834	100	-	100
			Goldstream R	Fall	1987	NOCM87121	160	-	160
					1988	NOCM8861	1,000	-	1,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Cowichan Valley Sch	Goldstream R	Fall	1988	NOCM8862	950	-	950
					1989	NOCM8994	4,200	-	4,200
					1990	NOCM9086	1,000	-	1,000
					1999	NOCM99189	375	-	375
					2000	NOCM00145	320	-	320
			Stocking Cr	Fall	2011	NOCM1142	430	-	430
					2017	NOCM1801	622	-	622
		Discovery Sch	Goldstream R	Fall	1981	NOCM8143	9,000	-	9,000
					1982	NOCM8268	17,000	-	17,000
					1983	NOCM8360	70	-	70
					1985	NOCM85108	3,975	-	3,975
					1986	NOCM8678	9,300	-	9,300
					1987	NOCM8748	11,000	-	11,000
		Fanny Bay/GSVI	Chef Cr	Fall	2002	NOCM02144	7,000	-	7,000
			Rosewall Cr	Fall	2006	NOCM0661	95,000	-	95,000
					2007	NOCM07137	191,700	-	191,700
					2008	NOCM0875	215,913	-	215,913
					2009	NOCM0944	165,562	-	165,562
					2010	NOCM1002	21,174	-	21,174
					2011	NOCM1119	32,590	-	32,590
					2012	NOCM1211	58,455	-	58,455
					2013	NOCM1313	185,497	-	185,497
					2014	NOCM1429	3,489	-	3,489
					2015	NOCM1565	152,079	-	152,079
					2016	NOCM1641	45,976	-	45,976
					2017	NOCM1757	66,149	-	66,149
					2018	NOCM1872	48,361	-	48,361
			Wilfred Cr (Coal)	Fall	2018	NOCM1873	22,264	-	22,264
		French Cr	Big Qualicum R	Fall	2004	NOCM04113	55,000	-	55,000
					2005	NOCM0533	92,000	-	92,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	French Cr	Big Qualicum R	Fall	2006	NOCM0662	90,000	-	90,000
			French Cr	Fall	2002	NOCM02222	25,000	-	25,000
			Puntledge R	Fall	2010	NOCM10119	87,000	-	87,000
					2011	NOCM1121	100,500	-	100,500
					2012	NOCM1231	100,000	-	100,000
					2013	NOCM1323	78,000	-	78,000
					2014	NOCM1422	75,000	-	75,000
					2015	NOCM1566	75,000	-	75,000
					2016	NOCM1689	89,000	-	89,000
					2017	NOCM1758	95,000	-	95,000
					2018	NOCM18108	89,980	-	89,980
		Goldstream R	Goldstream R	Fall	1979	NOCM7917	13,400	-	13,400
						NOCM7918	1,900	-	1,900
					1987	NOCM8749	14,000	-	14,000
					1990	NOCM9067	10,000	-	10,000
					1991	NOCM91143	15,150	-	15,150
					1992	NOCM9269	7,000	-	7,000
						NOCM9270	3,000	-	3,000
						NOCM9283	22,800	-	22,800
					1993	NOCM9344	7,800	-	7,800
					1994	NOCM94130	25,000	-	25,000
					1995	NOCM95100	39,448	-	39,448
					1996	NOCM9608	52,572	-	52,572
					1997	NOCM9708	84,962	-	84,962
					1998	NOCM98145	122,000	-	122,000
						NOCM98146	61,730	-	61,730
						NOCM98156	60,000	-	60,000
					1999	NOCM99104	21,000	-	21,000
						NOCM99105	60,000	-	60,000
						NOCM99106	160,000	-	160,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Goldstream R	Goldstream R	Fall	1999	NOCM99107	624,520	-	624,520
					2000	NOCM00131	5,601	-	5,601
					2001	NOCM0179	25,000	-	25,000
						NOCM0180	25,000	-	25,000
						NOCM0181	25,000	-	25,000
					2002	NOCM02183	35,000	-	35,000
						NOCM02184	80,000	-	80,000
						NOCM02185	35,000	-	35,000
						NOCM02186	35,000	-	35,000
					2003	NOCM0373	41,671	-	41,671
						NOCM0374	42,665	-	42,665
					2004	NOCM0451	30,000	-	30,000
					2005	NOCM0560	30,000	-	30,000
						NOCM0561	30,000	-	30,000
					2006	NOCM06126	23,783	-	23,783
						NOCM06127	45,000	-	45,000
						NOCM06132	30,000	-	30,000
					2007	NOCM07102	40,000	-	40,000
						NOCM07103	40,000	-	40,000
						NOCM07104	50,000	-	50,000
						NOCM07121	23,331	-	23,331
					2008	NOCM0881	30,000	-	30,000
						NOCM0882	241,942	-	241,942
						NOCM0883	55,000	-	55,000
						NOCM0884	88,619	-	88,619
					2009	NOCM0933	33,859	-	33,859
						NOCM0934	50,000	-	50,000
					2010	NOCM1053	77,370	-	77,370
					2011	NOCM11100	60,000	-	60,000
						NOCM11101	60,000	-	60,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Goldstream R	Goldstream R	Fall		NOCM11102	1,000	-	1,000
						NOCM11103	56,231	-	56,231
					2012	NOCM1239	142,368	-	142,368
					2013	NOCM1331	100,876	-	100,876
					2014	NOCM1410	20,000	-	20,000
						NOCM1411	28,459	-	28,459
						NOCM1412	35,169	-	35,169
						NOCM1413	32,112	-	32,112
					2015	NOCM1552	40,000	-	40,000
						NOCM1553	15,067	-	15,067
					2016	NOCM1652	11,598	-	11,598
					2017	NOCM1764	10,967	-	10,967
					2018	NOCM1835	50,000	-	50,000
						NOCM1836	50,000	-	50,000
						NOCM1837	88,963	-	88,963
		Gulf Is Sch	Goldstream R	Fall	1986	NOCM8680	480	-	480
					1987	NOCM8750	800	-	800
					1988	NOCM8868	1,260	-	1,260
					1989	NOCM89105	900	-	900
					1990	NOCM9087	1,000	-	1,000
					1991	NOCM9166	1,140	-	1,140
					1992	NOCM92135	1,150	-	1,150
					1993	NOCM93141	1,050	-	1,050
						NOCM93142	180	-	180
						NOCM93143	180	-	180
					1994	NOCM94123	730	-	730
						NOCM94124	180	-	180
						NOCM94125	180	-	180
					1995	NOCM95126	916	-	916
						NOCM95127	150	-	150

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Gulf Is Sch	Goldstream R	Fall	1996	NOCM9612	516	-	516
						NOCM9613	581	-	581
						NOCM9614	1,107	-	1,107
						NOCM9619	195	-	195
					1997	NOCM9780	195	-	195
						NOCM9781	195	-	195
						NOCM9782	655	-	655
					1998	NOCM98174	800	-	800
						NOCM98175	160	-	160
						NOCM98176	155	-	155
					1999	NOCM99167	1,227	-	1,227
					2000	NOCM00146	1,120	-	1,120
					2001	NOCM0188	1,200	-	1,200
					2002	NOCM02174	1,000	-	1,000
					2003	NOCM03126	195	-	195
						NOCM03162	150	-	150
					2004	NOCM0435	195	-	195
						NOCM0436	175	-	175
					2005	NOCM0580	200	-	200
						NOCM0581	390	-	390
						NOCM0582	195	-	195
					2006	NOCM06121	200	-	200
						NOCM06122	390	-	390
						NOCM06123	195	-	195
					2007	NOCM07171	198	-	198
						NOCM07172	392	-	392
						NOCM07173	150	-	150
						NOCM07174	194	-	194
						NOCM07175	390	-	390
						NOCM07176	1,223	-	1,223

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Gulf Is Sch	Goldstream R	Fall	2008	NOCM08114	192	-	192
						NOCM08115	200	-	200
						NOCM08116	150	-	150
						NOCM08117	194	-	194
						NOCM08118	390	-	390
						NOCM08119	1,023	-	1,023
					2009	NOCM0986	1,280	-	1,280
						NOCM0987	192	-	192
						NOCM0988	198	-	198
						NOCM0989	196	-	196
						NOCM0990	185	-	185
					2010	NOCM1051	634	-	634
						NOCM1052	181	-	181
					2011	NOCM11120	686	-	686
					2012	NOCM1224	717	-	717
					2013	NOCM1342	717	-	717
					2014	NOCM1408	1,027	-	1,027
						NOCM1409	193	-	193
					2015	NOCM1583	717	-	717
					2016	NOCM16121	746	-	746
						NOCM16132	192	-	192
					2017	NOCM1779	771	-	771
						NOCM1780	92	-	92
						NOCM1781	173	-	173
						NOCM1782	196	-	196
					2018	NOCM1838	993	-	993
						NOCM1839	196	-	196
						NOCM1840	170	-	170
		Gwa'ni	Puntledge R	Fall	2018	NOCM1847	970,995	-	970,995
						NOCM1848	852,252	-	852,252

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Halalt Band	Bonsall Cr	Fall	1994	NOCM9453	18,000	-	18,000
					2008	NOCM0868	4,000	-	4,000
			Chemainus R	Fall	1996	NOCM96152	32,080	-	32,080
					1997	NOCM97139	206,965	-	206,965
						NOCM97140	79,768	-	79,768
					1998	NOCM98179	350,000	-	350,000
						NOCM98180	350,000	-	350,000
					1999	NOCM99181	185,000	-	185,000
					2000	NOCM0097	115,000	-	115,000
						NOCM0098	115,000	-	115,000
					2001	NOCM0145	500,000	-	500,000
					2002	NOCM02123	569,746	-	569,746
					2003	NOCM0320	132,000	-	132,000
					2004	NOCM0456	224,000	-	224,000
					2006	NOCM06138	300,000	-	300,000
					2007	NOCM07118	106,355	-	106,355
					2008	NOCM0867	175,000	-	175,000
					2009	NOCM0995	22,000	-	22,000
					2010	NOCM1033	41,000	-	41,000
					2011	NOCM11109	80,000	-	80,000
					2012	NOCM12134	500,000	-	500,000
					2013	NOCM1374	153,365	-	153,365
					2014	NOCM14146	21,668	-	21,668
		Hornby Is	Big Qualicum R	Fall	1985	NOCM8598	22,500	-	22,500
					1986	NOCM8664	30,000	-	30,000
					1987	NOCM8751	40,000	-	40,000
					1988	NOCM8856	25,000	-	25,000
					1989	NOCM8988	40,000	-	40,000
					1990	NOCM9074	89,600	-	89,600
					1991	NOCM91147	40,000	-	40,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Hornby Is	Big Qualicum R	Fall	1993	NOCM93138	80,000	-	80,000
					1994	NOCM94112	80,000	-	80,000
					1995	NOCM9553	75,000	-	75,000
					2001	NOCM0172	90,000	-	90,000
					2002	NOCM02218	60,000	-	60,000
					2004	NOCM04114	75,000	-	75,000
					2005	NOCM0534	35,000	-	35,000
					2006	NOCM0663	40,000	-	40,000
					2009	NOCM0945	50,000	-	50,000
					2010	NOCM1003	40,000	-	40,000
		L Qualicum R	L Qualicum R	Fall	1979	ADLV7902	5,557,506	503,020	6,060,526
					1980	ADLV8001	1,227,566	242,134	1,469,700
						NOCM8009	6,135,315	-	6,135,315
					1981	ADLV8106	1,161,363	259,908	1,421,271
						LV8102	2,648,253	99,556	2,747,809
					1982	ADRV8206	22,663,589	184,661	22,848,250
						LV8202	2,617,109	102,448	2,719,557
					1983	ADRV8303	18,732,149	200,370	18,932,519
						LV8316	2,460,892	89,971	2,550,863
					1984	ADRV8403	21,006,490	201,238	21,207,728
						LV8404	2,989,748	98,714	3,088,462
					1985	ADRV8503	6,622,318	150,062	6,772,380
						NOCM8515	2,653,555	-	2,653,555
						RV8505		147,100	147,100
					1986	ADLV8604	39,878,011	250,618	40,128,629
						NOCM8617	3,853,898	-	3,853,898
					1987	ADLV8703	39,174,956	250,435	39,425,391
					1988	ADRV8801	37,247,379	252,049	37,499,428
					1989	ADLV8902	27,763,827	250,586	28,014,413
					1990	ADLV9002	42,433,479	250,269	42,683,748

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	L Qualicum R	L Qualicum R	Fall	1991	ADLV9103	31,852,858	251,185	32,104,043
					1992	ADLV9204	42,216,634	251,074	42,467,708
					1993	NOCM9321	30,550,740	-	30,550,740
					1994	NOCM9427	31,937,880	-	31,937,880
					1995	NOCM9522	11,041,160	-	11,041,160
					1996	NOCM9626	6,846,780	-	6,846,780
						NOCM9627	2,050,383	-	2,050,383
					1997	NOCM9798	9,424,480	-	9,424,480
					1998	NOCM9857	15,812,240	-	15,812,240
					1999	ADLV9901	12,510,271	255,729	12,766,000
					2000	NOCM00115	5,817,520	-	5,817,520
					2001	ADLV0101	21,755,530	274,204	22,029,734
					2002	ADLV0201	10,941,493	250,007	11,191,500
					2003	NOCM03167	12,927,540	-	12,927,540
					2004	NOCM04128	28,972,400	-	28,972,400
					2005	NOCM05177	9,865,420	-	9,865,420
					2006	NOCM0695	23,886,500	-	23,886,500
					2007	NOCM0739	21,720,120	-	21,720,120
					2008	NOCM0866	14,774,280	-	14,774,280
					2009	NOCM0975	14,341,780	-	14,341,780
					2010	NOCM10116	6,631,911	-	6,631,911
						NOCM10117	1,089,229	-	1,089,229
					2011	NOCM1175	31,579,920	-	31,579,920
					2012	NOCM1248	31,175,740	-	31,175,740
					2013	NOCM13110	23,121,060	-	23,121,060
					2014	NOCM1428	4,247,761	-	4,247,761
					2015	NOCM1507	17,938,440	-	17,938,440
					2016	NOCM1612	45,304,800	-	45,304,800
					2017	NOCM1742	4,522,163	-	4,522,163
					2018	NOCM1814	4,910,020	-	4,910,020

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Lasqueti Is	Big Qualicum R	Fall	1990	NOCM9075	43,000	-	43,000
					1991	NOCM9145	70,000	-	70,000
					1992	NOCM92110	175,000	-	175,000
					1997	NOCM97190	16,000	-	16,000
						NOCM97191	3,000	-	3,000
						NOCM97192	45,000	-	45,000
					1998	NOCM98200	33,850	-	33,850
						NOCM98201	28,200	-	28,200
						NOCM98202	60,000	-	60,000
					2000	NOCM00171	31,000	-	31,000
						NOCM00172	31,000	-	31,000
						NOCM00173	31,000	-	31,000
					2001	NOCM0173	31,000	-	31,000
						NOCM0176	31,000	-	31,000
						NOCM0177	31,000	-	31,000
					2002	NOCM02146	20,000	-	20,000
						NOCM02147	20,000	-	20,000
						NOCM02148	20,000	-	20,000
					2003	NOCM03159	10,000	-	10,000
						NOCM03160	10,000	-	10,000
						NOCM03161	10,000	-	10,000
					2004	NOCM04117	30,000	-	30,000
						NOCM04118	30,000	-	30,000
						NOCM04119	30,000	-	30,000
					2005	NOCM05163	45,000	-	45,000
						NOCM05164	45,000	-	45,000
					2006	NOCM0664	45,000	-	45,000
						NOCM0665	45,000	-	45,000
					2009	NOCM0946	8,500	-	8,500
			Puntledge R	Fall	2010	NOCM1004	25,000	-	25,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Lasqueti Is	Puntledge R	Fall	2010	NOCM1005	34,500	-	34,500
					2011	NOCM1124	49,780	-	49,780
						NOCM1125	24,890	-	24,890
						NOCM1126	24,900	-	24,900
					2012	NOCM1218	15,000	-	15,000
						NOCM1219	30,000	-	30,000
						NOCM1220	15,000	-	15,000
					2013	NOCM13100	50,000	-	50,000
						NOCM13101	25,000	-	25,000
						NOCM13102	25,000	-	25,000
					2014	NOCM1423	30,000	-	30,000
						NOCM1424	50,000	-	50,000
						NOCM1425	20,000	-	20,000
					2015	NOCM1567	23,000	-	23,000
						NOCM1568	45,000	-	45,000
						NOCM1569	22,000	-	22,000
					2016	NOCM16107	23,000	-	23,000
						NOCM16108	45,000	-	45,000
						NOCM16109	22,000	-	22,000
					2017	NOCM1760	23,000	-	23,000
						NOCM1761	23,000	-	23,000
						NOCM1762	48,000	-	48,000
					2018	NOCM1868	24,750	-	24,750
						NOCM1869	49,500	-	49,500
						NOCM1870	24,750	-	24,750
		Lester Pearson	Goldstream R	Fall	1998	NOCM98182	16,000	-	16,000
		Little R/GSVI	Puntledge R	Fall	1995	NOCM9562	90,000	-	90,000
					1996	NOCM96114	90,000	-	90,000
					1997	NOCM97128	220,000	-	220,000
					1998	NOCM9897	380,000	-	380,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Little R/GSVI	Puntledge R	Fall	1999	NOCM99125	150,000	-	150,000
					2007	NOCM07138	90,000	-	90,000
					2008	NOCM0876	160,000	-	160,000
					2009	NOCM0947	150,000	-	150,000
					2010	NOCM1006	190,000	-	190,000
					2012	NOCM1212	75,000	-	75,000
						NOCM1213	124,000	-	124,000
					2013	NOCM1314	195,000	-	195,000
					2014	NOCM1426	120,000	-	120,000
					2015	NOCM1570	90,000	-	90,000
					2016	NOCM16143	70,000	-	70,000
					2017	NOCM1759	192,000	-	192,000
					2018	NOCM18109	124,000	-	124,000
		Malaspina Coll	Chase R	Fall	1985	NOCM85105	5,180	-	5,180
					1988	NOCM88108	7,500	-	7,500
					1993	NOCM9304	17,151	-	17,151
		Nanaimo R	Chemainus R	Fall	2014	NOCM14124	500,000	-	500,000
			Nanaimo R	Fall	1979	NOCM7911	85,000	-	85,000
						NOCM7912	216,000	-	216,000
					1980	NOCM8017	901,000	-	901,000
					1981	NOCM8119	845,600	-	845,600
					1982	NOCM8232	724,000	-	724,000
					1983	NOCM8331	845,000	-	845,000
					1984	NOCM8434	774,078	-	774,078
					1985	NOCM8539	339,891	-	339,891
						NOCM8540	15,000	-	15,000
					1987	NOCM8727	470,037	-	470,037
					1993	NOCM9336	468,390	-	468,390
						NOCM9337	558,144	-	558,144
					1994	NOCM9424	132,650	-	132,650

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Nanaimo R	Nanaimo R	Fall	1995	NOCM9501	110,406	-	110,406
					1996	NOCM9695	381,968	-	381,968
					1997	NOCM97118	265,553	-	265,553
					1998	NOCM98210	436	-	436
						NOCM9893	242,853	-	242,853
						NOCM9894	213,874	-	213,874
					1999	NOCM9976	36,637	-	36,637
						NOCM9977	83,363	-	83,363
						NOCM9978	245,765	-	245,765
						NOCM9979	245,766	-	245,766
					2000	NOCM0005	189,000	-	189,000
						NOCM0006	433,000	-	433,000
					2001	NOCM0105	13,942	-	13,942
						NOCM0106	250,660	-	250,660
						NOCM0107	234,104	-	234,104
					2002	NOCM02113	434,405	-	434,405
						NOCM02187	214,982	-	214,982
					2003	NOCM0325	313,462	-	313,462
						NOCM0326	241,225	-	241,225
					2004	NOCM0454	563,254	-	563,254
						NOCM0455	229,930	-	229,930
					2005	NOCM0569	2,463	-	2,463
						NOCM0570	137,500	-	137,500
					2006	NOCM0698	463,202	-	463,202
					2007	NOCM07119	470,459	-	470,459
					2008	NOCM0863	491,482	-	491,482
					2009	NOCM0974	373,022	-	373,022
					2010	NOCM1034	216,901	-	216,901
					2011	NOCM11104	455,613	-	455,613
					2012	NOCM1246	409,069	-	409,069

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Nanaimo R	Nanaimo R	Fall	2013	NOCM1324	471,025	-	471,025
					2014	NOCM14115	463,030	-	463,030
					2015	NOCM1564	435,122	-	435,122
					2016	NOCM1695	463,337	-	463,337
					2017	NOCM1749	388,300	-	388,300
					2018	NOCM1817	399,712	-	399,712
		Nanaimo Sch	Bush Cr	Fall	1992	NOCM92119	225	-	225
					1997	NOCM97114	43	-	43
						NOCM97115	63	-	63
					1999	NOCM99120	719	-	719
					2005	NOCM0579	281	-	281
					2007	NOCM0727	93	-	93
					2010	NOCM1028	110	-	110
						NOCM1029	90	-	90
					2012	NOCM1277	196	-	196
					2013	NOCM13112	198	-	198
			Chase R	Fall	1988	NOCM8866	180	-	180
			Chemainus R	Fall	2005	NOCM05218	104	-	104
					2007	NOCM0728	88	-	88
					2016	NOCM16135	100	-	100
			Holland Cr	Fall	2001	NOCM0146	490	-	490
					2002	NOCM02124	185	-	185
					2011	NOCM1141	264	-	264
					2013	NOCM13113	100	-	100
					2014	NOCM1474	180	-	180
					2016	NOCM16140	194	-	194
			Nanaimo R	Fall	1989	NOCM89103	150	-	150
			Stocking Cr	Fall	2016	NOCM16134	457	-	457
			Walker Cr/GSVI	Fall	1987	NOCM8761	1,800	-	1,800
					1988	NOCM8865	1,800	-	1,800

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Nanaimo Sch	Walker Cr/GSVI	Fall	1991	NOCM9158	550	-	550
					1993	NOCM93139	750	-	750
					1994	NOCM94126	84	-	84
						NOCM94127	64	-	64
					1995	NOCM95130	45	-	45
						NOCM95131	165	-	165
					1996	NOCM9617	47	-	47
						NOCM9618	92	-	92
					1998	NOCM98165	700	-	700
		Nanoose Band	Nanoose Cr	Fall	1997	NOCM97143	11,000	-	11,000
		Oyster R	Oyster R	Fall	1999	NOCM99113	125,000	-	125,000
					2000	NOCM00168	20,000	-	20,000
					2001	NOCM0174	185,000	-	185,000
						NOCM0175	185,000	-	185,000
					2002	NOCM02149	366,000	-	366,000
					2003	NOCM0335	280,000	-	280,000
					2004	NOCM04120	200,000	-	200,000
						NOCM04121	170,000	-	170,000
					2005	NOCM0535	20,000	-	20,000
					2006	NOCM0666	350,000	-	350,000
					2007	NOCM07139	301,500	-	301,500
					2008	NOCM0877	26,000	-	26,000
					2013	NOCM1321	2,000	-	2,000
					2015	NOCM1571	30,000	-	30,000
					2016	NOCM16105	139,500	-	139,500
					2017	NOCM1763	30,000	-	30,000
					2018	NOCM18110	175,069	-	175,069
			Puntledge R	Fall	1990	NOCM9058	338,650	-	338,650
					1991	NOCM9146	294,000	-	294,000
					1992	NOCM92162	360,000	-	360,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Oyster R	Puntledge R	Fall	1994	NOCM94114	975,000	-	975,000
					1995	NOCM9572	481,000	-	481,000
					1996	NOCM96116	240,000	-	240,000
					1997	NOCM9779	724,300	-	724,300
					1998	NOCM9899	300,000	-	300,000
					1999	NOCM99188	95,000	-	95,000
					2000	NOCM00169	450,000	-	450,000
					2010	NOCM1007	200,000	-	200,000
					2011	NOCM1127	125,000	-	125,000
						NOCM1128	75,000	-	75,000
					2012	NOCM1214	125,000	-	125,000
						NOCM1215	75,000	-	75,000
					2013	NOCM1322	195,000	-	195,000
					2014	NOCM1427	190,000	-	190,000
					2015	NOCM1572	198,000	-	198,000
					2016	NOCM16106	180,000	-	180,000
					2017	NOCM1750	200,000	-	200,000
					2018	NOCM18111	144,931	-	144,931
		Pender Is Enh	Goldstream R	Fall	2012	NOCM1242	57,200	-	57,200
					2014	NOCM1421	30,000	-	30,000
					2015	NOCM1584	24,000	-	24,000
					2016	NOCM16123	7,676	-	7,676
					2017	NOCM1765	17,665	-	17,665
					2018	NOCM1841	51,024	-	51,024
		Puntledge R	Puntledge R	Fall	1979	NOCM7904	1,471,316	-	1,471,316
					1980	021724	3,224,388	103,446	3,327,834
					1981	022252	649,169	37,846	687,015
						022253	699,548	35,488	735,036
						022254	865,225	36,116	901,341
						NOCM8103	45,686	-	45,686

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Puntledge R	Puntledge R	Fall	1982	022437	1,227,099	35,581	1,262,680
						022438	2,572,847	37,595	2,610,442
						022439	1,234,545	36,496	1,271,041
						NOCM8208	1,952,287	-	1,952,287
						NOCM8209	285,482	-	285,482
					1983	022414	4,607,235	100,305	4,707,540
						NOCM8320	1,798,803	-	1,798,803
					1984	023361	2,456,876	76,294	2,533,170
						023362	4,773,619	77,786	4,851,405
					1985	022802	1,242,624	35,048	1,277,672
						023661	1,171,425	34,967	1,206,392
						024059	2,562,103	34,780	2,596,883
						NOCM8521	350,000	-	350,000
					1986	024614	1,202,050	13,521	1,215,571
						024615	1,234,575	15,158	1,249,733
						024616	1,246,529	15,292	1,261,821
						024617	1,099,456	13,238	1,112,694
						LV8607		72,383	72,383
					1987	025544	3,912,524	55,628	3,968,152
						LV8707		83,884	83,884
					1988	ADLV8806	3,086,823	143,866	3,230,689
					1989	LV8906	2,682,749	164,234	2,846,983
					1990	0201010208	5,082,530	80,632	5,163,162
					1991	0201010108	1,018,379	21,403	1,039,782
						H20302	2,230,096	52,223	2,282,319
						NOCM9127	1,874,851	-	1,874,851
					1992	0201010314	4,640,281	84,540	4,724,821
						NOCM9223	190,184	-	190,184
					1993	ADLV9306	3,529,313	100,188	3,629,501
						NOCM9371	51,501	-	51,501

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Puntledge R	Puntledge R	Fall	1993	NOCM9372	51,134	-	51,134
						NOCM9373	51,480	-	51,480
					1994	ADLV9404	2,934,320	59,954	2,994,274
						ADLV9405	1,998,449	39,908	2,038,357
					1995	ADLV9504	2,258,076	100,763	2,358,839
						NOCM95142	227,024	-	227,024
						NOCM95143	2,036,160	-	2,036,160
					1996	H20106	3,777,382	112,404	3,889,786
					1997	0201010401	4,667,836	81,414	4,749,250
						NOCM97108	1,020,198	-	1,020,198
					1998	NOCM98153	4,534,410	-	4,534,410
					1999	NOCM99111	1,972,984	-	1,972,984
						NOCM99112	1,937,774	-	1,937,774
					2000	NOCM00130	3,811,529	-	3,811,529
					2001	NOCM0128	3,505,768	-	3,505,768
					2002	NOCM02200	1,792,626	-	1,792,626
						NOCM02201	1,794,761	-	1,794,761
					2003	NOCM0371	1,849,937	-	1,849,937
						NOCM0372	1,816,623	-	1,816,623
					2004	NOCM0485	2,982,699	-	2,982,699
					2005	NOCM0540	3,771,550	-	3,771,550
					2006	NOCM0654	3,934,536	-	3,934,536
					2007	NOCM07128	1,540,741	-	1,540,741
						NOCM07129	1,301,364	-	1,301,364
					2008	NOCM0836	1,745,365	-	1,745,365
					2009	NOCM0916	2,986,351	-	2,986,351
					2010	NOCM1038	16,224	-	16,224
						NOCM1039	1,406,623	-	1,406,623
						NOCM1040	1,448,189	-	1,448,189
					2011	NOCM11125	3,136,635	-	3,136,635

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Puntledge R	Puntledge R	Fall	2011	NOCM1123	68,000	-	68,000
					2012	NOCM1234	2,660,844	-	2,660,844
					2013	NOCM1305	1,125,875	-	1,125,875
						NOCM1306	1,558,109	-	1,558,109
					2014	NOCM1433	2,664,720	-	2,664,720
					2015	NOCM1523	2,490,411	-	2,490,411
					2016	NOCM1615	2,635,535	-	2,635,535
					2017	NOCM1741	2,430,138	-	2,430,138
					2018	NOCM1811	2,197,122	-	2,197,122
		Qualicum Sch	Big Qualicum R	Fall	1992	NOCM92114	80	-	80
					1999	NOCM99123	92	-	92
		Roy Cr	Roy Cr	Fall	1988	NOCM8846	6,400	-	6,400
		Saanich Sch	Goldstream R	Fall	1989	NOCM8996	900	-	900
					1990	NOCM9089	2,200	-	2,200
					1991	NOCM9168	2,100	-	2,100
					1992	NOCM92137	2,000	-	2,000
					1993	NOCM93133	744	-	744
					1995	NOCM95132	966	-	966
					1996	NOCM9616	1,118	-	1,118
					1997	NOCM9783	2,508	-	2,508
					1998	NOCM98173	1,250	-	1,250
					1999	NOCM99177	1,368	-	1,368
					2000	NOCM00152	1,300	-	1,300
					2001	NOCM0187	1,000	-	1,000
					2002	NOCM02175	1,200	-	1,200
					2003	NOCM03164	180	-	180
						NOCM03165	1,225	-	1,225
					2004	NOCM0433	175	-	175
						NOCM0434	1,460	-	1,460
					2005	NOCM0583	180	-	180

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Saanich Sch	Goldstream R	Fall	2005	NOCM0584	900	-	900
						NOCM0585	190	-	190
						NOCM0586	1,687	-	1,687
					2006	NOCM06118	900	-	900
						NOCM06119	190	-	190
						NOCM06120	1,687	-	1,687
					2007	NOCM07165	1,244	-	1,244
						NOCM07166	1,173	-	1,173
						NOCM07167	396	-	396
						NOCM07168	592	-	592
						NOCM07169	49	-	49
						NOCM07170	176	-	176
					2008	NOCM08111	1,244	-	1,244
						NOCM08112	1,173	-	1,173
						NOCM08113	396	-	396
					2009	NOCM0985	1,242	-	1,242
					2010	NOCM1050	185	-	185
					2011	NOCM11121	350	-	350
						NOCM11122	200	-	200
						NOCM11123	190	-	190
					2012	NOCM1225	196	-	196
						NOCM1226	199	-	199
						NOCM1227	185	-	185
						NOCM1228	589	-	589
					2013	NOCM1338	196	-	196
						NOCM1339	199	-	199
						NOCM1340	185	-	185
						NOCM1341	589	-	589
					2014	NOCM1406	198	-	198
						NOCM1407	198	-	198

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Saanich Sch	Goldstream R	Fall	2015	NOCM1579	196	-	196
						NOCM1580	199	-	199
						NOCM1581	185	-	185
						NOCM1582	589	-	589
					2016	NOCM16141	2,600	-	2,600
		Saltspring Is	Fulford Cr	Fall	1990	NOCM9090	7,000	-	7,000
					1993	NOCM9361	9,000	-	9,000
					1996	NOCM96154	28,000	-	28,000
					2013	NOCM1392	1,200	-	1,200
			Goldstream R	Fall	1997	NOCM97158	14,500	-	14,500
						NOCM97159	14,500	-	14,500
					1998	NOCM98149	10,000	-	10,000
						NOCM98150	10,000	-	10,000
						NOCM98151	5,800	-	5,800
					1999	NOCM99183	18,000	-	18,000
						NOCM99184	18,000	-	18,000
						NOCM99185	7,500	-	7,500
					2001	NOCM0186	28,500	-	28,500
					2006	NOCM06131	30,000	-	30,000
					2012	NOCM1240	10,000	-	10,000
					2013	NOCM1391	17,603	-	17,603
					2014	NOCM1419	20,000	-	20,000
					2015	NOCM1573	29,950	-	29,950
						NOCM1574	9,862	-	9,862
					2016	NOCM1653	6,009	-	6,009
					2017	NOCM1766	6,081	-	6,081
					2018	NOCM1842	19,000	-	19,000
		Sandhill Cr/GSVI	Goldstream R	Fall	1986	NOCM8675	32,000	-	32,000
						NOCM8676	2,000	-	2,000
		Saturna Is	Goldstream R	Fall	1992	NOCM92138	22,000	-	22,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Saturna Is	Goldstream R	Fall	1993	NOCM9345	24,000	-	24,000
					1994	NOCM94129	22,400	-	22,400
					1995	NOCM95133	19,600	-	19,600
					1996	NOCM96155	23,800	-	23,800
					1997	NOCM97160	36,000	-	36,000
					1998	NOCM98208	67,000	-	67,000
					1999	NOCM99186	3,209	-	3,209
					2001	NOCM0185	87,000	-	87,000
					2004	NOCM0452	47,000	-	47,000
					2006	NOCM06130	45,000	-	45,000
					2007	NOCM07105	60,000	-	60,000
					2009	NOCM0936	40,000	-	40,000
					2012	NOCM1241	79,217	-	79,217
					2013	NOCM13138	59,383	-	59,383
					2014	NOCM1420	40,841	-	40,841
					2015	NOCM1585	48,000	-	48,000
					2018	NOCM1843	50,000	-	50,000
		Shawnigan Lk Sch	Goldstream R	Fall	1980	NOCM8032	8,200	-	8,200
					1981	NOCM8141	14,400	-	14,400
						NOCM8142	4,000	-	4,000
					1982	NOCM8267	28,300	-	28,300
					1983	NOCM8359	17,500	-	17,500
					1984	NOCM8483	41,000	-	41,000
					1986	NOCM8677	14,500	-	14,500
					1987	NOCM8773	22,000	-	22,000
					1988	NOCM8864	21,500	-	21,500
					1989	NOCM89102	8,500	-	8,500
					1990	NOCM9091	40,000	-	40,000
					1991	NOCM91145	100	-	100
					1992	NOCM92139	20,000	-	20,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Shawnigan Lk Sch	Goldstream R	Fall	1993	NOCM9363	22,000	-	22,000
					1996	NOCM96156	18,000	-	18,000
					1997	NOCM97161	15,000	-	15,000
					1998	NOCM9822	7,000	-	7,000
					1999	NOCM99178	8,600	-	8,600
			Shawnigan Cr	Fall	2010	NOCM1054	1,400	-	1,400
					2011	NOCM1199	4,954	-	4,954
					2017	NOCM1767	280	-	280
		Sooke Sch	Goldstream R	Fall	1989	NOCM8997	1,600	-	1,600
					1990	NOCM9092	1,800	-	1,800
					1991	NOCM9169	1,130	-	1,130
					1992	NOCM92140	1,150	-	1,150
					1993	NOCM93134	1,860	-	1,860
					1995	NOCM95134	1,654	-	1,654
					1997	NOCM9784	488	-	488
					1998	NOCM98178	630	-	630
					1999	NOCM99179	1,280	-	1,280
					2000	NOCM00147	1,280	-	1,280
					2002	NOCM02177	1,000	-	1,000
					2003	NOCM03148	1,490	-	1,490
					2005	NOCM0589	1,607	-	1,607
					2006	NOCM06116	1,427	-	1,427
						NOCM06117	180	-	180
					2007	NOCM07163	1,955	-	1,955
						NOCM07164	400	-	400
					2008	NOCM08109	400	-	400
						NOCM08110	2,153	-	2,153
					2009	NOCM0983	1,600	-	1,600
						NOCM0984	400	-	400
					2010	NOCM1048	1,820	-	1,820

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Sooke Sch	Goldstream R	Fall	2010	NOCM1049	272	-	272
					2011	NOCM11124	1,540	-	1,540
					2013	NOCM1337	1,177	-	1,177
					2015	NOCM1578	3,829	-	3,829
					2016	NOCM16131	2,144	-	2,144
					2018	NOCM1844	1,960	-	1,960
		Victoria Sch	Goldstream R	Fall	1986	NOCM8679	163	-	163
					1987	NOCM8780	320	-	320
					1988	NOCM8867	1,080	-	1,080
					1989	NOCM89104	3,960	-	3,960
					1990	NOCM9093	5,200	-	5,200
					1991	NOCM9170	2,900	-	2,900
					1992	NOCM92141	3,000	-	3,000
					1993	NOCM93135	4,836	-	4,836
					1995	NOCM95135	4,747	-	4,747
					1996	NOCM9615	6,779	-	6,779
					1997	NOCM9785	6,228	-	6,228
					1998	NOCM98177	3,200	-	3,200
					1999	NOCM99180	5,529	-	5,529
					2000	NOCM00148	4,800	-	4,800
					2001	NOCM0184	6,000	-	6,000
					2002	NOCM02178	5,500	-	5,500
					2003	NOCM03149	5,835	-	5,835
					2004	NOCM0432	6,801	-	6,801
					2005	NOCM0587	884	-	884
						NOCM0588	6,879	-	6,879
					2006	NOCM06114	6,159	-	6,159
						NOCM06115	734	-	734
					2007	NOCM07159	8,097	-	8,097
						NOCM07160	210	-	210

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Victoria Sch	Goldstream R	Fall	2007	NOCM07161	1,255	-	1,255
						NOCM07162	49	-	49
					2008	NOCM08106	8,146	-	8,146
						NOCM08107	1,255	-	1,255
						NOCM08108	210	-	210
					2009	NOCM0980	954	-	954
						NOCM0981	6,526	-	6,526
						NOCM0982	307	-	307
					2010	NOCM1044	761	-	761
						NOCM1045	2,085	-	2,085
						NOCM1046	420	-	420
						NOCM1047	3,513	-	3,513
					2011	NOCM11118	4,700	-	4,700
						NOCM11119	1,389	-	1,389
					2012	NOCM1221	180	-	180
						NOCM1222	4,381	-	4,381
						NOCM1223	1,194	-	1,194
					2013	NOCM1334	180	-	180
						NOCM1335	3,204	-	3,204
						NOCM1336	1,194	-	1,194
					2014	NOCM1403	197	-	197
						NOCM1404	4,414	-	4,414
						NOCM1405	1,759	-	1,759
					2015	NOCM1575	3,204	-	3,204
						NOCM1576	180	-	180
						NOCM1577	1,194	-	1,194
					2016	NOCM16114	198	-	198
						NOCM16115	3,138	-	3,138
						NOCM16116	2,154	-	2,154
					2017	NOCM1777	7,221	-	7,221

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Victoria Sch	Goldstream R	Fall	2017	NOCM1778	2,540	-	2,540
					2018	NOCM1845	2,353	-	2,353
						NOCM1846	4,916	-	4,916
		Walker Cr/GSVI	Bonsall Cr	Fall	2007	NOCM07117	10,000	-	10,000
			Bush Cr	Fall	1992	NOCM92150	5,400	-	5,400
					1993	NOCM9357	5,000	-	5,000
					1994	NOCM9454	5,000	-	5,000
					1996	NOCM96144	5,037	-	5,037
					1997	NOCM9792	60,000	-	60,000
					1998	NOCM98148	22,000	-	22,000
					1999	NOCM99119	10,500	-	10,500
					2000	NOCM00106	11,000	-	11,000
					2001	NOCM0152	28,600	-	28,600
					2002	NOCM02126	41,757	-	41,757
					2005	NOCM0591	33,000	-	33,000
					2006	NOCM06101	22,000	-	22,000
					2007	NOCM07112	5,000	-	5,000
					2008	NOCM0894	15,000	-	15,000
					2011	NOCM11110	7,300	-	7,300
					2013	NOCM1350	3,900	-	3,900
			Chemainus R	Fall	2012	NOCM12129	60,000	-	60,000
					2013	NOCM1352	59,340	-	59,340
					2016	NOCM1698	58,126	-	58,126
			Holland Cr	Fall	1997	NOCM97142	45,000	-	45,000
					1998	NOCM98147	29,000	-	29,000
					2000	NOCM00105	7,800	-	7,800
					2001	NOCM0151	55,450	-	55,450
					2002	NOCM02125	18,000	-	18,000
					2003	NOCM0321	34,000	-	34,000
					2004	NOCM0481	20,000	-	20,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Walker Cr/GSVI	Holland Cr	Fall	2005	NOCM0590	23,000	-	23,000
					2006	NOCM06100	28,000	-	28,000
					2007	NOCM07113	10,000	-	10,000
					2008	NOCM0895	85,000	-	85,000
					2010	NOCM1030	30,000	-	30,000
					2011	NOCM11111	13,000	-	13,000
					2012	NOCM12127	60,000	-	60,000
					2013	NOCM1302	49,720	-	49,720
						NOCM1351	4,687	-	4,687
					2014	NOCM1471	2,225	-	2,225
					2016	NOCM16100	4,590	-	4,590
					2018	NOCM1851	5,000	-	5,000
			Stocking Cr	Fall	2000	NOCM00104	3,500	-	3,500
					2002	NOCM02127	74,313	-	74,313
					2003	NOCM0322	34,000	-	34,000
					2004	NOCM0483	2,500	-	2,500
					2006	NOCM0699	18,500	-	18,500
					2007	NOCM07114	10,000	-	10,000
					2008	NOCM0896	75,000	-	75,000
					2010	NOCM1031	38,000	-	38,000
					2012	NOCM12128	40,000	-	40,000
					2013	NOCM1303	23,120	-	23,120
					2014	NOCM1472	28,583	-	28,583
						NOCM1473	28,583	-	28,583
					2016	NOCM1699	18,525	-	18,525
					2017	NOCM17138	41,184	-	41,184
					2018	NOCM1852	35,218	-	35,218
						NOCM1853	15,302	-	15,302
						NOCM1854	36,100	-	36,100
			Tyee (Rocky) Cr	Fall	1992	NOCM92178	7,500	-	7,500

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSVI	GEORGIA STRAIT	Walker Cr/GSVI	Tyee (Rocky) Cr	Fall	1993	NOCM93167	3,000	-	3,000
					1995	NOCM95136	2,700	-	2,700
					1998	NOCM98209	36,000	-	36,000
					2000	NOCM00103	4,750	-	4,750
					2001	NOCM01204	7,600	-	7,600
					2004	NOCM0482	2,500	-	2,500
					2007	NOCM07115	2,500	-	2,500
			Walker Cr/GSVI	Fall	1986	NOCM8646	42,000	-	42,000
					1987	NOCM8781	18,000	-	18,000
					1989	NOCM8981	5,000	-	5,000
					1990	NOCM9078	8,000	-	8,000
					1991	NOCM9159	9,000	-	9,000
					1992	NOCM92120	1,600	-	1,600
					1993	NOCM93168	2,000	-	2,000
					1994	NOCM94154	5,000	-	5,000
					1997	NOCM97141	3,500	-	3,500
					1999	NOCM99118	10,500	-	10,500
					2000	NOCM00102	6,400	-	6,400
					2001	NOCM0150	6,500	-	6,500
					2003	NOCM0323	18,000	-	18,000
					2004	NOCM0484	10,000	-	10,000
					2007	NOCM07116	5,000	-	5,000
					2008	NOCM0897	15,000	-	15,000
	(blank)	Fanny Bay/GSVI	Cook Cr/GSVI	Fall	2002	NOCM02145	117,270	-	117,270
GSMN	GEORGIA STRAIT	Anderson Cr/GSMN	Anderson Cr/Pender Hb	Fall	1982	NOCM8248	18,000	-	18,000
					1983	NOCM8350	52,500	-	52,500
					1984	NOCM8460	56,000	-	56,000
					1985	NOCM8568	50,000	-	50,000
					1987	NOCM8745	46,689	-	46,689
					1988	NOCM8895	222,735	-	222,735

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Anderson Cr/GSMN	Anderson Cr/Pender Hb	Fall	1989	NOCM8953	8,500	-	8,500
					1990	NOCM9064	120,000	-	120,000
					1991	NOCM9157	225,000	-	225,000
					1992	NOCM92127	230,000	-	230,000
					1993	NOCM9360	265,000	-	265,000
					1994	NOCM9498	265,000	-	265,000
					1995	NOCM9596	130,000	-	130,000
					1998	NOCM9806	139,000	-	139,000
						NOCM98186	139,000	-	139,000
		Chapman Cr	Chapman Cr	Fall	1992	NOCM92128	170,000	-	170,000
					1993	NOCM9339	283,498	-	283,498
					1994	NOCM9499	148,000	-	148,000
					1997	NOCM9711	17,000	-	17,000
					1998	NOCM9804	31,200	-	31,200
					1999	NOCM99144	32,000	-	32,000
					2002	NOCM02172	110,000	-	110,000
					2003	NOCM03166	10,000	-	10,000
					2004	NOCM0413	80,000	-	80,000
					2005	NOCM0574	5,500	-	5,500
					2008	NOCM0898	60,000	-	60,000
					2009	NOCM0948	30,000	-	30,000
					2011	NOCM11108	5,950	-	5,950
					2012	NOCM1210	33,102	-	33,102
					2013	NOCM1307	60,000	-	60,000
					2014	NOCM14109	2,000	-	2,000
					2016	NOCM1606	12,000	-	12,000
					2018	NOCM1821	7,766	-	7,766
		Cortez Is	Sliammon R	Fall	1991	NOCM91117	75,000	-	75,000
					1992	NOCM92107	90,000	-	90,000
		Deserted R/GSMN	Deserted R/GSMN	Fall	1982	NOCM8264	8,300	-	8,300

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Klahoose Band	Lang Cr	Fall	2017	NOCM17143	43,965	-	43,965
			Sliammon R	Fall	1991	NOCM91146	225,000	-	225,000
					1992	NOCM92109	360,000	-	360,000
					1993	NOCM93132	330,000	-	330,000
					1994	NOCM94113	200,000	-	200,000
					1995	NOCM9557	46,925	-	46,925
						NOCM9558	63,990	-	63,990
						NOCM9560	63,990	-	63,990
						NOCM9561	63,990	-	63,990
					1996	NOCM96113	200,000	-	200,000
					2018	NOCM1816	19,700	-	19,700
		Powell R	Lang Cr	Fall	1984	NOCM8448	52,226	-	52,226
					1985	NOCM8554	123,200	-	123,200
					1986	NOCM8632	94,996	-	94,996
					1987	NOCM8734	307,506	-	307,506
					1988	NOCM88102	170,776	-	170,776
					1989	NOCM89152	119,714	-	119,714
						NOCM8956	100,000	-	100,000
						NOCM8967	380,782	-	380,782
						NOCM8969	100,000	-	100,000
						NOCM8971	100,000	-	100,000
						NOCM8973	52,836	-	52,836
					1990	NOCM9041	75,000	-	75,000
						NOCM9042	50,000	-	50,000
						NOCM9043	313,389	-	313,389
					1991	NOCM9176	50,000	-	50,000
						NOCM9177	60,000	-	60,000
						NOCM9178	555,000	-	555,000
						NOCM9179	3,210	-	3,210
					1992	NOCM9242	33,333	-	33,333

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Powell R	Lang Cr	Fall	1992	NOCM9243	33,333	-	33,333
						NOCM9244	230,714	-	230,714
					1994	181331	199,174	25,285	224,459
						181332	198,631	25,216	223,847
					1995	NOCM9502	995,680	-	995,680
						NOCM9503	129,616	-	129,616
					1996	183357	534,871	49,596	584,467
						NOCM9603	375,000	-	375,000
					1997	183444	457,900	51,132	509,032
						NOCM9703	80,000	-	80,000
						NOCM9705	80,000	-	80,000
						NOCM9706	100,000	-	100,000
					1998	NOCM98157	516,801	-	516,801
					1999	NOCM9904	99,959	-	99,959
						NOCM9905	583,440	-	583,440
					2000	NOCM0002	408,783	-	408,783
						NOCM0003	59,920	-	59,920
					2001	NOCM0109	59,702	-	59,702
						NOCM0110	636,851	-	636,851
					2002	NOCM0285	157,343	-	157,343
						NOCM0286	340,614	-	340,614
					2003	NOCM0301	294,238	-	294,238
						NOCM0302	98,908	-	98,908
					2004	NOCM0403	288,102	-	288,102
						NOCM0404	279,494	-	279,494
					2005	NOCM0510	583,587	-	583,587
						NOCM0511	59,976	-	59,976
						NOCM0512	60,000	-	60,000
					2006	NOCM0617	160,000	-	160,000
						NOCM0618	253,881	-	253,881

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Powell R	Lang Cr	Fall	2006	NOCM0619	167,689	-	167,689
						NOCM0620	20,000	-	20,000
						NOCM0621	50,000	-	50,000
					2007	NOCM0712	459,754	-	459,754
						NOCM0713	202,931	-	202,931
						NOCM0714	70,000	-	70,000
					2008	NOCM0807	650,121	-	650,121
						NOCM08105	70,000	-	70,000
					2009	NOCM0938	70,000	-	70,000
						NOCM0939	613,852	-	613,852
					2010	NOCM1041	636,574	-	636,574
						NOCM1058	70,000	-	70,000
						NOCM1059	70,000	-	70,000
					2011	NOCM11105	622,764	-	622,764
						NOCM11106	70,000	-	70,000
						NOCM11107	70,000	-	70,000
					2012	NOCM1201	615,553	-	615,553
						NOCM1216	70,000	-	70,000
					2013	NOCM1310	70,000	-	70,000
						NOCM1311	70,000	-	70,000
						NOCM1312	621,635	-	621,635
					2014	NOCM1414	70,000	-	70,000
						NOCM1415	70,000	-	70,000
						NOCM1416	596,048	-	596,048
					2015	NOCM1558	70,000	-	70,000
						NOCM1559	641,260	-	641,260
						NOCM1560	70,000	-	70,000
					2016	NOCM16110	70,000	-	70,000
						NOCM16111	646,316	-	646,316
						NOCM16112	70,000	-	70,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Powell R	Lang Cr	Fall	2017	NOCM1752	544,156	-	544,156
						NOCM1753	70,000	-	70,000
						NOCM1754	70,000	-	70,000
					2018	NOCM1802	78,138	-	78,138
		Powell R Sch	Lang Cr	Fall	2016	NOCM16142	250	-	250
		Roberts Cr	Chaster Cr	Fall	1986	NOCM8647	16,275	-	16,275
					1987	NOCM8767	20,000	-	20,000
						NOCM8768	20,000	-	20,000
					1992	NOCM92131	5,000	-	5,000
						NOCM92132	5,000	-	5,000
						NOCM92133	20,000	-	20,000
					1993	NOCM93127	35,000	-	35,000
					1994	NOCM94102	25,000	-	25,000
			Chaster+Roberts	Fall	1989	NOCM89107	5,000	-	5,000
						NOCM8982	50,000	-	50,000
					1990	NOCM9046	41,000	-	41,000
						NOCM9052	13,000	-	13,000
						NOCM9053	3,000	-	3,000
			Roberts Cr	Fall	1981	NOCM8132	11,400	-	11,400
					1982	NOCM8252	3,500	-	3,500
						NOCM8253	4,000	-	4,000
					1983	NOCM8368	46,000	-	46,000
					1984	NOCM8464	8,700	-	8,700
					1985	NOCM8575	27,000	-	27,000
						NOCM8576	5,000	-	5,000
						NOCM8577	2,000	-	2,000
					1988	NOCM8847	10,000	-	10,000
						NOCM8848	9,000	-	9,000
						NOCM8849	2,500	-	2,500
						NOCM8850	2,000	-	2,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Sechelt	Angus Cr	Fall	1983	NOCM8330	45,000	-	45,000
					1985	NOCM8538	38,719	-	38,719
		Sliammon R	Sliammon R	Fall	1977	NOCM7706	30,380	-	30,380
					1978	H20204	849,959	29,041	879,000
					1979	H20301	696,176	53,824	750,000
					1980	NOCM8016	940,000	-	940,000
					1981	NOCM8116	305,000	-	305,000
						NOCM8117	316,000	-	316,000
						NOCM8118	369,000	-	369,000
					1982	NOCM8230	1,390,000	-	1,390,000
					1983	RV8304	867,746	100,539	968,285
					1984	LV8418	775,969	93,031	869,000
					1985	RV8501	738,698	181,302	920,000
					1986	NOCM8626	960,000	-	960,000
					1987	NOCM8744	254,000	-	254,000
					1988	NOCM8878	580,000	-	580,000
					1989	NOCM8946	509,000	-	509,000
					1990	NOCM90149	496,080	-	496,080
					1991	NOCM91131	627,800	-	627,800
					1992	NOCM9245	806,440	-	806,440
					1993	LV9311	558,487	75,923	634,410
					1994	181522	244,474	25,139	269,613
						181523	245,379	25,232	270,611
						NOCM9401	221,876	-	221,876
					1995	181511	127,260	25,113	152,373
						181512	128,233	25,305	153,538
						182252	279,726	49,152	328,878
						NOCM9508	54,193	-	54,193
					1996	181431	552,624	49,972	602,596
						NOCM9620	181,611	-	181,611

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Sliammon R	Sliammon R	Fall	1997	183446	444,274	48,399	492,673
						NOCM9704	271,243	-	271,243
						NOCM9710	299,141	-	299,141
					1998	NOCM9803	519,118	-	519,118
						NOCM9812	594,664	-	594,664
					1999	184544	251,333	49,733	301,066
						184545	254,300	50,320	304,620
						NOCM9936	867,497	-	867,497
					2000	184657	124,881	25,068	149,949
						184658	125,199	25,132	150,331
						184659	125,633	25,219	150,852
						184660	124,915	25,075	149,990
					2001	NOCM0101	533,593	-	533,593
						NOCM0114	608,123	-	608,123
					2002	NOCM0292	150,000	-	150,000
						NOCM0293	591,553	-	591,553
					2003	NOCM0303	583,759	-	583,759
					2004	NOCM0405	811,288	-	811,288
						NOCM0406	257,393	-	257,393
					2005	NOCM0528	336,078	-	336,078
						NOCM0529	587,868	-	587,868
					2006	NOCM06139	964,595	-	964,595
						NOCM06140	583,502	-	583,502
					2007	NOCM0710	300,000	-	300,000
						NOCM0711	592,635	-	592,635
					2008	NOCM0864	473,400	-	473,400
						NOCM0879	578,894	-	578,894
					2009	NOCM0940	587,403	-	587,403
						NOCM0941	351,163	-	351,163
					2010	NOCM1056	530,976	-	530,976

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Sliammon R	Sliammon R	Fall	2010	NOCM1057	191,600	-	191,600
					2011	NOCM11112	407,000	-	407,000
						NOCM11113	598,930	-	598,930
					2012	NOCM1203	80,000	-	80,000
						NOCM1204	898,809	-	898,809
					2013	NOCM1375	475,000	-	475,000
						NOCM1376	900,000	-	900,000
					2014	NOCM1434	18,500	-	18,500
					2015	NOCM1556	892,400	-	892,400
						NOCM1557	565,824	-	565,824
					2016	NOCM16113	1,210,900	-	1,210,900
					2017	NOCM1755	594,500	-	594,500
						NOCM1756	796,130	-	796,130
					2018	NOCM18106	598,214	-	598,214
						NOCM18107	320,361	-	320,361
			Theodosia Cr	Fall	2002	LV0201	300	101,029	101,329
		Sunshine Coast Sch	Anderson Cr/Pender Hb	Fall	1978	NOCM7803	78,000	-	78,000
					1980	NOCM8030	500	-	500
			Roberts Cr	Fall	1985	NOCM85101	90	-	90
					1986	NOCM8668	80	-	80
			Wilson Cr/GSMN	Fall	1985	NOCM85102	45	-	45
					1986	NOCM8666	40	-	40
		Texada Is Vol	Lang Cr	Fall	1996	NOCM9604	129,160	-	129,160
					1997	NOCM9767	109,760	-	109,760
					1998	NOCM98154	93,227	-	93,227
					1999	NOCM99147	75,582	-	75,582
					2000	NOCM00149	49,000	-	49,000
					2001	NOCM01110	98,000	-	98,000
					2002	NOCM0287	75,563	-	75,563
					2006	NOCM0622	70,000	-	70,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Texada Is Vol	Lang Cr	Fall	2007	NOCM07177	70,000	-	70,000
					2008	NOCM08104	70,000	-	70,000
					2012	NOCM1217	70,000	-	70,000
		Tuwanek	Angus Cr	Fall	1984	NOCM8465	25,000	-	25,000
			Gray Cr/GSMN	Fall	1983	NOCM8362	3,500	-	3,500
		Vancouver Bay	Deserted R/GSMN	Fall	1984	NOCM8425	19,300	-	19,300
			Saltery Bay+Vancvr	Fall	1979	NOCM7906	1,267,602	-	1,267,602
					1981	NOCM8111	133,500	-	133,500
					1983	NOCM8319	5,000	-	5,000
						NOCM8321	34,877	-	34,877
			Skwawka+Hunaechin	Fall	1984	NOCM8426	10,000	-	10,000
						NOCM8427	17,000	-	17,000
			Vancouver R	Fall	1982	NOCM8225	225	-	225
						NOCM8226	9,629	-	9,629
					1984	NOCM8424	124,500	-	124,500
						NOCM8485	3,000	-	3,000
					1985	NOCM8529	1,000	-	1,000
						NOCM8530	33,930	-	33,930
		Wakefield Cr	Flume Cr	Fall	1979	NOCM7921	15,000	-	15,000
					1980	NOCM8034	1,000	-	1,000
					1981	NOCM8131	1,000	-	1,000
					1982	NOCM8251	2,500	-	2,500
			Wakefield Cr	Fall	1984	NOCM8463	32,340	-	32,340
					1985	NOCM8574	35,000	-	35,000
		Whittall Cr	Whittall Cr	Fall	1983	NOCM8361	65,000	-	65,000
		Willingdon Cr	Lang Cr	Fall	1998	NOCM9808	100,000	-	100,000
					1999	NOCM9903	100,000	-	100,000
		Wilson Cr/GSMN	Wilson Cr/GSMN	Fall	1982	NOCM8249	2,300	-	2,300
					1983	NOCM8351	16,000	-	16,000
					1984	NOCM8461	18,000	-	18,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	GEORGIA STRAIT	Wilson Cr/GSMN	Wilson Cr/GSMN	Fall	1985	NOCM8569	35,000	-	35,000
					1987	NOCM8784	22,186	-	22,186
					1988	NOCM8844	25,000	-	25,000
					1989	NOCM8979	10,000	-	10,000
	HOWE SOUND-BURRARD INLET	Capilano R	Capilano R	Fall	1980	021932		5,009	5,009
					1993	NOCM9315	6,400	-	6,400
					1994	NOCM9441	1,282	-	1,282
					1997	NOCM9769	12,274	-	12,274
					1998	NOCM9834	10,715	-	10,715
					2001	NOCM0102	8,441	-	8,441
					2004	NOCM0445	4,324	-	4,324
					2005	NOCM0530	44,364	-	44,364
					2006	NOCM0633	2,743	-	2,743
					2007	NOCM07125	4,684	-	4,684
					2008	NOCM0811	12,902	-	12,902
						NOCM0812	30,095	-	30,095
					2009	NOCM0928	64,242	-	64,242
					2010	NOCM10101	5,177	-	5,177
					2012	NOCM1289	20,501	-	20,501
					2013	NOCM1390	30,437	-	30,437
					2014	NOCM14147	7,961	-	7,961
					2015	NOCM1541	1,606	-	1,606
					2018	NOCM1850	3,558	-	3,558
		Chapman Cr	Cheakamus R	Fall	1990	NOCM9066	185,000	-	185,000
					1991	NOCM91142	250,000	-	250,000
					1992	NOCM92129	100,000	-	100,000
					1993	NOCM9338	70,000	-	70,000
					1994	NOCM94107	308,000	-	308,000
						NOCM94108	200,000	-	200,000
					1995	NOCM9597	160,000	-	160,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Chapman Cr	Cheakamus R	Fall	1995	NOCM9598	140,000	-	140,000
						NOCM9599	160,000	-	160,000
					1997	NOCM9712	100,000	-	100,000
			Ouillet Cr	Fall	1994	NOCM94100	6,000	-	6,000
		Cheakamus Centre	Cheakamus R	Fall	1981	NOCM8127	15,708	-	15,708
					1982	NOCM8245	96,706	-	96,706
					1988	NOCM88111	16,080	-	16,080
					1989	NOCM8978	88,000	-	88,000
					1997	NOCM9776	86,930	-	86,930
					1998	NOCM9827	67,390	-	67,390
					1999	NOCM99117	95,295	-	95,295
					2000	NOCM00101	59,654	-	59,654
					2001	NOCM0108	75,220	-	75,220
					2002	NOCM02106	86,154	-	86,154
					2003	NOCM0375	113,628	-	113,628
					2004	NOCM0437	37,755	-	37,755
					2005	NOCM0571	54,197	-	54,197
					2006	NOCM0693	48,830	-	48,830
					2007	NOCM07178	44,862	-	44,862
					2008	NOCM0840	72,218	-	72,218
					2009	NOCM0966	65,351	-	65,351
					2010	NOCM1061	15,950	-	15,950
					2011	NOCM1110	14,003	-	14,003
					2012	NOCM12105	68,696	-	68,696
					2013	NOCM1382	40,650	-	40,650
					2014	NOCM1487	10,890	-	10,890
					2015	NOCM15131	20,551	-	20,551
					2017	NOCM17127	16,386	-	16,386
					2018	NOCM18140	10,949	-	10,949
		Coquitlam Sch	Hutchinson Cr	Fall	2004	NOCM04131	80	-	80

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Coquitlam Sch	Hutchinson Cr	Fall	2006	NOCM0684	42	-	42
					2010	NOCM10112	50	-	50
			Indian R	Fall	2003	NOCM03153	97	-	97
			Mossom Cr	Fall	2003	NOCM03155	99	-	99
					2005	NOCM05160	58	-	58
					2006	NOCM0674	90	-	90
					2008	NOCM08123	108	-	108
					2010	NOCM10111	63	-	63
					2011	NOCM1138	58	-	58
			Noons Cr	Fall	2002	NOCM02129	38	-	38
		Howe Sd Sch	Cheakamus R	Fall	1986	NOCM8663	40	-	40
			L Stawamus R	Fall	1984	NOCM8477	100	-	100
			Mamquam R	Fall	1985	NOCM8594	22	-	22
						NOCM8595	23	-	23
						NOCM8596	45	-	45
			Tenderfoot Cr	Fall	2001	NOCM0144	450	-	450
					2002	NOCM02180	350	-	350
					2003	NOCM03141	500	-	500
		Hutchinson Cr	Indian R	Fall	1997	NOCM97119	1,700	-	1,700
					1998	NOCM98137	1,542	-	1,542
					1999	NOCM99130	2,900	-	2,900
					2000	NOCM00132	3,578	-	3,578
					2001	NOCM01104	3,000	-	3,000
					2002	NOCM02154	890	-	890
					2003	NOCM03127	4,560	-	4,560
					2004	NOCM0457	3,500	-	3,500
					2005	NOCM05166	1,546	-	1,546
					2006	NOCM06102	2,932	-	2,932
		King Edward Bay Cr	Cheakamus R	Fall	1989	NOCM8991	28,000	-	28,000
					1990	NOCM9081	39,000	-	39,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	King Edward Bay Cr	Cheakamus R	Fall	1991	NOCM9174	48,000	-	48,000
			West Bay Cr	Fall	1984	NOCM8480	19,000	-	19,000
					1985	NOCM85104	35,000	-	35,000
					1986	NOCM8671	1,000	-	1,000
						NOCM8672	40,000	-	40,000
					1987	NOCM8753	35,000	-	35,000
					1988	NOCM8859	11,500	-	11,500
		MacKay Cr	Indian R	Fall	1998	NOCM9809	27,100	-	27,100
					1999	NOCM99132	26,447	-	26,447
					2000	NOCM00133	30,800	-	30,800
					2001	NOCM01103	28,050	-	28,050
					2002	NOCM02155	24,500	-	24,500
					2003	NOCM03128	29,297	-	29,297
					2004	NOCM0459	30,000	-	30,000
					2005	NOCM05167	25,025	-	25,025
					2006	NOCM06103	27,690	-	27,690
		Maplewood Cr	Indian R	Fall	1989	NOCM8986	4,800	-	4,800
					1990	NOCM9096	13,000	-	13,000
					1991	NOCM9153	19,500	-	19,500
					1992	NOCM92104	26,570	-	26,570
					1993	NOCM9386	24,900	-	24,900
					1994	NOCM9491	24,200	-	24,200
					1995	NOCM95122	11,000	-	11,000
			Seymour R/GSMN	Fall	1986	NOCM8659	17,000	-	17,000
					1993	NOCM9388	8,000	-	8,000
					1994	NOCM9490	3,100	-	3,100
					1995	NOCM95123	12,500	-	12,500
		McNab Cr	McNab Cr	Fall	1982	NOCM8254	39,823	-	39,823
					1983	NOCM8369	32,460	-	32,460
					1984	NOCM8466	33,600	-	33,600

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	McNab Cr	McNab Cr	Fall	1985	NOCM8578	35,000	-	35,000
					1986	NOCM8648	58,900	-	58,900
					1987	NOCM8755	70,000	-	70,000
						NOCM8756	80,000	-	80,000
		Morten Cr	Indian R	Fall	1995	NOCM95114	28,000	-	28,000
					1996	NOCM96125	26,000	-	26,000
					1997	NOCM97120	25,500	-	25,500
					1998	NOCM98158	13,069	-	13,069
					1999	NOCM99133	35,550	-	35,550
					2000	NOCM00134	39,000	-	39,000
					2001	NOCM01102	39,158	-	39,158
					2002	NOCM02156	27,000	-	27,000
					2003	NOCM03129	8,000	-	8,000
					2004	NOCM0460	36,207	-	36,207
					2005	NOCM05168	21,600	-	21,600
					2006	NOCM06104	30,000	-	30,000
		Mossom Cr	Indian R	Fall	1990	NOCM9070	4,400	-	4,400
						NOCM9071	11,700	-	11,700
					1991	NOCM91133	5,500	-	5,500
						NOCM91134	21,206	-	21,206
						NOCM91135	12,500	-	12,500
					1994	NOCM9442	5,894	-	5,894
						NOCM9443	20,270	-	20,270
						NOCM9444	30,993	-	30,993
					1995	NOCM95115	5,900	-	5,900
						NOCM95116	20,257	-	20,257
						NOCM95117	31,000	-	31,000
					1996	NOCM96127	11,000	-	11,000
						NOCM96128	38,000	-	38,000
						NOCM96129	17,600	-	17,600

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Mossom Cr	Indian R	Fall	1996	NOCM96130	4,000	-	4,000
					1997	NOCM97162	42,124	-	42,124
						NOCM97163	39,463	-	39,463
						NOCM97164	43,248	-	43,248
					1998	NOCM98166	46,000	-	46,000
						NOCM98167	20,000	-	20,000
						NOCM98168	27,000	-	27,000
					1999	NOCM99134	27,894	-	27,894
						NOCM99135	40,000	-	40,000
					2001	NOCM01100	57,000	-	57,000
						NOCM01101	19,435	-	19,435
						NOCM0199	31,000	-	31,000
					2003	NOCM03130	10,012	-	10,012
						NOCM03131	19,380	-	19,380
					2004	NOCM0461	10,000	-	10,000
						NOCM0462	10,000	-	10,000
						NOCM0463	18,000	-	18,000
					2005	NOCM05169	36,408	-	36,408
						NOCM05170	10,000	-	10,000
						NOCM05171	16,000	-	16,000
						NOCM05172	1,000	-	1,000
					2006	NOCM06105	22,000	-	22,000
						NOCM06106	10,000	-	10,000
						NOCM06107	10,000	-	10,000
			Mossom Cr	Fall	1976	NOCM7603	30,000	-	30,000
					1985	NOCM8557	31,000	-	31,000
						NOCM8558	22,000	-	22,000
					1986	NOCM8633	2,000	-	2,000
						NOCM8634	43,000	-	43,000
					1987	NOCM8758	35,000	-	35,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Mossom Cr	Mossom Cr	Fall	1987	NOCM8759	40,000	-	40,000
					1988	NOCM8871	26,000	-	26,000
						NOCM8872	1,000	-	1,000
						NOCM8873	54,000	-	54,000
					1989	NOCM8941	53,000	-	53,000
					1990	NOCM9069	71,000	-	71,000
					1992	NOCM92100	20,000	-	20,000
						NOCM92101	20,000	-	20,000
						NOCM92102	10,000	-	10,000
						NOCM92103	25,000	-	25,000
					1993	NOCM9381	37,500	-	37,500
						NOCM9382	24,500	-	24,500
						NOCM9383	19,500	-	19,500
					1994	NOCM9445	58,577	-	58,577
					1995	NOCM95118	58,577	-	58,577
					1996	NOCM96131	26,000	-	26,000
					1997	NOCM97165	28,467	-	28,467
					1998	NOCM98141	46,169	-	46,169
					1999	NOCM99136	67,347	-	67,347
					2001	NOCM0198	29,066	-	29,066
					2002	NOCM02158	13,000	-	13,000
						NOCM02159	22,000	-	22,000
						NOCM02160	15,000	-	15,000
					2003	NOCM03132	32,600	-	32,600
						NOCM03133	10,000	-	10,000
					2004	NOCM0464	36,000	-	36,000
					2005	NOCM05173	19,387	-	19,387
					2006	NOCM06108	26,000	-	26,000
					2008	NOCM0853	17,000	-	17,000
					2009	NOCM0998	13,700	-	13,700

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Mossom Cr	Mossom Cr	Fall	1987	NOCM1187	10,947	-	10,947
					2012	NOCM1284	16,626	-	16,626
					2016	NOCM1660	3,700	-	3,700
					2018	NOCM18119	4,502	-	4,502
		Nelson Cr	Cheakamus R	Fall	1985	NOCM8592	20,000	-	20,000
					1986	NOCM8660	9,000	-	9,000
						NOCM8661	1,300	-	1,300
					1987	NOCM8762	11,000	-	11,000
					1988	NOCM8855	9,000	-	9,000
					1990	NOCM9082	35,000	-	35,000
					1991	NOCM91132	70,000	-	70,000
					1992	NOCM92122	95,000	-	95,000
					1993	NOCM9374	95,000	-	95,000
					1994	NOCM9483	75,000	-	75,000
					1995	NOCM9595	87,000	-	87,000
					1996	NOCM9633	47,000	-	47,000
					1997	NOCM9796	55,000	-	55,000
					1998	NOCM9855	47,000	-	47,000
						NOCM9856	47,000	-	47,000
					2000	NOCM00100	42,700	-	42,700
			Indian R	Fall	1989	NOCM8987	22,000	-	22,000
			Tenderfoot Cr	Fall	1999	NOCM99115	59,000	-	59,000
						NOCM99116	35,000	-	35,000
					2001	NOCM01199	45,000	-	45,000
						NOCM01200	45,000	-	45,000
					2002	NOCM02181	73,000	-	73,000
						NOCM02182	74,000	-	74,000
					2003	NOCM03142	19,000	-	19,000
						NOCM03168	19,000	-	19,000
						NOCM03169	19,000	-	19,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Nelson Cr	Tenderfoot Cr	Fall	2003	NOCM03170	19,000	-	19,000
						NOCM03171	19,000	-	19,000
						NOCM03173	19,000	-	19,000
						NOCM03174	19,000	-	19,000
						NOCM03175	19,000	-	19,000
					2004	NOCM04205	25,000	-	25,000
						NOCM04206	25,000	-	25,000
						NOCM04207	25,000	-	25,000
						NOCM04208	25,000	-	25,000
						NOCM04209	25,000	-	25,000
						NOCM04210	25,000	-	25,000
						NOCM04211	25,000	-	25,000
						NOCM0438	25,000	-	25,000
					2005	NOCM05193	21,500	-	21,500
						NOCM05194	21,500	-	21,500
						NOCM05195	21,500	-	21,500
						NOCM05196	21,500	-	21,500
						NOCM05197	21,500	-	21,500
						NOCM05198	21,500	-	21,500
						NOCM05199	21,500	-	21,500
						NOCM05200	21,500	-	21,500
					2006	NOCM0692	2,000	-	2,000
					2007	NOCM07126	50,293	-	50,293
					2008	NOCM0841	98,000	-	98,000
					2009	NOCM09114	83,000	-	83,000
					2012	NOCM12109	37,553	-	37,553
						NOCM12110	37,553	-	37,553
						NOCM12111	37,553	-	37,553
						NOCM12112	37,553	-	37,553
						NOCM12113	37,555	-	37,555

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Nelson Cr	Tenderfoot Cr	Fall	2013	NOCM1379	59,000	-	59,000
						NOCM1380	59,000	-	59,000
		Noons Cr	Indian R	Fall	1994	NOCM9446	41,000	-	41,000
					1995	NOCM95120	17,000	-	17,000
					1996	NOCM96136	30,000	-	30,000
						NOCM96137	35,000	-	35,000
					1997	NOCM97122	35,000	-	35,000
						NOCM97123	35,000	-	35,000
					1998	NOCM98139	38,080	-	38,080
					1999	NOCM9996	11,268	-	11,268
						NOCM9997	30,146	-	30,146
					2000	NOCM00135	26,000	-	26,000
						NOCM00136	26,000	-	26,000
					2001	NOCM0196	46,274	-	46,274
						NOCM0197	46,000	-	46,000
					2002	NOCM02138	38,995	-	38,995
						NOCM02139	19,840	-	19,840
					2003	NOCM03134	45,499	-	45,499
						NOCM03135	29,000	-	29,000
					2004	NOCM0465	37,500	-	37,500
						NOCM0466	41,717	-	41,717
					2005	NOCM05188	41,528	-	41,528
						NOCM05189	9,000	-	9,000
					2006	NOCM06109	35,000	-	35,000
			Mossom Cr	Fall	1993	NOCM9394	23,000	-	23,000
					1998	NOCM98140	32,534	-	32,534
					1999	NOCM9998	8,899	-	8,899
			Noons Cr	Fall	1999	NOCM9995	11,719	-	11,719
					2001	NOCM0195	14,882	-	14,882
					2002	NOCM02140	25,258	-	25,258

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Noons Cr	Noons Cr	Fall	2003	NOCM03136	20,164	-	20,164
					2004	NOCM0467	5,658	-	5,658
					2005	NOCM05190	5,000	-	5,000
					2006	NOCM06110	42,460	-	42,460
					2008	NOCM0839	44,796	-	44,796
					2012	NOCM1287	1,436	-	1,436
						NOCM1288	1,435	-	1,435
		North Van Sch	Indian R	Fall	2002	NOCM02161	4,722	-	4,722
					2003	NOCM03137	3,952	-	3,952
					2004	NOCM0468	3,750	-	3,750
					2005	NOCM05174	3,750	-	3,750
			Seymour R/GSMN	Fall	2006	NOCM0678	3,200	-	3,200
					2010	NOCM10105	4,000	-	4,000
		Ouillet Cr	Cheakamus R	Fall	1997	NOCM97137	98,206	-	98,206
						NOCM97166	71,205	-	71,205
					1999	NOCM99145	90,000	-	90,000
						NOCM99146	90,000	-	90,000
			Cheakamus+Tender	Fall	1998	NOCM98184	125,000	-	125,000
						NOCM98185	125,000	-	125,000
			Ouillet Cr	Fall	1982	NOCM8247	35,000	-	35,000
					1983	NOCM8349	32,000	-	32,000
					1984	NOCM8458	63,000	-	63,000
						NOCM8459	50,000	-	50,000
					1985	NOCM8566	51,000	-	51,000
						NOCM8567	50,000	-	50,000
					1986	NOCM8642	26,500	-	26,500
					1987	NOCM8763	85,000	-	85,000
					1988	NOCM8894	9,671	-	9,671
					1989	NOCM8952	70,000	-	70,000
		Reed Point/Ioco	Indian R	Fall	2000	NOCM00137	9,000	-	9,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Reed Point/Ioco	Indian R	Fall	2001	NOCM0194	48,950	-	48,950
					2002	NOCM02157	29,950	-	29,950
			Mossom Cr	Fall	1999	NOCM99131	35,330	-	35,330
					2000	NOCM00138	3,340	-	3,340
		Richards Cr	Indian R	Fall	2003	NOCM03138	25,275	-	25,275
					2004	NOCM0474	25,000	-	25,000
					2005	NOCM05175	22,485	-	22,485
					2006	NOCM06111	21,000	-	21,000
		Rodgers Cr	Cheakamus R	Fall	1985	NOCM8593	5,000	-	5,000
					1986	NOCM8662	16,000	-	16,000
					1987	NOCM87120	11,000	-	11,000
		Seymour R	Indian R	Fall	1988	NOCM8876	90,439	-	90,439
					1989	NOCM8943	12,814	-	12,814
						NOCM8962	53,571	-	53,571
					1990	NOCM9045	101,735	-	101,735
					1992	NOCM92148	116,016	-	116,016
					1993	NOCM9316	145,764	-	145,764
					1994	NOCM9414	164,915	-	164,915
					1995	NOCM9514	122,033	-	122,033
					1996	NOCM9607	279,522	-	279,522
					1997	NOCM9771	205,742	-	205,742
						NOCM9772	199,263	-	199,263
					1998	NOCM9836	22,717	-	22,717
						NOCM9837	198,908	-	198,908
					1999	NOCM99157	35,703	-	35,703
						NOCM99158	111,870	-	111,870
					2000	NOCM0008	259,105	-	259,105
						NOCM0009	19,828	-	19,828
					2001	NOCM0112	26,876	-	26,876
						NOCM0113	25,490	-	25,490

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Seymour R	Indian R	Fall	2002	NOCM02215	24,696	-	24,696
						NOCM02216	269,395	-	269,395
						NOCM02217	3,781	-	3,781
					2003	NOCM0343	16,953	-	16,953
						NOCM0344	99,830	-	99,830
					2004	NOCM04122	83,460	-	83,460
						NOCM0415	157,294	-	157,294
					2005	NOCM0558	66,786	-	66,786
						NOCM0559	19,124	-	19,124
					2006	NOCM0609	322,922	-	322,922
						NOCM0610	25,143	-	25,143
			Seymour R/GSMN	Fall	1987	NOCM8739	2,572	-	2,572
						NOCM8740	85,003	-	85,003
					1991	NOCM91120	57,667	-	57,667
					2016	NOCM1666	26,561	-	26,561
					2017	NOCM1790	75,256	-	75,256
					2018	NOCM18128	31,649	-	31,649
		Sunshine Coast Sch	Ouillet Cr	Fall	1985	NOCM85100	85	-	85
					1986	NOCM8667	40	-	40
		Tenderfoot Cr	Cheakamus+Tender	Fall	1994	NOCM9430	106,707	-	106,707
						NOCM9431	23,726	-	23,726
			Mamquam R	Fall	2008	NOCM0813	19,169	-	19,169
			Tenderfoot Cr	Fall	1991	NOCM9123	66,667	-	66,667
					1992	NOCM9211	117,511	-	117,511
					1993	NOCM9327	150,837	-	150,837
					1995	NOCM95113	76,656	-	76,656
					1998	NOCM9835	17,886	-	17,886
					1999	NOCM99152	44,360	-	44,360
					2000	NOCM0004	84,981	-	84,981
					2002	NOCM0290	54,872	-	54,872

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Tenderfoot Cr	Tenderfoot Cr	Fall	2003	NOCM0317	49,159	-	49,159
						NOCM0318	98,495	-	98,495
					2004	NOCM04103	12,543	-	12,543
					2005	NOCM0517	5,991	-	5,991
					2006	NOCM0659	54,838	-	54,838
					2007	NOCM0726	120,111	-	120,111
					2008	NOCM0814	102,419	-	102,419
						NOCM0815	199,449	-	199,449
						NOCM0816	100,000	-	100,000
					2009	NOCM0926	112,110	-	112,110
						NOCM0927	273,516	-	273,516
					2010	NOCM1060	67,175	-	67,175
					2011	NOCM1152	292,136	-	292,136
					2012	NOCM1274	521,423	-	521,423
						NOCM1275	476,454	-	476,454
						NOCM1276	92,628	-	92,628
					2013	NOCM1384	99,987	-	99,987
						NOCM1385	99,884	-	99,884
						NOCM1386	155,924	-	155,924
						NOCM1387	100,000	-	100,000
						NOCM1388	200,000	-	200,000
						NOCM1389	500,000	-	500,000
					2014	NOCM1443	99,995	-	99,995
						NOCM1444	150,000	-	150,000
						NOCM1445	500,000	-	500,000
						NOCM1446	100,000	-	100,000
						NOCM1447	218,240	-	218,240
					2015	NOCM1544	359,562	-	359,562
						NOCM1545	280,000	-	280,000
						NOCM1546	100,000	-	100,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Tenderfoot Cr	Tenderfoot Cr	Fall	2015	NOCM1547	150,000	-	150,000
					2016	NOCM1605	199,797	-	199,797
						NOCM1634	152,599	-	152,599
						NOCM1635	200,000	-	200,000
						NOCM1636	100,000	-	100,000
						NOCM1637	273,738	-	273,738
						NOCM1638	200,000	-	200,000
						NOCM1639	200,000	-	200,000
						NOCM1640	20,000	-	20,000
					2017	NOCM1731	200,000	-	200,000
						NOCM1732	200,000	-	200,000
						NOCM1733	410,000	-	410,000
						NOCM1734	562,825	-	562,825
					2018	NOCM1875	296,122	-	296,122
						NOCM1876	115,000	-	115,000
						NOCM1877	210,000	-	210,000
						NOCM1878	110,000	-	110,000
						NOCM1879	439,301	-	439,301
		Terminal Cr	Cheakamus R	Fall	1989	NOCM8984	55,000	-	55,000
					1990	NOCM9063	98,000	-	98,000
					1991	NOCM9175	124,000	-	124,000
					1992	NOCM92123	95,000	-	95,000
					1993	NOCM9375	94,000	-	94,000
					1994	NOCM9484	71,600	-	71,600
					1996	NOCM9634	107,700	-	107,700
					1997	NOCM9795	86,000	-	86,000
			Tenderfoot Cr	Fall	1999	NOCM99114	90,000	-	90,000
					2000	NOCM0099	57,000	-	57,000
					2001	NOCM01109	100,000	-	100,000
					2002	NOCM02122	160,000	-	160,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Terminal Cr	Tenderfoot Cr	Fall	2003	NOCM03143	178,000	-	178,000
					2004	NOCM0439	174,000	-	174,000
					2005	NOCM0562	68,000	-	68,000
						NOCM0563	28,000	-	28,000
						NOCM0564	28,000	-	28,000
						NOCM0565	28,000	-	28,000
						NOCM0566	28,000	-	28,000
					2006	NOCM0688	20,000	-	20,000
						NOCM0689	20,000	-	20,000
						NOCM0690	18,000	-	18,000
						NOCM0691	39,000	-	39,000
					2007	NOCM07127	50,294	-	50,294
					2008	NOCM0842	98,000	-	98,000
					2009	NOCM0967	102,000	-	102,000
					2011	NOCM1112	6,000	-	6,000
						NOCM1113	6,000	-	6,000
						NOCM1114	3,000	-	3,000
						NOCM1161	6,000	-	6,000
					2012	NOCM12106	70,243	-	70,243
						NOCM12107	70,243	-	70,243
						NOCM12108	70,243	-	70,243
					2013	NOCM1381	100,000	-	100,000
					2014	NOCM1481	58,878	-	58,878
						NOCM1482	29,439	-	29,439
						NOCM1483	9,820	-	9,820
					2015	NOCM15128	60,000	-	60,000
						NOCM15129	10,000	-	10,000
						NOCM15130	27,069	-	27,069
					2017	NOCM17128	34,954	-	34,954
						NOCM17129	34,954	-	34,954

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	HOWE SOUND-BURRARD INLET	Terminal Cr	Tenderfoot Cr	Fall	2017	NOCM17130	34,954	-	34,954
					2018	NOCM18148	19,680	-	19,680
			Terminal Cr	Fall	1994	NOCM9485	13,400	-	13,400
					1995	NOCM95109	56,500	-	56,500
					1998	NOCM9854	40,000	-	40,000
			West Bay Cr	Fall	1989	NOCM89108	5,000	-	5,000
						NOCM89109	5,000	-	5,000
		Van Aquarium	Indian R	Fall	2000	NOCM00151	11,744	-	11,744
					2002	NOCM02153	4,000	-	4,000
					2004	NOCM0479	12,645	-	12,645
					2006	NOCM06112	7,400	-	7,400
	(blank)	Cheakamus Centre	Paradise Ch Up	Fall	1983	NOCM8346	5,520	-	5,520
						NOCM8347	39,743	-	39,743
					1984	NOCM8456	150,000	-	150,000
					1985	NOCM8563	120,000	-	120,000
					1986	NOCM8639	122,000	-	122,000
					1987	NOCM8760	77,760	-	77,760
					1990	NOCM9050	102,373	-	102,373
					1991	NOCM91119	56,725	-	56,725
					1992	NOCM9247	97,645	-	97,645
					1993	NOCM9307	100,743	-	100,743
					1994	NOCM9402	126,760	-	126,760
					1995	NOCM9510	46,410	-	46,410
						NOCM9511	49,251	-	49,251
					1996	NOCM9610	91,772	-	91,772
		Chehalis Band	Evans Cr	Fall	1982	NOCM8241	10,001	-	10,001
		Ouillet Cr	Maclean Bay	Fall	2006	NOCM06143	6,600	-	6,600
		Sechelt	Jitco Cr	Fall	1993	NOCM9349	84,545	-	84,545
			Maclean Bay	Fall	1982	NOCM8231	38,000	-	38,000
					1984	NOCM8433	44,800	-	44,800

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	(blank)	Sechelt	Maclean Bay	Fall	1986	NOCM8627	60,799	-	60,799
					1987	NOCM8735	64,879	-	64,879
						NOCM8736	10,000	-	10,000
						NOCM8737	66,000	-	66,000
						NOCM8738	1,423	-	1,423
					1988	NOCM8879	11,000	-	11,000
						NOCM8880	60,184	-	60,184
						NOCM8881	60,311	-	60,311
					1990	NOCM9048	48,216	-	48,216
					1991	NOCM91121	105,771	-	105,771
					1992	NOCM92160	132,753	-	132,753
						NOCM92161	254,277	-	254,277
					1993	NOCM9348	54,900	-	54,900
					1994	NOCM94119	28,340	-	28,340
					1995	NOCM9517	9,195	-	9,195
					1996	NOCM9697	99,051	-	99,051
					1997	NOCM9760	5,140	-	5,140
					1998	NOCM98159	11,095	-	11,095
						NOCM9828	124,924	-	124,924
					1999	NOCM9999	75,010	-	75,010
					2000	NOCM0007	180,000	-	180,000
					2001	NOCM0111	331,250	-	331,250
					2002	NOCM02107	111,119	-	111,119
					2004	NOCM0416	397,866	-	397,866
						NOCM0417	176,964	-	176,964
					2005	NOCM05183	419,862	-	419,862
					2008	NOCM0802	48,797	-	48,797
					2009	NOCM0943	514,503	-	514,503
					2011	NOCM1120	16,831	-	16,831
		Vancouver Bay	Jitco Cr	Fall	1986	NOCM86100	100,000	-	100,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMN	(blank)	Vancouver Bay	Jitco Cr	Fall	1986	NOCM86101	69,000	-	69,000
						NOCM86102	25,500	-	25,500
						NOCM86103	40,000	-	40,000
						NOCM8699	10,000	-	10,000
					1987	NOCM87115	60,000	-	60,000
						NOCM87116	24,000	-	24,000
					1988	NOCM88148	24,450	-	24,450
					1989	NOCM89145	17,200	-	17,200
					1990	NOCM9054	10,000	-	10,000
						NOCM9055	485,000	-	485,000
						NOCM9056	15,000	-	15,000
					1991	NOCM91139	145,000	-	145,000
					1992	NOCM9248	42,000	-	42,000
						NOCM9249	100,000	-	100,000
			Saltery Bay Cr	Fall	1980	NOCM8033	2,450	-	2,450
GSMS	GEORGIA STRAIT	L Campbell R	L Campbell R	Fall	1983	LV8306		2,469	2,469
		Langley Sch	Nicomekl R	Fall	1997	NOCM97116	810	-	810
		Nicomekl R	Nicomekl R	Fall	2012	NOCM12103	25,423	-	25,423
					2013	NOCM13129	23,359	-	23,359
						NOCM13130	98,853	-	98,853
					2014	NOCM1475	4,432	-	4,432
					2015	NOCM1599	42,771	-	42,771
					2016	NOCM16126	32,466	-	32,466
					2017	NOCM17117	106,729	-	106,729
					2018	NOCM1871	87,597	-	87,597
		Serpentine R	L Campbell R	Fall	1985	NOCM8570	18,500	-	18,500
					1986	NOCM8643	40,000	-	40,000
					1987	NOCM8778	26,961	-	26,961
					1988	NOCM88110	30,000	-	30,000
					1989	NOCM8961	27,660	-	27,660

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
GSMS	GEORGIA STRAIT	Serpentine R	Serpentine R	Fall	1996	NOCM9683	49,500	-	49,500
					1997	NOCM97130	22,000	-	22,000
						NOCM97131	22,000	-	22,000
					1999	NOCM99161	17,000	-	17,000
					2009	NOCM09108	50,000	-	50,000
					2010	NOCM1091	46,173	-	46,173
					2011	NOCM11128	45,734	-	45,734
					2012	NOCM12104	55,837	-	55,837
					2013	NOCM13131	59,800	-	59,800
					2014	NOCM14133	58,500	-	58,500
					2015	NOCM1598	43,220	-	43,220
					2016	NOCM16127	60,490	-	60,490
					2017	NOCM17118	70,233	-	70,233
					2018	NOCM1874	54,992	-	54,992
LWFR	LOWER FRASER	Alouette R	Alouette R S	Fall	1979	NOCM7907	60,290	-	60,290
					1980	NOCM8010	15,000	-	15,000
					1981	022161	1,854	61,098	62,952
					1982	022442		93,756	93,756
					1983	NOCM8322	147,000	-	147,000
					1984	NOCM8428	249,000	-	249,000
					1985	NOCM8531	1,190,000	-	1,190,000
					1986	NOCM86104	1,037,205	-	1,037,205
					1987	NOCM8785	1,097,556	-	1,097,556
					1988	NOCM88112	124,712	-	124,712
						NOCM8892	429,513	-	429,513
					1989	NOCM8950	521,089	-	521,089
						NOCM8966	199,840	-	199,840
					1990	NOCM9044	1,960,000	-	1,960,000
					1991	NOCM91118	768,742	-	768,742
					1992	NOCM9253	861,000	-	861,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Alouette R	Alouette R S	Fall	1993	NOCM9335	1,680,573	-	1,680,573
					1994	NOCM9422	1,358,798	-	1,358,798
					1995	NOCM9516	293,292	-	293,292
					1996	NOCM9628	170,546	-	170,546
					1997	NOCM9794	1,200,000	-	1,200,000
					1998	NOCM9853	1,676,000	-	1,676,000
					1999	NOCM99126	661,000	-	661,000
					2000	NOCM00111	855,904	-	855,904
					2001	NOCM0154	134,979	-	134,979
					2004	NOCM0420	200,000	-	200,000
					2005	NOCM0575	195,013	-	195,013
					2006	NOCM0627	198,000	-	198,000
					2007	NOCM0740	257,049	-	257,049
					2008	NOCM0869	366,481	-	366,481
					2009	NOCM0958	111,500	-	111,500
						NOCM0959	88,500	-	88,500
						NOCM0960	50,000	-	50,000
						NOCM0969	220,000	-	220,000
					2010	NOCM1062	49,778	-	49,778
						NOCM1063	5,437	-	5,437
						NOCM1064	60,869	-	60,869
						NOCM1065	300	-	300
						NOCM1066	600	-	600
						NOCM1067	196,307	-	196,307
						NOCM1068	300	-	300
						NOCM1069	600	-	600
					2011	NOCM1164	100,000	-	100,000
						NOCM1165	75,000	-	75,000
						NOCM1166	60,800	-	60,800
						NOCM1167	400,145	-	400,145

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Alouette R	Alouette R S	Fall	2012	NOCM12122	250,265	-	250,265
						NOCM12123	344,097	-	344,097
					2013	NOCM1355	431,304	-	431,304
						NOCM1356	214,864	-	214,864
					2014	NOCM1488	81,818	-	81,818
						NOCM1489	109,800	-	109,800
						NOCM1490	77,921	-	77,921
						NOCM1491	77,980	-	77,980
					2015	NOCM15100	360,112	-	360,112
					2016	NOCM1668	312,798	-	312,798
					2017	NOCM1793	428,199	-	428,199
					2018	NOCM18130	385,868	-	385,868
			Blaney Cr/LWFR	Fall	1980	H20105	207,635	27,365	235,000
		Blaney Cr/LWFR	Blaney Cr/LWFR	Fall	1972	ADLV7201	1,569	257,355	258,924
					1973	ADLV7301	1,029,328	252,900	1,282,228
					1974	ADLV7401	751	190,033	190,784
					1975	ADLV7501	1,211	138,472	139,683
					1976	NOCM7601	158,837	-	158,837
					1977	NOCM7703	1,171,710	-	1,171,710
					1978	LV7801	11,848	163,867	175,715
					1979	NOCM7901	262,260	-	262,260
		Brunette R	Brunette R	Fall	2006	NOCM0696	2,000	-	2,000
					2008	NOCM0887	50,000	-	50,000
					2009	NOCM0955	2,000	-	2,000
					2010	NOCM1076	700	-	700
						NOCM1077	470	-	470
					2011	NOCM1155	825	-	825
					2012	NOCM12115	3,390	-	3,390
					2013	NOCM1364	6,248	-	6,248
					2014	NOCM1468	3,257	-	3,257

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Brunette R	Brunette R	Fall	2015	NOCM15112	5,900	-	5,900
					2016	NOCM1675	9,137	-	9,137
					2017	NOCM1794	4,800	-	4,800
					2018	NOCM18132	3,500	-	3,500
			Kanaka Cr	Fall	2000	NOCM00110	30,000	-	30,000
					2001	NOCM0155	30,000	-	30,000
					2002	NOCM02128	50,000	-	50,000
					2003	NOCM0327	50,000	-	50,000
					2004	NOCM0421	50,000	-	50,000
					2005	NOCM0503	50,000	-	50,000
					2006	NOCM0606	20,000	-	20,000
					2007	NOCM07182	50,000	-	50,000
					2008	NOCM08129	50,000	-	50,000
		Burnaby Sch	Brunette R	Fall	2012	NOCM12119	1,132	-	1,132
					2013	NOCM1365	1,127	-	1,127
					2014	NOCM14125	1,172	-	1,172
					2015	NOCM15114	1,393	-	1,393
					2016	NOCM1682	1,193	-	1,193
					2017	NOCM17111	1,367	-	1,367
					2018	NOCM1860	1,348	-	1,348
			Kanaka Cr	Fall	1995	NOCM9542	1,200	-	1,200
					1996	NOCM9689	594	-	594
					1997	NOCM97147	1,190	-	1,190
					1998	NOCM9813	1,113	-	1,113
					1999	NOCM99163	1,100	-	1,100
					2000	NOCM00109	1,250	-	1,250
					2001	NOCM0156	1,264	-	1,264
					2002	NOCM02133	1,000	-	1,000
					2003	NOCM03150	956	-	956
					2004	NOCM0489	881	-	881

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Burnaby Sch	Kanaka Cr	Fall	2005	NOCM05156	1,067	-	1,067
					2006	NOCM0670	964	-	964
					2008	NOCM08120	1,114	-	1,114
					2010	NOCM10107	879	-	879
					2011	NOCM1134	899	-	899
		Centre Cr	Vedder R	Fall	1981	NOCM8124	38,000	-	38,000
		Chehalis Band	Billy Harris Sl	Fall	1979	NOCM7914	1,010,000	-	1,010,000
					1980	NOCM8020	1,059,436	-	1,059,436
			Ed Leon Sl	Fall	1980	NOCM8021	484,190	-	484,190
			Harrison R	Fall	1980	NOCM8018	4,826	-	4,826
						NOCM8019	15,112	-	15,112
						NOCM8022	1,726	-	1,726
					1981	NOCM8120	480,090	-	480,090
						NOCM8121	48,160	-	48,160
						NOCM8122	12,859	-	12,859
						NOCM8144	1,736,012	-	1,736,012
					1982	NOCM8234	399,995	-	399,995
						NOCM8235	11,839	-	11,839
						NOCM8236	41,519	-	41,519
						NOCM8237	67,115	-	67,115
						NOCM8238	106,825	-	106,825
						NOCM8239	2,449	-	2,449
					1983	NOCM8335	205,632	-	205,632
						NOCM8336	59,976	-	59,976
						NOCM8337	60,936	-	60,936
						NOCM8338	42,269	-	42,269
						NOCM8339	242,189	-	242,189
						NOCM8340	49,123	-	49,123
					1984	NOCM8440	261,300	-	261,300
						NOCM8441	132,000	-	132,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis Band	Harrison R	Fall	1984	NOCM8442	131,000	-	131,000
						NOCM8443	287,000	-	287,000
						NOCM8444	100,900	-	100,900
					1985	NOCM8544	260,494	-	260,494
						NOCM8545	86,818	-	86,818
						NOCM8546	216,975	-	216,975
						NOCM8547	43,400	-	43,400
						NOCM8548	130,220	-	130,220
						NOCM8549	892,940	-	892,940
					1986	NOCM8688	400,000	-	400,000
						NOCM8689	480,000	-	480,000
						NOCM8690	499,200	-	499,200
						NOCM8691	160,000	-	160,000
						NOCM8692	916,800	-	916,800
						NOCM8693	480,000	-	480,000
					1987	NOCM8719	582,350	-	582,350
						NOCM8720	570,000	-	570,000
						NOCM8721	900,600	-	900,600
						NOCM8722	190,000	-	190,000
						NOCM8723	440,800	-	440,800
						NOCM8724	380,000	-	380,000
					1988	NOCM8885	885,300	-	885,300
						NOCM8886	122,700	-	122,700
						NOCM8887	587,700	-	587,700
						NOCM8888	203,900	-	203,900
						NOCM8889	622,300	-	622,300
						NOCM8890	366,300	-	366,300
						NOCM8891	794,300	-	794,300
					1989	NOCM8949	647,490	-	647,490
						NOCM8965	668,440	-	668,440

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Harrison R	Fall		1989	NOCM8968	452,645	-	452,645
						NOCM8970	173,210	-	173,210
						NOCM8972	598,808	-	598,808
			Jimmy Charlie Sl	Fall	1979	NOCM7913	230,000	-	230,000
		Chehalis R	Chehalis R	Fall	1982	NOCM8201	476,752	-	476,752
						NOCM8224	630,555	-	630,555
					1983	022717	1,965,753	34,792	2,000,545
						NOCM8306	817,816	-	817,816
					1984	023302	2,064,091	52,887	2,116,978
						NOCM8401	103,522	-	103,522
					1985	023716	4,186,033	54,242	4,240,275
						023718	4,977,512	50,224	5,027,736
					1986	023733	13,374,028	82,064	13,456,092
						ADRV8601		83,741	83,741
					1988	025644	10,582,401	77,665	10,660,066
						025804	2,103,388	27,055	2,130,443
						NOCM8801	1,448,421	-	1,448,421
					1989	020637	3,996,256	24,899	4,021,155
						020638	4,012,129	26,508	4,038,637
						020639	1,448,941	26,928	1,475,869
						020640	1,456,318	26,865	1,483,183
					1990	020817	4,165,622	35,546	4,201,168
						180320	4,201,092	35,715	4,236,807
						180321	4,347,351	35,879	4,383,230
					1991	180137	4,125,120	36,634	4,161,754
						180318	4,093,663	37,233	4,130,896
						180319	4,101,440	36,289	4,137,729
					1992	180138	3,727,288	34,043	3,761,331
						180139	3,746,613	34,147	3,780,760
						180140	2,801,904	33,452	2,835,356

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis R	Chehalis R	Fall	1993	181414	3,747,637	34,291	3,781,928
						181415	3,799,197	34,207	3,833,404
						181416	3,021,302	34,136	3,055,438
						NOCM9314	204,680	-	204,680
					1994	181955	3,682,208	36,036	3,718,244
						181956	3,759,198	36,184	3,795,382
						181957	1,362,728	35,861	1,398,589
					1995	182136	3,108,172	26,985	3,135,157
						182153	3,825,826	33,352	3,859,178
						182154	3,960,250	34,752	3,995,002
					1996	182824	2,768,534	38,002	2,806,536
						182825	2,931,998	34,545	2,966,543
						182826	1,956,459	34,575	1,991,034
						NOCM9621	849,253	-	849,253
						NOCM9622	631,088	-	631,088
					1997	183847	1,896,925	35,186	1,932,111
						183848	2,595,103	35,215	2,630,318
						183849	3,350,539	35,270	3,385,809
						NOCM9791	844,646	-	844,646
					1998	183850	840,086	34,252	874,338
						183851	1,842,634	34,213	1,876,847
						183852	1,219,446	34,253	1,253,699
					1999	NOCM9991	890,398	-	890,398
						NOCM9992	336,255	-	336,255
					2000	NOCM0010	3,949,094	-	3,949,094
					2001	NOCM0103	5,793,868	-	5,793,868
						NOCM0148	91,327	-	91,327
					2002	NOCM02120	5,853,743	-	5,853,743
					2003	NOCM0359	5,912,133	-	5,912,133
					2004	NOCM0446	6,162,391	-	6,162,391

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis R	Chehalis R	Fall	2005	NOCM0531	2,335,730	-	2,335,730
						NOCM0532	715,916	-	715,916
					2006	NOCM0634	649,214	-	649,214
						NOCM0635	6,757,029	-	6,757,029
					2007	NOCM0729	1,133,682	-	1,133,682
						NOCM0730	4,953,634	-	4,953,634
					2008	NOCM0809	4,919,030	-	4,919,030
						NOCM0810	947,314	-	947,314
					2009	NOCM0901	511,486	-	511,486
						NOCM0902	839,204	-	839,204
						NOCM0903	907,110	-	907,110
						NOCM0904	37,846	-	37,846
					2010	NOCM1088	2,438,758	-	2,438,758
						NOCM1089	1,525,847	-	1,525,847
					2011	NOCM1168	1,929,797	-	1,929,797
						NOCM1169	3,971,020	-	3,971,020
					2012	NOCM12100	4,571,195	-	4,571,195
						NOCM12101	2,011,179	-	2,011,179
						NOCM12102	142,857	-	142,857
						NOCM1294	25,308	-	25,308
						NOCM1295	50,923	-	50,923
						NOCM1296	26,737	-	26,737
						NOCM1298	126,884	-	126,884
						NOCM1299	107,825	-	107,825
					2013	NOCM13108	3,087,410	-	3,087,410
						NOCM13109	205,437	-	205,437
						NOCM13132	75,000	-	75,000
						NOCM13133	50,000	-	50,000
						NOCM13134	40,000	-	40,000
						NOCM13135	10,000	-	10,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis R	Chehalis R	Fall	2013	NOCM13136	25,000	-	25,000
						NOCM13137	25,000	-	25,000
					2014	NOCM14103	100,000	-	100,000
						NOCM14104	119,327	-	119,327
						NOCM14105	25,000	-	25,000
						NOCM14106	150,000	-	150,000
						NOCM14107	25,000	-	25,000
						NOCM14108	25,000	-	25,000
						NOCM1435	31,890	-	31,890
						NOCM1436	2,830,374	-	2,830,374
						NOCM1437	168,110	-	168,110
					2015	NOCM1542	212,325	-	212,325
						NOCM1543	2,823,898	-	2,823,898
						NOCM1548	100,000	-	100,000
						NOCM1549	144,927	-	144,927
						NOCM1550	137,619	-	137,619
						NOCM1551	25,210	-	25,210
						NOCM1554	10,000	-	10,000
					2016	NOCM1627	140,000	-	140,000
						NOCM1628	100,000	-	100,000
						NOCM1629	160,000	-	160,000
						NOCM1630	25,000	-	25,000
						NOCM1631	25,000	-	25,000
						NOCM1632	2,966,998	-	2,966,998
					2017	NOCM1709	2,994,269	-	2,994,269
						NOCM1710	50,000	-	50,000
						NOCM1711	150,000	-	150,000
						NOCM1712	100,000	-	100,000
						NOCM1713	125,000	-	125,000
						NOCM1714	20,000	-	20,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis R	Chehalis R	Fall	2017	NOCM1715	5,000	-	5,000
					2018	NOCM18100	25,000	-	25,000
						NOCM1887	607,970	-	607,970
						NOCM1894	2,430,781	-	2,430,781
						NOCM1895	100,000	-	100,000
						NOCM1896	150,000	-	150,000
						NOCM1897	100,000	-	100,000
						NOCM1898	150,000	-	150,000
						NOCM1899	25,000	-	25,000
			Chehalis+Squakum	Fall	1987	024955	4,002,828	26,656	4,029,484
						025006	4,061,441	27,048	4,088,489
						025007	4,041,953	26,918	4,068,871
						ADRV8701		80,104	80,104
			Harrison R	Fall	1982	NOCM8210	4,117,000	-	4,117,000
						NOCM8216	16,500	-	16,500
						NOCM8221	406,944	-	406,944
						NOCM8222	120,012	-	120,012
						NOCM8223	602,410	-	602,410
					1983	022715	2,082,900	34,613	2,117,513
						022716	510,045	34,617	544,662
						NOCM8304	1,974,873	-	1,974,873
						NOCM8305	4,978,929	-	4,978,929
					1984	023312	2,036,335	83,519	2,119,854
						NOCM8402	4,168,159	-	4,168,159
						NOCM8403	1,528,542	-	1,528,542
					1985	023717	6,403,332	47,046	6,450,378
			Harrison Sl	Fall	2012	NOCM1304	34,147	-	34,147
					2013	NOCM13123	96,922	-	96,922
			Squakum Cr	Fall	1982	022257	200,407	34,604	235,011
						022524	1,066,904	41,752	1,108,656

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chehalis R	Squakum Cr	Fall	1983	022732	620,169	60,966	681,135
					1984	023149	732,078	19,711	751,789
						023223	1,156,669	31,143	1,187,812
						023341	818,386	25,439	843,825
						023342	1,144,000	26,244	1,170,244
					1985	NOCM8501	1,118,300	-	1,118,300
						NOCM8502	127,950	-	127,950
			Weaver Sp Ch	Fall	1982	022322	246,420	46,860	293,280
						022526	216,900	39,930	256,830
					1983	NOCM8307	514,503	-	514,503
		Chilliwack R	Chilliwack R	Fall	1980	LV8002	685,582	159,597	845,179
					1981	ADLV8101	860,469	48,874	909,343
						LV8101	870,469	49,442	919,911
						RV8101	1,997,314	107,264	2,104,578
					1982	ADLV8202	1,372,178	48,348	1,420,526
						LV8201	1,377,683	48,542	1,426,225
						RV8201	1,201,742	104,060	1,305,802
					1983	ADLV8302	592,181	94,019	686,200
						LV8302	412,565	76,495	489,060
					1984	LV8401	3,209,230	200,862	3,410,092
					1985	LV8504	3,912,107	200,377	4,112,484
					1986	NOCM8601	1,485,312	-	1,485,312
						RV8602	2,793,198	201,502	2,994,700
					1987	RV8701	2,617,026	147,662	2,764,688
					1988	RV8803	2,449,926	149,176	2,599,102
					1989	NOCM8901	1,867,406	-	1,867,406
						RV8901	2,913,424	148,759	3,062,183
					1990	NOCM9001	2,353,771	-	2,353,771
						RV9005	2,870,368	149,708	3,020,076
					1991	NOCM9124	2,373,784	-	2,373,784

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chilliwack R	Chilliwack R	Fall	1991	RV9101	2,846,519	147,508	2,994,027
					1992	NOCM9205	927,670	-	927,670
						RV9202	2,815,923	141,847	2,957,770
					1993	NOCM9309	1,288,430	-	1,288,430
						RV9301	2,342,051	147,830	2,489,881
					1994	NOCM9416	1,679,063	-	1,679,063
						RV9401	2,966,629	99,543	3,066,172
					1995	NOCM9520	1,666,530	-	1,666,530
						RV9503	2,968,212	99,594	3,067,806
					1996	RV9601	2,367,830	98,690	2,466,520
					1997	NOCM97101	501,916	-	501,916
						RV9705	2,779,742	100,042	2,879,784
					1998	NOCM98128	3,899,000	-	3,899,000
					1999	NOCM9993	1,314,928	-	1,314,928
					2000	NOCM0086	1,209,406	-	1,209,406
						NOCM0087	32,814	-	32,814
						NOCM0088	84,014	-	84,014
						NOCM0089	251,170	-	251,170
						NOCM0090	231,880	-	231,880
					2001	NOCM0117	1,011,083	-	1,011,083
						NOCM0118	200,224	-	200,224
						NOCM0119	200,250	-	200,250
						NOCM0120	201,000	-	201,000
					2002	NOCM02116	1,040,525	-	1,040,525
						NOCM02117	203,657	-	203,657
						NOCM02118	178,780	-	178,780
						NOCM02119	200,975	-	200,975
					2003	NOCM0353	198,992	-	198,992
						NOCM0354	201,814	-	201,814
						NOCM0355	200,011	-	200,011

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chilliwack R	Chilliwack R	Fall	2003	NOCM0356	1,141,870	-	1,141,870
					2004	NOCM0495	208,099	-	208,099
						NOCM0496	1,459,311	-	1,459,311
						NOCM0497	175,622	-	175,622
						NOCM0498	183,771	-	183,771
					2005	NOCM0553	78,825	-	78,825
						NOCM0554	1,202,310	-	1,202,310
						NOCM0555	59,750	-	59,750
						NOCM0556	62,250	-	62,250
					2006	NOCM0667	2,045,707	-	2,045,707
					2007	NOCM0702	1,443,816	-	1,443,816
						NOCM0703	50,000	-	50,000
					2008	NOCM0832	207,967	-	207,967
						NOCM0833	2,841,421	-	2,841,421
						NOCM0834	205,469	-	205,469
						NOCM0835	206,717	-	206,717
					2009	NOCM0905	894,866	-	894,866
						NOCM0906	100,071	-	100,071
						NOCM0907	97,514	-	97,514
					2010	NOCM1079	185,000	-	185,000
						NOCM1080	1,203,551	-	1,203,551
						NOCM1081	192,725	-	192,725
						NOCM1082	181,075	-	181,075
						NOCM1083	210,000	-	210,000
						NOCM1084	232,975	-	232,975
						NOCM1085	207,025	-	207,025
					2011	NOCM1102	1,066,654	-	1,066,654
						NOCM1103	197,275	-	197,275
						NOCM1104	150,910	-	150,910
						NOCM1105	97,275	-	97,275

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chilliwack R	Chilliwack R	Fall	2012	NOCM1257	203,342	-	203,342
						NOCM1258	142,857	-	142,857
						NOCM1259	1,014,582	-	1,014,582
						NOCM1260	2,526	-	2,526
						NOCM1261	285,714	-	285,714
						NOCM1262	141,958	-	141,958
						NOCM1263	142,857	-	142,857
						NOCM1264	142,857	-	142,857
						NOCM1265	213,000	-	213,000
						NOCM1266	195,291	-	195,291
						NOCM1267	142,857	-	142,857
					2013	NOCM1393	72,222	-	72,222
						NOCM1394	144,444	-	144,444
						NOCM1395	261,110	-	261,110
						NOCM1396	144,444	-	144,444
						NOCM1397	1,088,693	-	1,088,693
						NOCM1398	111,111	-	111,111
						NOCM1399	72,222	-	72,222
					2014	NOCM1452	29,611	-	29,611
						NOCM1453	1,062,976	-	1,062,976
						NOCM1454	250,000	-	250,000
						NOCM1455	37,176	-	37,176
						NOCM1456	125,000	-	125,000
						NOCM1457	250,000	-	250,000
						NOCM1458	125,000	-	125,000
					2015	NOCM1512	16,670	-	16,670
						NOCM1513	1,376,249	-	1,376,249
						NOCM1514	220,830	-	220,830
						NOCM1515	102,040	-	102,040
						NOCM1516	102,040	-	102,040

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chilliwack R	Chilliwack R	Fall	2015	NOCM1517	204,080	-	204,080
						NOCM1518	192,780	-	192,780
						NOCM1519	206,385	-	206,385
						NOCM1520	204,080	-	204,080
						NOCM1521	306,120	-	306,120
						NOCM1522	102,040	-	102,040
					2016	NOCM16130	200,000	-	200,000
						NOCM1616	261,414	-	261,414
						NOCM1617	100,000	-	100,000
						NOCM1618	10,278	-	10,278
						NOCM1619	1,036,929	-	1,036,929
						NOCM1620	200,000	-	200,000
						NOCM1621	289,360	-	289,360
						NOCM1622	253,388	-	253,388
						NOCM1623	200,000	-	200,000
						NOCM1624	100,000	-	100,000
						NOCM1625	200,000	-	200,000
					2017	NOCM1716	184,114	-	184,114
						NOCM1717	100,000	-	100,000
						NOCM1718	200,000	-	200,000
						NOCM1719	183,343	-	183,343
						NOCM1720	201,744	-	201,744
						NOCM1721	200,000	-	200,000
						NOCM1722	200,000	-	200,000
						NOCM1723	100,000	-	100,000
						NOCM1724	100,000	-	100,000
						NOCM1748	1,059,951	-	1,059,951
					2018	NOCM1883	145,214	-	145,214
						NOCM1884	100,000	-	100,000
						NOCM1885	1,305,168	-	1,305,168

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Chilliwack R	Chilliwack R	Fall	2018	NOCM1886	200,000	-	200,000
						NOCM1888	145,214	-	145,214
						NOCM1889	145,216	-	145,216
						NOCM1890	200,000	-	200,000
						NOCM1891	200,000	-	200,000
						NOCM1892	200,000	-	200,000
						NOCM1893	100,000	-	100,000
			Jones Sp Ch	Fall	1995	NOCM9521	64,391	-	64,391
		Chilliwack Sch	Chilliwack R	Fall	1981	NOCM8137	1,200	-	1,200
		Coquitlam Sch	Brunette R	Fall	2013	NOCM1366	374	-	374
					2014	NOCM14129	269	-	269
					2015	NOCM15125	212	-	212
					2016	NOCM1683	431	-	431
					2017	NOCM17112	289	-	289
					2018	NOCM1861	445	-	445
			Coquitlam R	Fall	2001	NOCM0158	899	-	899
					2002	NOCM02132	700	-	700
					2003	NOCM03151	786	-	786
					2004	NOCM0490	373	-	373
					2005	NOCM05158	775	-	775
					2006	NOCM0672	399	-	399
					2007	NOCM07183	549	-	549
					2008	NOCM08130	270	-	270
					2009	NOCM09116	432	-	432
					2011	NOCM1139	550	-	550
					2012	NOCM12121	600	-	600
					2013	NOCM1368	632	-	632
					2014	NOCM14131	432	-	432
					2015	NOCM15116	562	-	562
					2016	NOCM1685	590	-	590

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Coquitlam Sch	Coquitlam R	Fall	2017	NOCM17114	630	-	630
					2018	NOCM1862	1,202	-	1,202
			Hyde Cr/LWFR	Fall	2001	NOCM01107	480	-	480
					2002	NOCM02131	300	-	300
					2003	NOCM03152	269	-	269
					2004	NOCM0491	274	-	274
					2005	NOCM05159	262	-	262
					2006	NOCM0673	217	-	217
					2008	NOCM08122	575	-	575
					2010	NOCM10113	347	-	347
					2011	NOCM1137	590	-	590
					2012	NOCM12120	482	-	482
					2013	NOCM1369	490	-	490
					2014	NOCM14130	580	-	580
					2015	NOCM15115	523	-	523
					2016	NOCM1684	370	-	370
					2017	NOCM17113	464	-	464
			Kanaka Cr	Fall	1995	NOCM9545	1,040	-	1,040
					1996	NOCM9688	490	-	490
					1997	NOCM97148	350	-	350
						NOCM97150	350	-	350
						NOCM97151	350	-	350
					1998	NOCM9814	1,064	-	1,064
					1999	NOCM99164	1,100	-	1,100
					2000	NOCM00108	1,200	-	1,200
					2001	NOCM0159	334	-	334
					2002	NOCM02130	250	-	250
					2003	NOCM03154	326	-	326
					2004	NOCM04130	379	-	379
					2005	NOCM05157	415	-	415

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Coquitlam Sch	Kanaka Cr	Fall	2006	NOCM0671	339	-	339
					2008	NOCM08121	313	-	313
					2010	NOCM10110	874	-	874
		Delta Watershed Pk	Chehalis R	Fall	2002	NOCM02104	25,000	-	25,000
					2003	NOCM03144	25,000	-	25,000
					2004	NOCM04132	25,000	-	25,000
					2005	NOCM05184	25,000	-	25,000
		Fraser-Cascade Sch	Chehalis R	Fall	2008	NOCM0893	151	-	151
					2009	NOCM09115	286	-	286
			Inch Cr	Fall	2000	NOCM00112	80	-	80
					2001	NOCM0153	80	-	80
		Hoy Cr	Hoy Cr	Fall	1999	NOCM99127	10,000	-	10,000
					2000	NOCM00107	3,762	-	3,762
					2001	NOCM0160	1,223	-	1,223
					2016	NOCM1677	26,363	-	26,363
					2017	NOCM1796	3,721	-	3,721
		Hutchinson Cr	Alouette R S	Fall	2007	NOCM07140	2,864	-	2,864
					2008	NOCM0848	8,124	-	8,124
					2009	NOCM0972	3,772	-	3,772
					2010	NOCM1094	2,272	-	2,272
		Hyde Cr/LWFR	Coquitlam R	Fall	1987	NOCM8752	8,172	-	8,172
					1988	NOCM8854	3,200	-	3,200
			Hyde Cr/LWFR	Fall	1979	NOCM7919	3,000	-	3,000
					1980	NOCM8029	3,000	-	3,000
					1981	NOCM8138	12,000	-	12,000
					1982	NOCM8260	19,000	-	19,000
					1983	NOCM8353	5,000	-	5,000
					1984	NOCM8473	5,000	-	5,000
					1986	NOCM8657	5,300	-	5,300
					1991	NOCM9161	55,000	-	55,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Hyde Cr/ LWFR	Hyde Cr/LWFR	Fall	1992	NOCM9255	25,000	-	25,000
					1995	NOCM9554	300	-	300
					1996	NOCM9630	5,000	-	5,000
					1997	NOCM97110	24,500	-	24,500
					1998	NOCM98129	50,000	-	50,000
					1999	NOCM99129	34,887	-	34,887
					2000	NOCM00120	30,000	-	30,000
					2001	NOCM0161	3,338	-	3,338
					2003	NOCM0328	4,250	-	4,250
					2004	NOCM0422	250	-	250
					2005	NOCM05208	3,300	-	3,300
					2006	NOCM0628	12,784	-	12,784
					2007	NOCM07131	1,000	-	1,000
						NOCM07132	500	-	500
					2008	NOCM0888	10,000	-	10,000
					2009	NOCM0970	10,500	-	10,500
					2010	NOCM1078	980	-	980
					2011	NOCM1150	5,061	-	5,061
					2012	NOCM12124	8,450	-	8,450
					2013	NOCM1370	851	-	851
						NOCM1371	8,066	-	8,066
					2014	NOCM1469	172	-	172
						NOCM1470	4,032	-	4,032
					2015	NOCM15118	72	-	72
						NOCM15119	88	-	88
						NOCM15120	1,714	-	1,714
						NOCM15121	2,938	-	2,938
					2016	NOCM1676	10,745	-	10,745
					2017	NOCM1797	11,223	-	11,223
					2018	NOCM18133	8,742	-	8,742

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Hyde Cr/ LWFR	Hyde+Partington Cr	Fall	1994	NOCM9449	25,000	-	25,000
			Partington Cr	Fall	1989	NOCM8985	9,000	-	9,000
					1990	NOCM90152	15,000	-	15,000
					1993	NOCM9367	40,000	-	40,000
		Inch Cr	Blaney Cr/LWFR	Fall	1981	022160	836,149	37,718	873,867
						022224	904,780	40,815	945,595
					1982	NOCM8202	568,229	-	568,229
					1983	NOCM8312	595,850	-	595,850
					1984	RV8403	943,945	100,060	1,044,005
					1985	NOCM8508	1,011,236	-	1,011,236
					1986	ADLV8601	792,732	75,119	867,851
			Inch Cr	Fall	1970	NOCM7001	323,026	-	323,026
					1971	NOCM7101	882,432	-	882,432
					1972	NOCM7201	713,361	-	713,361
					1973	NOCM7301	662,716	-	662,716
					1974	NOCM7401	940,369	-	940,369
					1975	NOCM7501	778,500	-	778,500
					1976	ADLV7601	960,098	275,305	1,235,403
					1977	ADLV7701	206,788	246,120	452,908
						NOCM7701	210,371	-	210,371
						NOCM7702	38,358	-	38,358
					1978	021740		50,720	50,720
						021741		49,226	49,226
						021742		3,000	3,000
						NOCM7801	235,980	-	235,980
						NOCM7802	604,649	-	604,649
					1979	021857	974,020	117,257	1,091,277
					1980	021804	414,121	50,138	464,259
						RV8002	413,584	50,073	463,657
					1981	NOCM8101	1,284,194	-	1,284,194

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Inch Cr	Inch Cr	Fall	1982	ADLV8203	2,412,392	99,767	2,512,159
					1983	022703	249,181	50,819	300,000
						022707	230,014	49,986	280,000
						NOCM8314	1,415,202	-	1,415,202
						RV8306	245,886	50,083	295,969
					1984	ADLV8402	2,237,345	100,047	2,337,392
					1985	023659	550,556	35,192	585,748
						ADLV8501	549,288	35,111	584,399
						RV8503	548,631	35,069	583,700
					1986	ADLV8602	985,242	74,826	1,060,068
					1987	ADLV8701	935,881	75,011	1,010,892
					1988	ADLV8801	993,862	72,905	1,066,767
						ADLV8805		1,423	1,423
						NOCM8812	2,000	-	2,000
					1989	NOCM8906	1,204,967	-	1,204,967
					1990	020659	703,660	26,105	729,765
						NOCM9005	100,801	-	100,801
					1991	180506	828,857	24,996	853,853
						NOCM9126	100,000	-	100,000
					1992	180938	977,260	51,460	1,028,720
					1993	181228	1,098,690	50,792	1,149,482
					1994	181948	1,037,829	49,495	1,087,324
						NOCM9415	25,100	-	25,100
					1995	180218	556,594	25,790	582,384
						180219	556,595	26,843	583,438
					1996	182853	1,075,929	50,753	1,126,682
					1997	183907	971,992	50,329	1,022,321
						NOCM9786	200,000	-	200,000
					1998	184045	1,070,913	50,575	1,121,488
					1999	184543	952,769	49,924	1,002,693

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Inch Cr	Inch Cr	Fall	2000	183810	465,553	25,132	490,685
						183811	461,105	24,891	485,996
					2001	184908	1,124,599	50,031	1,174,630
					2002	NOCM02110	1,179,829	-	1,179,829
					2003	NOCM0309	150,000	-	150,000
						NOCM0311	681,643	-	681,643
					2004	NOCM04137	150,000	-	150,000
						NOCM0488	812,847	-	812,847
					2005	NOCM0513	885,282	-	885,282
						NOCM0514	150,000	-	150,000
					2006	NOCM0623	946,694	-	946,694
						NOCM0624	150,000	-	150,000
					2007	NOCM0718	955,850	-	955,850
						NOCM0719	150,000	-	150,000
					2008	NOCM0823	1,016,358	-	1,016,358
						NOCM0824	199,752	-	199,752
					2009	NOCM0920	1,033,325	-	1,033,325
					2010	NOCM1090	735,302	-	735,302
					2011	NOCM1156	1,355,151	-	1,355,151
						NOCM1157	50,000	-	50,000
						NOCM1158	400,000	-	400,000
						NOCM1159	250,000	-	250,000
						NOCM1160	250,000	-	250,000
					2012	NOCM1253	1,134,417	-	1,134,417
						NOCM1254	750,000	-	750,000
						NOCM1255	750,000	-	750,000
						NOCM1256	400,000	-	400,000
						NOCM1297	50,000	-	50,000
					2013	NOCM13124	836,943	-	836,943
						NOCM13125	50,000	-	50,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Inch Cr	Inch Cr	Fall	2013	NOCM13126	270,864	-	270,864
						NOCM13127	753,992	-	753,992
						NOCM13128	753,992	-	753,992
					2014	NOCM1438	1,025,468	-	1,025,468
						NOCM1439	50,000	-	50,000
						NOCM1440	385,000	-	385,000
						NOCM1441	343,000	-	343,000
						NOCM1442	750,000	-	750,000
					2015	NOCM1524	500,000	-	500,000
						NOCM1525	150,000	-	150,000
						NOCM1526	700,581	-	700,581
						NOCM1527	50,000	-	50,000
					2016	NOCM1626	1,606,819	-	1,606,819
					2017	NOCM1743	808,380	-	808,380
						NOCM1744	251,507	-	251,507
						NOCM1745	766,153	-	766,153
						NOCM1746	50,000	-	50,000
					2018	NOCM18101	40,000	-	40,000
						NOCM18102	732,278	-	732,278
						NOCM18103	210,937	-	210,937
						NOCM18104	806,765	-	806,765
						NOCM18105	50,000	-	50,000
			Stave R	Fall	1982	022250	631,008	34,680	665,688
						022440	791,312	35,772	827,084
						022522	681,184	36,308	717,492
					1983	NOCM8313	3,445,880	-	3,445,880
					1984	NOCM8411	3,730,556	-	3,730,556
						NOCM8412	275,357	-	275,357
					1985	023656	1,149,902	34,598	1,184,500
						023657	2,318,347	34,490	2,352,837

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Inch Cr	Stave R	Fall	1985	023658	1,556,863	34,895	1,591,758
						NOCM8509	200,090	-	200,090
					1986	024235	992,758	25,669	1,018,427
						024236	961,752	24,942	986,694
						024237	920,843	25,013	945,856
						024238	959,649	25,909	985,558
						024239	775,141	25,038	800,179
						024240	494,241	25,153	519,394
						NOCM8605	200,000	-	200,000
					1987	024652	947,548	20,175	967,723
						024653	1,038,759	20,141	1,058,900
						024654	1,038,662	20,109	1,058,771
						025145	771,932	19,970	791,902
					1988	025912	246,791	49,720	296,511
						025914	250,970	50,303	301,273
						NOCM8806	974,993	-	974,993
						NOCM8807	140,000	-	140,000
						NOCM8808	971,649	-	971,649
						NOCM8809	401,234	-	401,234
						NOCM8810	990,936	-	990,936
						NOCM8811	988,368	-	988,368
					1989	020526	2,915,791	50,176	2,965,967
						020527	874,475	52,779	927,254
						020528	990,530	54,187	1,044,717
					1990	021431	961,949	26,110	988,059
						021432	914,316	25,911	940,227
						021433	923,055	25,945	949,000
						021434	880,004	26,217	906,221
						021435	565,338	26,097	591,435
					1991	180501	903,495	24,963	928,458

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Inch Cr	Stave R	Fall	1991	180502	980,306	24,457	1,004,763
						180503	824,985	26,043	851,028
						180504	953,956	26,120	980,076
						180505	870,815	26,151	896,966
					1992	180743	2,759,662	8,400	2,768,062
						180744	267,889	10,681	278,570
						180745	265,285	10,721	276,006
						180749	195,025	10,476	205,501
						180750	191,111	10,383	201,494
						180751	189,775	10,306	200,081
						180752	188,114	10,268	198,382
					1993	181535	1,452,178	25,228	1,477,406
						181536	1,452,177	25,295	1,477,472
						181537	961,921	25,966	987,887
						181538	971,963	25,522	997,485
					1994	181817	1,139,817	24,716	1,164,533
						181818	1,178,645	24,965	1,203,610
						181819	1,202,872	24,925	1,227,797
						181820	1,201,910	24,925	1,226,835
					1995	180214	1,347,221	24,578	1,371,799
						180215	1,331,235	24,230	1,355,465
						180216	927,681	25,717	953,398
						180217	918,105	25,460	943,565
					1996	182852	1,995,248	49,826	2,045,074
						182854	982,091	49,924	1,032,015
					1997	183908	2,028,888	50,064	2,078,952
		Jones Sp Ch	Jones Sp Ch	Fall	1961	NOCM6102	28,600	-	28,600
					1963	NOCM6302	99,700	-	99,700
					1965	NOCM6502	43,900	-	43,900
					1967	NOCM6702	9,900	-	9,900

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Jones Sp Ch	Jones Sp Ch	Fall	1969	NOCM6902	19,400	-	19,400
					1971	NOCM7104	1,700	-	1,700
					1973	NOCM7303	187,600	-	187,600
					1975	NOCM7503	14,800	-	14,800
					1977	NOCM7709	139,300	-	139,300
					1979	NOCM7932	14,800	-	14,800
					1981	NOCM8157	251,400	-	251,400
					1983	NOCM8308	69,700	-	69,700
					1985	NOCM85130	668,000	-	668,000
					1987	NOCM8703	210,758	-	210,758
					1989	NOCM8907	153,678	-	153,678
					1991	NOCM9101	292,603	-	292,603
		Kanaka Cr	Kanaka Cr	Fall	1982	NOCM8246	4,500	-	4,500
					1983	NOCM8348	39,600	-	39,600
					1984	NOCM8457	98,000	-	98,000
					1985	NOCM8565	86,000	-	86,000
					1986	NOCM8641	98,000	-	98,000
					1987	ADLV8705	109,200	2,800	112,000
					1988	NOCM8893	87,675	-	87,675
					1989	NOCM89146	97,000	-	97,000
					1990	NOCM9049	107,900	-	107,900
					1991	NOCM9142	121,207	-	121,207
					1992	NOCM9246	100,640	-	100,640
					1993	NOCM9308	120,100	-	120,100
					1994	NOCM9403	127,309	-	127,309
					1995	NOCM9515	124,070	-	124,070
					1996	NOCM9605	126,395	-	126,395
						NOCM9692	17,660	-	17,660
					1997	NOCM9768	82,758	-	82,758
					1998	NOCM9826	154,304	-	154,304

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Kanaka Cr	Kanaka Cr	Fall	1998	NOCM9850	15,000	-	15,000
					1999	NOCM99141	30,000	-	30,000
						NOCM99142	115,950	-	115,950
					2000	NOCM00121	30,000	-	30,000
						NOCM00122	159,000	-	159,000
					2001	NOCM0162	159,000	-	159,000
						NOCM0163	30,000	-	30,000
					2002	NOCM02101	100,000	-	100,000
						NOCM0299	20,000	-	20,000
					2003	NOCM0329	25,000	-	25,000
						NOCM0360	71,500	-	71,500
					2004	NOCM0414	79,000	-	79,000
						NOCM0418	25,000	-	25,000
						NOCM0419	5,000	-	5,000
					2005	NOCM0504	96,000	-	96,000
						NOCM0505	30,000	-	30,000
						NOCM05219	2,000	-	2,000
					2006	NOCM0602	15,000	-	15,000
						NOCM0604	35,500	-	35,500
					2007	NOCM0705	30,000	-	30,000
						NOCM0707	12,000	-	12,000
						NOCM0708	86,000	-	86,000
					2008	NOCM0872	30,000	-	30,000
						NOCM0874	80,600	-	80,600
					2009	NOCM0961	50,200	-	50,200
						NOCM0962	5,000	-	5,000
						NOCM0963	25,000	-	25,000
						NOCM0964	50,000	-	50,000
						NOCM0968	12,200	-	12,200
					2010	NOCM1070	12,640	-	12,640

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Kanaka Cr	Kanaka Cr	Fall	2010	NOCM1071	5,000	-	5,000
						NOCM1072	25,000	-	25,000
						NOCM1073	16,200	-	16,200
						NOCM1074	16,000	-	16,000
						NOCM1075	13,200	-	13,200
					2011	NOCM11126	42,275	-	42,275
						NOCM1170	25,000	-	25,000
						NOCM1171	4,100	-	4,100
						NOCM1172	51,000	-	51,000
						NOCM1173	12,000	-	12,000
						NOCM1174	12,000	-	12,000
					2012	NOCM12116	15,280	-	15,280
						NOCM12133	20,800	-	20,800
					2013	NOCM1357	27,500	-	27,500
						NOCM1358	2,500	-	2,500
						NOCM1359	75,200	-	75,200
						NOCM1360	20,000	-	20,000
						NOCM1361	57,800	-	57,800
					2014	NOCM14145	10,000	-	10,000
						NOCM1459	1,000	-	1,000
						NOCM1460	9,800	-	9,800
						NOCM1461	63,000	-	63,000
						NOCM1462	25,000	-	25,000
						NOCM1463	5,000	-	5,000
						NOCM1464	10,200	-	10,200
						NOCM1465	15,300	-	15,300
						NOCM1466	15,000	-	15,000
						NOCM1467	15,000	-	15,000
					2015	NOCM15101	10,000	-	10,000
						NOCM15102	40,000	-	40,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Kanaka Cr	Kanaka Cr	Fall	2015	NOCM15103	5,000	-	5,000
						NOCM15104	30,000	-	30,000
						NOCM15105	5,000	-	5,000
						NOCM15106	20,000	-	20,000
						NOCM15107	50,000	-	50,000
						NOCM15108	15,000	-	15,000
						NOCM15109	68,200	-	68,200
						NOCM15110	15,000	-	15,000
						NOCM15111	42,400	-	42,400
					2016	NOCM1669	10,000	-	10,000
						NOCM1670	150,000	-	150,000
						NOCM1671	45,000	-	45,000
						NOCM1672	5,000	-	5,000
						NOCM1673	30,000	-	30,000
						NOCM1674	20,500	-	20,500
					2017	NOCM17100	57,000	-	57,000
						NOCM17101	57,273	-	57,273
						NOCM17102	13,400	-	13,400
						NOCM17103	37,727	-	37,727
						NOCM17104	15,000	-	15,000
						NOCM17105	5,000	-	5,000
						NOCM17106	1,600	-	1,600
						NOCM17107	10,000	-	10,000
						NOCM17108	30,000	-	30,000
						NOCM1798	3,472	-	3,472
						NOCM1799	45,000	-	45,000
					2018	NOCM18134	50,000	-	50,000
						NOCM18135	45,000	-	45,000
						NOCM18136	5,000	-	5,000
						NOCM18137	110,000	-	110,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Kanaka Cr	Kanaka Cr	Fall	2018	NOCM18138	25,800	-	25,800
						NOCM18139	30,000	-	30,000
		L Chilliwack	Chilliwack R	Fall	1981	NOCM8130	8,000	-	8,000
					1990	NOCM9083	30,000	-	30,000
					1998	NOCM9810	50,000	-	50,000
					1999	NOCM99168	50,000	-	50,000
					2002	NOCM02163	11,000	-	11,000
					2004	NOCM04141	10,000	-	10,000
					2014	NOCM1476	24,693	-	24,693
					2015	NOCM1597	16,244	-	16,244
			L Chilliwack R	Fall	2016	NOCM16128	18,191	-	18,191
					2017	NOCM17123	42,155	-	42,155
					2018	NOCM18112	42,275	-	42,275
		Langley Sch	Chehalis R	Fall	1995	NOCM95102	350	-	350
						NOCM95103	350	-	350
					1998	NOCM98134	300	-	300
						NOCM98135	300	-	300
						NOCM9816	359	-	359
			Inch Cr	Fall	2000	NOCM00141	200	-	200
					2002	NOCM02221	45	-	45
		MacKay Cr	Alouette R S	Fall	2007	NOCM07141	30,404	-	30,404
					2008	NOCM0849	25,000	-	25,000
					2009	NOCM0993	29,320	-	29,320
					2010	NOCM1099	20,804	-	20,804
					2011	NOCM1190	29,331	-	29,331
					2012	NOCM1293	33,339	-	33,339
					2013	NOCM1333	31,712	-	31,712
					2014	NOCM14136	26,914	-	26,914
					2015	NOCM1593	26,498	-	26,498
					2016	NOCM1667	26,851	-	26,851

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	MacKay Cr	Alouette R S	Fall	2017	NOCM1784	29,610	-	29,610
					2018	NOCM18125	31,512	-	31,512
		Maple Ridge Sch	Kanaka Cr	Fall	1995	NOCM9564	520	-	520
					1996	NOCM9687	240	-	240
					1997	NOCM97152	770	-	770
					1998	NOCM9817	982	-	982
					1999	NOCM99169	720	-	720
					2000	NOCM00123	900	-	900
					2001	NOCM0164	873	-	873
					2002	NOCM02134	1,125	-	1,125
					2003	NOCM03156	802	-	802
					2004	NOCM0492	728	-	728
					2005	NOCM05161	712	-	712
					2006	NOCM0675	475	-	475
					2008	NOCM08124	623	-	623
					2010	NOCM10108	614	-	614
					2011	NOCM1135	554	-	554
					2012	NOCM12117	655	-	655
					2013	NOCM1372	698	-	698
					2014	NOCM14126	675	-	675
					2015	NOCM15122	675	-	675
					2016	NOCM1686	736	-	736
					2017	NOCM17115	791	-	791
					2018	NOCM1863	939	-	939
						NOCM1864	616	-	616
		Mission Sch	Kanaka Cr	Fall	2013	NOCM1377	682	-	682
					2014	NOCM14127	836	-	836
					2015	NOCM15124	875	-	875
					2016	NOCM1688	596	-	596
					2018	NOCM18113	65	-	65

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Mission Sch	Silverdale Cr	Fall	2005	NOCM05153	692	-	692
					2006	NOCM0679	645	-	645
					2010	NOCM10114	90	-	90
					2011	NOCM1154	579	-	579
			Stave R	Fall	1989	NOCM8993	400	-	400
					1990	NOCM90107	1,350	-	1,350
					1991	NOCM91130	400	-	400
					1992	NOCM9256	400	-	400
					1993	NOCM9370	550	-	550
					1994	NOCM9450	200	-	200
					1995	NOCM9567	480	-	480
					1996	NOCM9686	60	-	60
					1997	NOCM97153	240	-	240
					1998	NOCM9818	675	-	675
					1999	NOCM99170	700	-	700
					2000	NOCM00124	1,000	-	1,000
					2001	NOCM0165	544	-	544
					2002	NOCM02135	1,034	-	1,034
					2003	NOCM03157	525	-	525
					2004	NOCM0493	525	-	525
		Morten Cr	Alouette R S	Fall	2007	NOCM07142	31,613	-	31,613
					2008	NOCM0850	25,000	-	25,000
					2009	NOCM0994	30,000	-	30,000
					2010	NOCM10100	24,732	-	24,732
					2011	NOCM1193	32,770	-	32,770
					2012	NOCM1290	26,212	-	26,212
					2013	NOCM1329	30,831	-	30,831
					2014	NOCM14143	29,442	-	29,442
					2015	NOCM1594	31,999	-	31,999
					2016	NOCM1663	15,484	-	15,484

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Morten Cr	Alouette R S	Fall	2017	NOCM1785	32,764	-	32,764
					2018	NOCM18115	33,743	-	33,743
		Mossom Cr	Alouette R S	Fall	1978	NOCM7804	19,000	-	19,000
					2007	NOCM07143	31,500	-	31,500
						NOCM07144	10,000	-	10,000
						NOCM07145	10,000	-	10,000
					2008	NOCM0851	75,768	-	75,768
						NOCM0852	35,754	-	35,754
					2009	NOCM0996	23,500	-	23,500
						NOCM0997	20,000	-	20,000
					2010	NOCM1095	31,000	-	31,000
						NOCM1096	20,000	-	20,000
					2011	NOCM1184	39,146	-	39,146
						NOCM1185	8,467	-	8,467
						NOCM1186	11,000	-	11,000
					2014	NOCM14137	46,589	-	46,589
						NOCM14138	10,231	-	10,231
						NOCM14139	10,232	-	10,232
						NOCM14140	22,369	-	22,369
					2015	NOCM1590	45,728	-	45,728
						NOCM1591	15,375	-	15,375
						NOCM1592	15,375	-	15,375
					2016	NOCM1656	33,191	-	33,191
						NOCM1657	32,214	-	32,214
						NOCM1658	16,382	-	16,382
						NOCM1659	17,000	-	17,000
					2017	NOCM17119	46,130	-	46,130
						NOCM17120	22,946	-	22,946
						NOCM17121	15,000	-	15,000
					2018	NOCM18116	50,479	-	50,479

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Mossom Cr	Alouette R S	Fall	2018	NOCM18117	19,846	-	19,846
						NOCM18118	19,753	-	19,753
			Weaver Sp Ch	Fall	1979	NOCM7915	25,000	-	25,000
					1980	NOCM8023	500	-	500
					1981	NOCM8123	40,000	-	40,000
					1982	NOCM8243	1,000	-	1,000
					1983	NOCM8342	60,000	-	60,000
					1984	NOCM8451	110,000	-	110,000
		Musqueam Cr	Kanaka Cr	Fall	1990	NOCM9097	4,200	-	4,200
					1991	NOCM9154	35,700	-	35,700
					1992	NOCM92105	9,900	-	9,900
					1993	NOCM9390	41,000	-	41,000
					1994	NOCM9492	47,400	-	47,400
					1995	NOCM95119	51,000	-	51,000
					1996	NOCM96104	15,900	-	15,900
						NOCM96105	22,200	-	22,200
					1997	NOCM97121	43,000	-	43,000
					1998	NOCM98138	48,300	-	48,300
					1999	NOCM99137	50,000	-	50,000
		Nelson Cr	Alouette R S	Fall	2014	NOCM1485	48,421	-	48,421
						NOCM1486	48,422	-	48,422
					2015	NOCM15126	41,000	-	41,000
						NOCM15127	58,329	-	58,329
					2017	NOCM17124	24,750	-	24,750
						NOCM17125	24,750	-	24,750
						NOCM17126	49,500	-	49,500
					2018	NOCM18141	26,000	-	26,000
						NOCM18142	26,700	-	26,700
						NOCM18143	24,250	-	24,250
						NOCM18144	24,250	-	24,250

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Nelson Cr	Weaver Sp Ch	Fall	1984	NOCM8475	8,000	-	8,000
		New West Sch	Brunette R	Fall	2012	NOCM12118	363	-	363
					2013	NOCM1367	395	-	395
					2014	NOCM14128	293	-	293
					2015	NOCM15123	367	-	367
					2016	NOCM1687	432	-	432
					2017	NOCM17116	297	-	297
					2018	NOCM1865	312	-	312
			Kanaka Cr	Fall	1995	NOCM9569	720	-	720
					1996	NOCM9685	313	-	313
					1997	NOCM97154	720	-	720
					1998	NOCM9819	440	-	440
					1999	NOCM99171	800	-	800
					2000	NOCM00125	567	-	567
					2001	NOCM0166	501	-	501
					2002	NOCM02136	332	-	332
					2003	NOCM03158	707	-	707
					2004	NOCM0494	649	-	649
					2005	NOCM05162	571	-	571
					2006	NOCM0676	459	-	459
					2008	NOCM08125	542	-	542
					2010	NOCM10109	344	-	344
					2011	NOCM1136	388	-	388
		Nicomekl R	Chehalis R	Fall	1991	NOCM91137	50,000	-	50,000
					1992	NOCM9294	170,000	-	170,000
					1993	NOCM9376	50,000	-	50,000
					1994	NOCM9494	40,000	-	40,000
						NOCM9495	50,000	-	50,000
					1995	NOCM95105	60,000	-	60,000
					1996	NOCM9682	120,000	-	120,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Nicomekl R	Chehalis R	Fall	1997	NOCM9787	40,000	-	40,000
					1998	NOCM9801	20,000	-	20,000
						NOCM9802	20,000	-	20,000
					1999	NOCM99172	22,000	-	22,000
						NOCM99173	22,000	-	22,000
					2000	NOCM00142	45,000	-	45,000
					2001	NOCM0190	48,000	-	48,000
					2002	NOCM02105	50,000	-	50,000
						NOCM02121	45,000	-	45,000
					2003	NOCM03146	83,000	-	83,000
					2004	NOCM04133	174,746	-	174,746
					2005	NOCM05185	50,000	-	50,000
					2007	NOCM07153	50,000	-	50,000
						NOCM07154	50,000	-	50,000
					2008	NOCM08127	111,340	-	111,340
					2009	NOCM09111	25,000	-	25,000
						NOCM09112	12,500	-	12,500
						NOCM09113	12,500	-	12,500
					2010	NOCM10121	52,000	-	52,000
					2011	NOCM1198	126,428	-	126,428
			Chilliwack R	Fall	1989	NOCM89100	40,000	-	40,000
			Inch Cr	Fall	1992	NOCM9295	50,000	-	50,000
		Noons Cr	Alouette R S	Fall	2007	NOCM07146	42,797	-	42,797
						NOCM07147	40,803	-	40,803
					2009	NOCM09100	18,000	-	18,000
						NOCM0999	28,000	-	28,000
					2010	NOCM1097	1,597	-	1,597
						NOCM1098	39,138	-	39,138
					2011	NOCM1194	41,724	-	41,724
						NOCM1195	40,214	-	40,214

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Noons Cr	Alouette R S	Fall	2012	NOCM1285	33,684	-	33,684
						NOCM1286	36,488	-	36,488
					2013	NOCM1325	35,609	-	35,609
					2014	NOCM14141	36,969	-	36,969
						NOCM14142	9,895	-	9,895
					2015	NOCM1595	36,233	-	36,233
					2016	NOCM1661	30,530	-	30,530
						NOCM1662	19,882	-	19,882
					2017	NOCM1786	47,812	-	47,812
						NOCM1787	20,000	-	20,000
					2018	NOCM18120	31,429	-	31,429
						NOCM18121	20,000	-	20,000
		North Van Sch	Alouette R S	Fall	2007	NOCM07148	3,835	-	3,835
					2008	NOCM0856	3,680	-	3,680
					2009	NOCM09101	4,320	-	4,320
					2012	NOCM1283	4,220	-	4,220
					2013	NOCM1345	1,125	-	1,125
						NOCM1346	1,125	-	1,125
						NOCM1347	1,125	-	1,125
						NOCM1348	1,125	-	1,125
					2014	NOCM14144	3,995	-	3,995
					2015	NOCM1596	2,953	-	2,953
					2016	NOCM1655	3,267	-	3,267
					2017	NOCM1792	4,052	-	4,052
					2018	NOCM18122	3,607	-	3,607
		Poco Hatchery	Coquitlam R	Fall	1983	NOCM8367	12,000	-	12,000
					1985	NOCM8573	15,000	-	15,000
					1986	NOCM8645	46,000	-	46,000
					1987	NOCM8746	37,000	-	37,000
					1988	NOCM8845	10,000	-	10,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Poco Hatchery	Coquitlam R	Fall	1989	NOCM8980	15,000	-	15,000
					1990	NOCM9079	12,000	-	12,000
					1991	NOCM9160	45,000	-	45,000
					1992	NOCM9254	50,000	-	50,000
					1993	NOCM9364	14,000	-	14,000
						NOCM9365	3,000	-	3,000
					1995	NOCM9544	5,000	-	5,000
					1996	NOCM96140	5,000	-	5,000
					1997	NOCM97109	6,500	-	6,500
					2004	NOCM04213	33,700	-	33,700
						NOCM0423	9,000	-	9,000
		Reed Point/Ioco	Alouette R S	Fall	2007	NOCM07149	29,990	-	29,990
					2009	NOCM09102	36,998	-	36,998
					2010	NOCM10115	43,699	-	43,699
					2011	NOCM1183	27,897	-	27,897
		Richards Cr	Alouette R S	Fall	2007	NOCM07150	24,331	-	24,331
					2008	NOCM0857	15,000	-	15,000
		Richmond Sch	Chehalis R	Fall	1995	NOCM95107	600	-	600
					1998	NOCM9820	623	-	623
					1999	NOCM99176	750	-	750
		River Springs Enh	Coquitlam R	Fall	1997	NOCM97111	6,500	-	6,500
					1998	NOCM98130	13,320	-	13,320
					1999	NOCM99128	8,125	-	8,125
					2000	NOCM00126	14,500	-	14,500
					2001	NOCM0167	1,030	-	1,030
					2002	NOCM02137	7,500	-	7,500
					2003	NOCM0330	2,961	-	2,961
					2004	NOCM0424	1,600	-	1,600
					2005	NOCM0576	1,500	-	1,500
					2006	NOCM0629	2,000	-	2,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	River Springs Enh	Coquitlam R	Fall	2006	NOCM0632	445	-	445
					2007	NOCM07134	2,000	-	2,000
					2008	NOCM0890	2,000	-	2,000
					2009	NOCM0956	4,200	-	4,200
					2011	NOCM1151	3,900	-	3,900
					2012	NOCM12131	2,300	-	2,300
					2013	NOCM1373	4,900	-	4,900
					2014	NOCM14132	2,900	-	2,900
					2015	NOCM15117	5,326	-	5,326
					2016	NOCM1679	10,050	-	10,050
					2017	NOCM17109	630	-	630
						NOCM17110	4,690	-	4,690
					2018	NOCM1867	2,889	-	2,889
		Rodgers Cr	Weaver Sp Ch	Fall	1984	NOCM8476	20,000	-	20,000
		Serpentine R	Chehalis R	Fall	1990	NOCM9051	50,000	-	50,000
					1991	NOCM91138	10,000	-	10,000
					1992	NOCM9296	100,000	-	100,000
					1993	NOCM9329	82,802	-	82,802
					1994	NOCM9496	165,000	-	165,000
					1995	NOCM95108	30,000	-	30,000
					1996	NOCM96102	99,500	-	99,500
					2000	NOCM00143	51,300	-	51,300
					2001	NOCM0189	49,000	-	49,000
					2002	NOCM02103	100,000	-	100,000
						NOCM02164	45,000	-	45,000
					2003	NOCM03147	127,900	-	127,900
					2004	NOCM04134	74,554	-	74,554
					2006	NOCM06129	50,000	-	50,000
					2007	NOCM07155	150,000	-	150,000
					2008	NOCM0878	38,000	-	38,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Serpentine R	Chehalis R	Fall	2009	NOCM09107	180,000	-	180,000
					2011	NOCM11127	150,000	-	150,000
		Seymour R	Alouette R S	Fall	2007	NOCM07130	25,000	-	25,000
						NOCM0715	32,124	-	32,124
					2008	NOCM0805	473,798	-	473,798
						NOCM0806	27,000	-	27,000
					2009	NOCM09105	20,000	-	20,000
						NOCM0971	55,374	-	55,374
					2010	NOCM1092	27,500	-	27,500
						NOCM1093	312,500	-	312,500
					2011	NOCM1188	20,000	-	20,000
						NOCM1189	64,733	-	64,733
					2012	NOCM1291	21,450	-	21,450
						NOCM1292	388,003	-	388,003
					2013	NOCM1330	400,292	-	400,292
						NOCM1332	22,990	-	22,990
					2014	NOCM14117	224,227	-	224,227
						NOCM14118	25,000	-	25,000
					2015	NOCM1588	141,469	-	141,469
						NOCM1589	24,000	-	24,000
					2016	NOCM1664	301,576	-	301,576
						NOCM1665	25,000	-	25,000
					2017	NOCM1788	20,000	-	20,000
						NOCM1789	393,496	-	393,496
					2018	NOCM18126	229,874	-	229,874
						NOCM18127	18,493	-	18,493
		Silverdale Cr	Silverdale Cr	Fall	1981	NOCM8139	9,000	-	9,000
					1982	NOCM8262	20,000	-	20,000
		Spanish Banks Cr	Kanaka Cr	Fall	1999	NOCM99138	30,000	-	30,000
					2000	NOCM00139	30,000	-	30,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Spanish Banks Cr	Kanaka Cr	Fall	2001	NOCM0192	30,000	-	30,000
					2002	NOCM02151	30,000	-	30,000
					2003	NOCM0361	10,000	-	10,000
						NOCM0362	10,000	-	10,000
						NOCM0363	10,000	-	10,000
					2004	NOCM0478	30,000	-	30,000
					2005	NOCM05176	30,000	-	30,000
					2006	NOCM0607	15,000	-	15,000
					2007	NOCM07151	38,000	-	38,000
					2008	NOCM0858	40,000	-	40,000
					2010	NOCM10102	16,100	-	16,100
						NOCM10103	16,200	-	16,200
					2011	NOCM1191	22,300	-	22,300
						NOCM1192	19,975	-	19,975
		Stave R	Inch Cr	Fall	1989	NOCM8977	105,000	-	105,000
			Stave R	Fall	1985	NOCM8562	62,000	-	62,000
					1986	NOCM8638	25,000	-	25,000
					1987	NOCM8777	60,000	-	60,000
					1988	NOCM8843	85,000	-	85,000
		Stave Val SES	Silverdale Cr	Fall	1996	NOCM9636	32,000	-	32,000
					1997	NOCM97113	33,500	-	33,500
					1998	NOCM98132	28,000	-	28,000
					1999	NOCM99150	44,000	-	44,000
					2000	NOCM00127	40,000	-	40,000
					2001	NOCM0169	50,000	-	50,000
					2002	NOCM02143	40,000	-	40,000
					2003	NOCM0333	50,000	-	50,000
					2007	NOCM07136	34,000	-	34,000
					2008	NOCM0892	40,000	-	40,000
					2009	NOCM0973	46,000	-	46,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Stave Val SES	Silverdale Cr	Fall	2010	NOCM1086	24,000	-	24,000
					2011	NOCM1153	60,200	-	60,200
					2012	NOCM12132	500	-	500
			Silvermere Lk	Fall	2002	NOCM02142	47,000	-	47,000
					2010	NOCM1087	7,000	-	7,000
			Stave R	Fall	1982	NOCM8261	30,000	-	30,000
					1983	NOCM8354	38,000	-	38,000
					1984	NOCM8474	44,000	-	44,000
					1985	NOCM8591	75,000	-	75,000
					1986	NOCM8658	100,000	-	100,000
					1987	NOCM8774	50,000	-	50,000
						NOCM8775	30,000	-	30,000
						NOCM8776	25,000	-	25,000
					1988	NOCM88107	150,000	-	150,000
					1989	NOCM8959	155,000	-	155,000
					1990	NOCM9061	98,000	-	98,000
						NOCM9062	40,000	-	40,000
					1991	NOCM9173	107,500	-	107,500
					1992	NOCM9257	114,000	-	114,000
					1993	NOCM9369	75,000	-	75,000
					1994	NOCM9451	45,000	-	45,000
						NOCM9452	60,000	-	60,000
					1995	NOCM9581	60,000	-	60,000
					1996	NOCM9631	195,000	-	195,000
					1997	NOCM97112	73,000	-	73,000
						NOCM97132	75,000	-	75,000
					1998	NOCM98133	200,000	-	200,000
					1999	NOCM99151	180,000	-	180,000
					2000	NOCM00128	160,000	-	160,000
					2001	NOCM0170	100,000	-	100,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Stave Val SES	Stave R	Fall	2002	NOCM02141	76,000	-	76,000
					2003	NOCM0331	100,000	-	100,000
						NOCM0332	80,000	-	80,000
					2004	NOCM0425	120,000	-	120,000
						NOCM0426	75,000	-	75,000
					2005	NOCM0577	80,000	-	80,000
						NOCM0578	80,000	-	80,000
					2006	NOCM0630	75,000	-	75,000
						NOCM0631	92,000	-	92,000
					2007	NOCM07135	40,000	-	40,000
					2008	NOCM0891	30,000	-	30,000
					2009	NOCM0965	46,000	-	46,000
		Surrey Sch	Brunette R	Fall	2012	NOCM12126	54	-	54
					2015	NOCM15113	52	-	52
					2018	NOCM18124	37	-	37
			Chehalis R	Fall	2014	NOCM14134	110	-	110
		Van Aquarium	Alouette R S	Fall	2007	NOCM07100	27,774	-	27,774
					2008	NOCM0859	31,979	-	31,979
					2010	NOCM10104	29,844	-	29,844
		Vancouver Sch	Kanaka Cr	Fall	1990	NOCM9098	3,400	-	3,400
					1991	NOCM91136	3,000	-	3,000
					1992	NOCM92106	2,500	-	2,500
					1993	NOCM9397	2,900	-	2,900
					1994	NOCM9493	1,700	-	1,700
					1995	NOCM95121	1,800	-	1,800
					1996	NOCM96132	1,700	-	1,700
					1997	NOCM97124	1,600	-	1,600
					1998	NOCM9821	725	-	725
					1999	NOCM99139	810	-	810
					2000	NOCM00140	1,125	-	1,125

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Vancouver Sch	Kanaka Cr	Fall	2001	NOCM0191	1,191	-	1,191
					2002	NOCM02152	990	-	990
					2003	NOCM03139	590	-	590
						NOCM03140	200	-	200
					2004	NOCM0480	809	-	809
					2005	NOCM05154	871	-	871
					2006	NOCM0677	1,388	-	1,388
					2007	NOCM07152	1,360	-	1,360
					2008	NOCM0860	1,623	-	1,623
					2010	NOCM10106	1,561	-	1,561
					2011	NOCM1182	1,576	-	1,576
					2012	NOCM1282	1,371	-	1,371
					2013	NOCM1327	1,577	-	1,577
					2014	NOCM14135	1,338	-	1,338
					2016	NOCM1654	2,099	-	2,099
					2017	NOCM1791	1,988	-	1,988
					2018	NOCM18123	1,942	-	1,942
		Weaver Sp Ch	Weaver Sp Ch	Fall	1965	NOCM6501	982,000	-	982,000
					1966	NOCM6601	227,000	-	227,000
					1967	NOCM6701	471,000	-	471,000
					1968	NOCM6801	2,703,000	-	2,703,000
					1969	NOCM6901	3,230,000	-	3,230,000
					1970	NOCM7002	1,240,000	-	1,240,000
					1971	NOCM7102	1,758,000	-	1,758,000
					1972	NOCM7203	12,507,000	-	12,507,000
					1973	NOCM7302	4,294,000	-	4,294,000
					1974	NOCM7402	6,182,000	-	6,182,000
					1975	NOCM7502	6,239,000	-	6,239,000
					1976	NOCM7604	5,862,000	-	5,862,000
					1977	NOCM7708	1,649,000	-	1,649,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Weaver Sp Ch	Weaver Sp Ch	Fall	1978	NOCM7811	2,390,000	-	2,390,000
					1979	NOCM7931	3,060,000	-	3,060,000
					1980	NOCM8043	1,872,000	-	1,872,000
					1981	NOCM8156	2,810,000	-	2,810,000
					1982	NOCM8281	3,670,000	-	3,670,000
					1983	NOCM8383	4,430,000	-	4,430,000
					1984	NOCM84101	1,684,893	-	1,684,893
					1985	NOCM85129	1,978,135	-	1,978,135
					1986	NOCM86125	234,765	-	234,765
					1987	NOCM87124	774,942	-	774,942
					1988	NOCM88150	579,715	-	579,715
					1989	NOCM8931	931,467	-	931,467
					1990	NOCM9024	1,971,547	-	1,971,547
					1991	NOCM9125	364,458	-	364,458
					1992	NOCM92151	1,394,386	-	1,394,386
					1993	NOCM9366	2,669,594	-	2,669,594
					1994	NOCM9456	2,743,046	-	2,743,046
					1995	NOCM95137	2,501,500	-	2,501,500
					1996	NOCM96126	1,852,603	-	1,852,603
					1997	NOCM97145	3,308,542	-	3,308,542
					1998	NOCM98187	3,227,000	-	3,227,000
					1999	NOCM99160	3,224,000	-	3,224,000
					2000	NOCM00150	2,500,917	-	2,500,917
					2001	NOCM0104	1,484,980	-	1,484,980
					2002	NOCM0291	1,910,384	-	1,910,384
					2003	NOCM0348	1,658,827	-	1,658,827
					2004	NOCM04129	1,557,606	-	1,557,606
					2005	NOCM05182	1,743,583	-	1,743,583
					2006	NOCM0685	3,392,490	-	3,392,490
					2007	NOCM0717	3,435,397	-	3,435,397

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	Weaver Sp Ch	Weaver Sp Ch	Fall	2008	NOCM0862	3,808,013	-	3,808,013
					2009	NOCM0929	3,225,677	-	3,225,677
					2010	NOCM10118	2,446,000	-	2,446,000
					2011	NOCM1181	2,060,000	-	2,060,000
					2012	NOCM12130	2,329,000	-	2,329,000
					2013	NOCM1378	3,150,000	-	3,150,000
					2014	NOCM14116	2,580,000	-	2,580,000
					2015	NOCM1501	2,320,000	-	2,320,000
					2016	NOCM1633	1,180,000	-	1,180,000
					2017	NOCM17147	4,960,000	-	4,960,000
					2018	NOCM1810	1,270,000	-	1,270,000
		West Sl	Inch Cr	Fall	1985	NOCM8599	45,000	-	45,000
					1986	NOCM8665	45,000	-	45,000
					1987	NOCM8782	49,000	-	49,000
						NOCM8783	60,000	-	60,000
					1988	NOCM8857	40,000	-	40,000
						NOCM8858	90,000	-	90,000
					1990	NOCM9084	37,500	-	37,500
						NOCM9085	100,000	-	100,000
					1991	NOCM91122	75,000	-	75,000
						NOCM9155	50,000	-	50,000
					1992	NOCM92147	71,000	-	71,000
						NOCM9297	55,000	-	55,000
						NOCM9298	12,000	-	12,000
					1993	NOCM9399	100,000	-	100,000
					1994	NOCM9497	127,000	-	127,000
					1995	NOCM95110	125,000	-	125,000
					1996	NOCM9684	150,000	-	150,000
					1997	NOCM9790	150,000	-	150,000
					2000	NOCM00114	150,000	-	150,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
LWFR	LOWER FRASER	West Sl	Inch Cr	Fall	2001	NOCM01111	150,000	-	150,000
					2002	NOCM02165	40,000	-	40,000
						NOCM02166	120,000	-	120,000
					2004	NOCM04135	50,000	-	50,000
					2005	NOCM05186	29,055	-	29,055
					2008	NOCM08102	28,000	-	28,000
			Stave R	Fall	1989	NOCM8989	50,000	-	50,000
		Yorkson Cr	Inch Cr	Fall	1988	NOCM8860	26,000	-	26,000
					1991	NOCM9156	25,000	-	25,000
					2002	NOCM02167	40,000	-	40,000
					2003	NOCM03125	50,000	-	50,000
					2004	NOCM04136	50,000	-	50,000
					2005	NOCM05187	50,000	-	50,000
					2006	NOCM0660	51,000	-	51,000
					2008	NOCM08103	28,000	-	28,000
			Stave R	Fall	1989	NOCM8992	45,000	-	45,000
	(blank)	Chehalis Band	Deadmans Cr	Fall	1982	NOCM8240	13	-	13
		Stave Val SES	Chester Cr	Fall	1997	NOCM97133	12,500	-	12,500
					1998	NOCM98131	20,000	-	20,000
					1999	NOCM99149	27,500	-	27,500
					2001	NOCM0168	7,000	-	7,000
			Rae Cr	Fall	1996	NOCM9635	8,000	-	8,000
NWVI	NORTHWEST VANCOUVER ISLAND	Holberg In	Goodspeed R	Fall	1985	NOCM8587	40,000	-	40,000
					1986	NOCM8655	26,000	-	26,000
					1987	NOCM8747	102,817	-	102,817
					1988	NOCM88106	64,000	-	64,000
					1989	NOCM8958	77,000	-	77,000
					1990	NOCM9060	40,000	-	40,000
					1991	NOCM9149	72,535	-	72,535
					1992	NOCM92115	60,218	-	60,218

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	NORTHWEST VANCOUVER ISLAND	Holberg In	Goodspeed R	Fall	1993	NOCM9380	34,353	-	34,353
					1994	NOCM94109	141,897	-	141,897
					1995	NOCM9512	42,874	-	42,874
					1996	NOCM9696	65,438	-	65,438
					1997	NOCM9759	20,584	-	20,584
					1998	NOCM9838	39,451	-	39,451
					1999	NOCM99182	40,232	-	40,232
					2000	NOCM0091	3,274	-	3,274
					2001	NOCM0138	28,853	-	28,853
					2002	NOCM02169	39,095	-	39,095
					2003	NOCM0345	30,000	-	30,000
					2004	NOCM0440	14,484	-	14,484
					2005	NOCM05178	22,840	-	22,840
					2008	NOCM08128	18,207	-	18,207
					2009	NOCM09109	5,932	-	5,932
					2014	NOCM1417	3,659	-	3,659
					2015	NOCM1586	21,700	-	21,700
					2016	NOCM1693	15,680	-	15,680
					2017	NOCM17122	38,577	-	38,577
					2018	NOCM18129	62,544	-	62,544
		Monkey Cr	Monkey Cr	Fall	1985	NOCM8588	27,000	-	27,000
					1986	NOCM8656	35,000	-	35,000
					1987	NOCM8757	16,000	-	16,000
		Nequiltpaalis Cr	Marble R	Fall	1981	NOCM8136	39,000	-	39,000
					1982	NOCM8259	14,500	-	14,500
					1983	NOCM8352	3,500	-	3,500
			Nequiltpaalis Cr	Fall	1985	NOCM8589	6,000	-	6,000
						NOCM8590	15,500	-	15,500
		P Hardy/Marble	Marble R	Fall	1982	NOCM8250	2,837	-	2,837
		P Hardy/Stephens	Stephens Cr	Fall	1983	NOCM8332	303,000	-	303,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	NORTHWEST VANCOUVER ISLAND	P Hardy/Stephens	Stephens Cr	Fall	1983	NOCM8333	80,000	-	80,000
					1984	NOCM8436	400,000	-	400,000
						NOCM8437	158,886	-	158,886
					1985	NOCM8541	1,003,000	-	1,003,000
						NOCM8542	314,700	-	314,700
					1986	NOCM8685	588,400	-	588,400
						NOCM8686	12,600	-	12,600
					1987	NOCM8732	97,867	-	97,867
					1988	NOCM8883	85,000	-	85,000
					1989	NOCM8964	33,889	-	33,889
						NOCM8974	50,000	-	50,000
					1993	NOCM9353	135,853	-	135,853
					1995	NOCM9507	58,445	-	58,445
			Wanokana Cr	Fall	1984	NOCM8439	10,900	-	10,900
			Washlawlis R	Fall	1993	NOCM9355	8,017	-	8,017
					1994	NOCM9406	30,160	-	30,160
						NOCM9407	33,560	-	33,560
			Waukwaas Cr	Fall	1983	NOCM8334	55,674	-	55,674
					1984	NOCM8438	20,100	-	20,100
					1985	NOCM8543	258,900	-	258,900
					1986	NOCM8687	280,128	-	280,128
					1987	NOCM8733	140,000	-	140,000
					1988	NOCM8884	17,336	-	17,336
					1989	NOCM8948	208,145	-	208,145
					1993	NOCM9354	126,761	-	126,761
					1998	NOCM9824	68,988	-	68,988
		Quatsino Band	Stephens Cr	Fall	1991	NOCM91127	160,000	-	160,000
					1993	NOCM9302	30,000	-	30,000
		Quatsino Cr	Kwokwesta Cr	Fall	1986	NOCM8653	18,000	-	18,000
			Marble R	Fall	1982	NOCM8258	4,000	-	4,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	NORTHWEST VANCOUVER ISLAND	Quatsino Cr	Marble R	Fall	1983	NOCM8366	500	-	500
			Stephens Cr	Fall	1987	NOCM8766	14,000	-	14,000
					1988	NOCM8853	10,390	-	10,390
		Vanc Is North Sch	Stephens Cr	Fall	1984	NOCM8482	150	-	150
					1985	NOCM85107	89	-	89
					1986	NOCM8674	87	-	87
					1988	NOCM8869	90	-	90
					1989	NOCM89106	90	-	90
					1990	NOCM90140	90	-	90
					1991	NOCM9152	90	-	90
					1992	NOCM92118	80	-	80
					1993	NOCM93101	80	-	80
					1995	NOCM95139	80	-	80
					1996	NOCM96143	80	-	80
	SOUTHWEST VANCOUVER ISLAND	Conuma R	Canton Cr	Fall	1979	NOCM7905	16,576	-	16,576
					1980	NOCM8004	318,509	-	318,509
					1981	022206	314,610	102,990	417,600
					1982	NOCM8212	1,334,400	-	1,334,400
					1983	NOCM8311	876,000	-	876,000
					1984	NOCM8408	1,052,000	-	1,052,000
					1985	NOCM8503	2,787,197	-	2,787,197
					1986	NOCM8603	1,773,264	-	1,773,264
					1987	NOCM8701	49,480	-	49,480
					1988	NOCM8803	638,619	-	638,619
					1989	NOCM8904	960,609	-	960,609
					1990	NOCM9003	169,014	-	169,014
					1991	NOCM9103	523,390	-	523,390
					1992	NOCM9207	1,302,034	-	1,302,034
					1993	NOCM9311	1,473,443	-	1,473,443
					1994	NOCM9435	1,348,933	-	1,348,933

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Canton Cr	Fall	1995	NOCM9518	692,443	-	692,443
					1996	NOCM9623	531,275	-	531,275
					1997	NOCM97100	1,482,895	-	1,482,895
					1998	NOCM9873	1,340,117	-	1,340,117
					1999	NOCM99154	1,071,147	-	1,071,147
					2000	NOCM00117	1,009,746	-	1,009,746
					2001	NOCM0132	1,070,539	-	1,070,539
					2002	NOCM02210	892,140	-	892,140
					2003	NOCM0342	484,570	-	484,570
					2004	NOCM0447	679,554	-	679,554
					2005	NOCM0557	434,449	-	434,449
					2006	NOCM0636	133,731	-	133,731
					2007	NOCM0736	47,846	-	47,846
					2008	NOCM0830	418,655	-	418,655
					2009	NOCM0908	854,548	-	854,548
					2010	NOCM1019	646,203	-	646,203
					2011	NOCM11114	365,682	-	365,682
					2012	NOCM1238	116,757	-	116,757
					2013	NOCM1320	1,009,478	-	1,009,478
					2014	NOCM14119	200,646	-	200,646
					2015	NOCM1511	576,649	-	576,649
					2016	NOCM1609	835,191	-	835,191
					2018	NOCM1803	511,748	-	511,748
			Conuma R	Fall	1978	LV7803	707,893	105,207	813,100
					1979	LV7902	399,280	82,319	481,599
					1980	021763		10,646	10,646
						NOCM8002	1,340,647	-	1,340,647
						NOCM8003	2,118,679	-	2,118,679
					1981	NOCM8106	1,578,000	-	1,578,000
						NOCM8107	2,503,000	-	2,503,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Conuma R	Fall	1982	022258	3,489,017	75,983	3,565,000
						NOCM8211	1,649,000	-	1,649,000
					1983	NOCM8310	4,546,000	-	4,546,000
					1984	023215	67,418	26,079	93,497
						082315		16,233	16,233
						082316		14,522	14,522
						082317		14,303	14,303
						082318		15,303	15,303
						082319		16,036	16,036
						082320		15,282	15,282
						082321		16,802	16,802
						082322		15,464	15,464
						082323		15,468	15,468
						082324		17,230	17,230
						082325		14,589	14,589
						082326		15,320	15,320
						082327		15,559	15,559
						082328		15,663	15,663
						082329		15,788	15,788
						082330		16,343	16,343
						082331		14,272	14,272
						082332		15,954	15,954
						082333		15,054	15,054
						082334		15,013	15,013
						082335		15,728	15,728
						082336		15,776	15,776
						082337		16,165	16,165
						082338		15,446	15,446
						082340		13,793	13,793
						082341		13,909	13,909

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Conuma R	Fall	1984	082342		14,035	14,035
						082346		15,814	15,814
						082347		16,028	16,028
						082348		15,953	15,953
						082403		4,028	4,028
						082404		4,341	4,341
						082405		5,482	5,482
						ADLV8401	1,927,230	53,200	1,980,430
						LV8402	1,847,569	51,001	1,898,570
						NOCM8404	380,000	-	380,000
						NOCM8405	100,000	-	100,000
						NOCM8406	1,669,000	-	1,669,000
						NOCM8421	80,000	-	80,000
						NOCM8422	100,000	-	100,000
						RV8402	75,355	29,149	104,504
					1985	ADRV8501	4,189,290	81,710	4,271,000
						LV8505	2,951,029	81,972	3,033,001
					1986	LV8602	3,513,333	102,321	3,615,654
						RV8603	1,704,478	98,115	1,802,593
					1987	LV8703	5,047,862	81,201	5,129,063
					1988	LV8805	3,331,823	77,993	3,409,816
						NOCM8804	2,298,678	-	2,298,678
					1989	ADLV8901	195,686	104,314	300,000
						ADRV8902		53,149	53,149
						NOCM8902	2,133,343	-	2,133,343
						RV8908	3,788,235	53,591	3,841,826
					1990	021544		55,914	55,914
						ADLV9001	5,799,086	52,449	5,851,535
						ADRV9002	888,825	103,917	992,742
					1991	ADLV9101	1,445,827	108,532	1,554,359

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Conuma R	Fall	1991	RV9102	4,554,059	108,440	4,662,499
					1992	ADLV9201	1,891,858	113,636	2,005,494
						RV9203	3,874,453	81,358	3,955,811
					1993	ADLV9301	3,148,504	104,933	3,253,437
						RV9305	2,054,722	83,002	2,137,724
					1994	ADLV9406	1,983,286	103,261	2,086,547
						NOCM9432	1,195,459	-	1,195,459
						NOCM9433	3,059,662	-	3,059,662
						NOCM9434	268,580	-	268,580
					1995	ADLV9501	1,877,816	103,952	1,981,768
					1996	ADLV9602	714,396	21,241	735,637
						ADLV9603	2,901,761	77,260	2,979,021
					1997	ADLV9702	4,003,669	80,700	4,084,369
						ADLV9703	960,420	21,302	981,722
					1998	ADLV9801	3,603,624	82,427	3,686,051
						ADLV9802	1,082,800	22,267	1,105,067
					1999	ADLV9902	1,289,257	80,528	1,369,785
						ADLV9903	498,718	27,246	525,964
					2000	ADLV0001	1,218,853	77,801	1,296,654
						ADLV0002	436,682	24,825	461,507
						NOCM00119	82,004	-	82,004
					2001	ADLV0102	1,571,311	77,979	1,649,290
						ADLV0103	541,020	28,098	569,118
					2002	NOCM02211	1,792,758	-	1,792,758
					2003	NOCM0357	1,585,534	-	1,585,534
					2004	NOCM0448	1,882,230	-	1,882,230
					2005	NOCM0549	914,381	-	914,381
					2006	NOCM0639	1,455,119	-	1,455,119
					2007	NOCM0701	271,820	-	271,820
					2008	NOCM0829	1,011,562	-	1,011,562

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Conuma R	Fall	2009	NOCM0909	5,962	-	5,962
						NOCM0910	18,847	-	18,847
						NOCM0911	1,814,475	-	1,814,475
					2010	NOCM1015	1,800	-	1,800
						NOCM1016	1,794,205	-	1,794,205
					2011	NOCM1129	1,270,286	-	1,270,286
					2012	NOCM1235	785,682	-	785,682
					2013	NOCM1316	1,705,633	-	1,705,633
					2014	NOCM14120	1,465,538	-	1,465,538
						NOCM14121	410,214	-	410,214
						NOCM14122	436,800	-	436,800
					2015	NOCM1508	723,867	-	723,867
						NOCM1509	534,334	-	534,334
					2016	NOCM1607	424,032	-	424,032
						NOCM1678	1,932,540	-	1,932,540
					2017	NOCM1726	1,624,825	-	1,624,825
						NOCM1727	203,990	-	203,990
						NOCM1728	471,129	-	471,129
						NOCM1729	213,343	-	213,343
					2018	NOCM1804	610,249	-	610,249
						NOCM1805	563,431	-	563,431
						NOCM1806	1,679,255	-	1,679,255
			Deserted R/NWVI	Fall	1979	RV7902	1,319,603	140,167	1,459,770
					1980	RV8005	1,842,006	111,373	1,953,379
					1981	NOCM8105	3,782,200	-	3,782,200
					1982	NOCM8213	4,916,500	-	4,916,500
					1983	ADLV8303	4,343,671	54,329	4,398,000
						ADRV8304	1,664,620	51,380	1,716,000
					1984	NOCM8409	4,740,000	-	4,740,000
						NOCM8410	248,000	-	248,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Deserted R/NWVI	Fall	1985	NOCM8504	3,500,944	-	3,500,944
						NOCM8505	107,500	-	107,500
						NOCM8507	55,600	-	55,600
					1986	NOCM8604	1,999,782	-	1,999,782
					1987	NOCM8702	3,054,578	-	3,054,578
					1988	025907	4,959,880	103,577	5,063,457
					1989	025647	3,910,922	107,162	4,018,084
						NOCM8903	990,000	-	990,000
					1990	NOCM9004	1,365,048	-	1,365,048
					1991	NOCM9104	3,043,149	-	3,043,149
					1992	NOCM9208	3,128,365	-	3,128,365
					1993	NOCM9313	770,056	-	770,056
					1994	NOCM9436	1,695,163	-	1,695,163
					1995	NOCM9519	322,586	-	322,586
					1996	NOCM9624	37,225	-	37,225
					1997	RV9704	16,003	78,686	94,689
					1998	RV9805	1,977,865	80,344	2,058,209
					1999	RV9904	1,742,873	79,603	1,822,476
					2000	RV0003	191,182	78,102	269,284
					2001	NOCM0131	272,395	-	272,395
					2002	NOCM02212	341,635	-	341,635
					2003	NOCM0349	798,330	-	798,330
			Sucwoa R	Fall	1978	RV7801		37,800	37,800
					1979	ADLV7901	485,442	81,756	567,198
						ADRV7901		81,354	81,354
					1980	ADLV8003		109,565	109,565
						LV8005	2,339,657	99,567	2,439,224
						NOCM8001	435,017	-	435,017
					1981	022255	478,582	35,018	513,600
						022256	1,967,287	29,713	1,997,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Sucwoa R	Fall	1981	LV8106	992,355	32,645	1,025,000
						RV8106	496,312	35,588	531,900
					1982	ADLV8205	1,380,332	50,668	1,431,000
						ADRV8203	1,698,602	48,398	1,747,000
						RV8206	1,552,033	49,967	1,602,000
					1983	LV8307	2,677,991	79,009	2,757,000
						RV8305	1,642,392	81,608	1,724,000
					1984	023251	1,348,915	51,085	1,400,000
						023252	3,521,042	51,958	3,573,000
					1985	RV8502	3,491,013	114,909	3,605,922
					1986	ADRV8603	3,775,827	101,036	3,876,863
					1987	RV8702	570,419	79,594	650,013
					1988	RV8804	421,086	85,213	506,299
					1989	LV8901	248,661	75,759	324,420
					1990	LV9003	2,433,324	69,192	2,502,516
						LV9004	269,979	7,727	277,706
					1991	LV9102	2,618,329	79,829	2,698,158
					1992	LV9201	1,607,526	78,143	1,685,669
					1993	LV9306	1,806,073	77,938	1,884,011
					1994	LV9408	3,039,426	75,083	3,114,509
					1995	LV9503	840,135	74,297	914,432
					1996	LV9601	1,332,111	79,073	1,411,184
					1997	LV9705	2,001,294	74,789	2,076,083
					1998	LV9805	1,920,487	78,139	1,998,626
						NOCM9874	300,000	-	300,000
					1999	LV9904	1,806,710	77,012	1,883,722
					2000	LV0003	62,690	76,400	139,090
					2001	LV0103	124,287	76,516	200,803
					2002	NOCM02213	445,007	-	445,007
					2003	NOCM0341	410,872	-	410,872

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Sucwoa R	Fall	2004	NOCM0449	1,023,658	-	1,023,658
					2005	NOCM0551	256,296	-	256,296
					2006	NOCM0637	181,333	-	181,333
					2007	NOCM0735	15,701	-	15,701
					2008	NOCM0828	292,430	-	292,430
					2009	NOCM0912	551,365	-	551,365
					2010	NOCM1018	311,828	-	311,828
					2011	NOCM11115	223,882	-	223,882
					2012	NOCM1237	41,196	-	41,196
					2013	NOCM1319	269,435	-	269,435
			Tlupana R	Fall	1979	022062	617	9,756	10,373
					1980	021833	233,447	94,698	328,145
					1981	ADRV8102	274,209	101,291	375,500
					1982	LV8206	2,464,425	86,075	2,550,500
					1983	NOCM8309	2,947,000	-	2,947,000
					1984	NOCM8407	1,562,000	-	1,562,000
					1985	NOCM8506	2,452,195	-	2,452,195
					1986	NOCM8602	1,998,932	-	1,998,932
					1987	024331	186,682	48,893	235,575
						024817	1,563,716	52,183	1,615,899
					1988	NOCM8802	584,713	-	584,713
					1989	NOCM8905	1,641,798	-	1,641,798
					1990	NOCM9002	1,132,343	-	1,132,343
					1991	NOCM9102	1,085,612	-	1,085,612
					1992	NOCM9206	1,325,617	-	1,325,617
					1993	NOCM9310	1,170,484	-	1,170,484
					1994	RV9407	1,687,290	76,101	1,763,391
					1995	RV9502	143,479	75,061	218,540
					1996	RV9602	1,572,720	73,651	1,646,371
					1997	NOCM9799	1,296,403	-	1,296,403

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	Tluspana R	Fall	1998	NOCM9872	1,234,402	-	1,234,402
					1999	NOCM99153	1,103,714	-	1,103,714
					2000	NOCM00118	998,400	-	998,400
					2001	RV0102	314,042	76,712	390,754
					2002	NOCM02214	1,038,542	-	1,038,542
					2003	NOCM03124	425,261	-	425,261
					2004	NOCM0450	932,556	-	932,556
					2005	NOCM0550	744,834	-	744,834
					2006	NOCM0638	1,139,028	-	1,139,028
					2007	NOCM0734	109,922	-	109,922
					2008	NOCM0827	254,905	-	254,905
					2009	NOCM0913	685,465	-	685,465
					2010	NOCM1017	1,015,355	-	1,015,355
					2011	NOCM1130	37,241	-	37,241
					2012	NOCM1236	813,957	-	813,957
					2013	NOCM1317	37,642	-	37,642
						NOCM1318	782,970	-	782,970
					2014	NOCM14123	885,461	-	885,461
					2015	NOCM1510	452,375	-	452,375
					2016	NOCM1608	1,027,846	-	1,027,846
					2017	NOCM1730	580,356	-	580,356
					2018	NOCM1807	1,120,443	-	1,120,443
		Kyuquot	McKay Cv Cr	Fall	1985	NOCM8556	17,000	-	17,000
		Vanc Is West (Gold R) Sch	Conuma R	Fall	1996	NOCM96142	80	-	80
		Vanc Is West (Zeball) Sch	Zeballos R	Fall	2012	NOCM1233	65	-	65
		Zeballos R	Zeballos R	Fall	2012	NOCM1232	1,250	-	1,250
					2013	NOCM1328	4,000	-	4,000
					2014	NOCM14114	4,000	-	4,000
					2015	NOCM1561	13,730	-	13,730

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
NWVI	SOUTHWEST VANCOUVER ISLAND	Zeballos R	Zeballos R	Fall	2016	NOCM16133	14,320	-	14,320
NWVI	(blank)	Kyuquot Sch	Chamin Bay Cr	Fall	2003	NOCM0334	2,500	-	2,500
					2004	NOCM04115	3,000	-	3,000
		Quatsino Cr	Quatsino Cr	Fall	1984	NOCM8471	3,500	-	3,500
					1985	NOCM8585	10,000	-	10,000
SWVI	GEORGIA STRAIT	Lester Pearson	Ayum Cr	Fall	1987	NOCM8754	11,026	-	11,026
			Sooke R	Fall	1985	NOCM85103	3,000	-	3,000
					1986	NOCM8669	1,240	-	1,240
		Sooke R	Sooke R	Fall	1977	NOCM7707	123,000	-	123,000
		T-sou-ke Nation	Sooke R	Fall	1993	NOCM9350	66,500	-	66,500
	SOUTHWEST VANCOUVER ISLAND	Ahousat	Atleo R	Fall	1981	NOCM8133	98	-	98
					1982	NOCM8255	19,000	-	19,000
					1983	NOCM8363	5,600	-	5,600
					1984	NOCM8467	10,000	-	10,000
					1985	NOCM8579	48,500	-	48,500
					1986	NOCM8649	48,000	-	48,000
		Alberni Enh Soc	Kitsuksis Cr	Fall	2015	NOCM1535	20,903	-	20,903
					2018	NOCM1822	30,000	-	30,000
						NOCM1823	10,000	-	10,000
			Rogers Cr	Fall	2015	NOCM1536	21,807	-	21,807
		Cowichan Valley Sch	Nitinat R	Fall	1995	NOCM95129	200	-	200
		Huu-ay-aht	Sarita R	Fall	2001	NOCM0137	12,000	-	12,000
			Sugsaw Cr	Fall	1996	NOCM96175	8,000	-	8,000
					1997	NOCM97189	68,000	-	68,000
					1998	NOCM98199	131,000	-	131,000
					1999	NOCM99121	70,000	-	70,000
						NOCM99122	70,000	-	70,000
					2000	LV0007		13,000	13,000
					2001	LV0106	107,000	31,000	138,000
						NOCM0136	37,000	-	37,000

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Huu-ay-aht	Sugsaw Cr	Fall	2002	LV0205	79,000	11,000	90,000
					2002	NOCM02114	30,000	-	30,000
					2003	LV0304	151,900	20,600	172,500
					2004	AD04112		19,200	19,200
					2005	LV0502	34,000	22,000	56,000
						NOCM0502	40,000	-	40,000
					2006	AD0695		8,000	8,000
					2007	NOCM07180	61,000	-	61,000
					2008	AD0859	16,000	13,000	29,000
					2009	NOCM0937	130,000	-	130,000
					2010	NOCM10120	15,000	-	15,000
					2011	NOCM1115	110,000	-	110,000
					2012	NOCM12114	105,000	-	105,000
					2013	NOCM1326	140,000	-	140,000
					2015	NOCM1539	45,000	-	45,000
					2017	NOCM17142	23,205	-	23,205
		Lester Pearson	Nitinat R	Fall	1989	NOCM8990	1,000	-	1,000
					1990	NOCM9088	14,000	-	14,000
					1991	NOCM9167	14,200	-	14,200
					1992	NOCM92136	18,500	-	18,500
					1993	NOCM9362	650	-	650
					1994	NOCM94128	16,000	-	16,000
					1995	NOCM95128	3,500	-	3,500
					1996	NOCM96153	17,500	-	17,500
					1997	NOCM97157	13,000	-	13,000
		Nitinat R	Nitinat R	Fall	1980	LV8003	1,479,410	80,437	1,559,847
						RV8003	701,120	78,901	780,021
					1981	ADLV8102	2,228,345	76,491	2,304,836
						ADRV8101	6,766,893	72,991	6,839,884
						LV8103	6,747,461	73,117	6,820,578

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	1981	NOCM8102	4,506,088	-	4,506,088
						RV8103	6,632,358	74,788	6,707,146
					1982	LV8204	892,156	90,720	982,876
						NOCM8205	771,616	-	771,616
						NOCM8206	1,965,804	-	1,965,804
						NOCM8207	2,749,641	-	2,749,641
						RV8204	1,869,203	92,998	1,962,201
					1983	ADLV8304	12,302,531	102,043	12,404,574
						LV8315	3,000,483	107,131	3,107,614
						RV8307	1,682,472	89,326	1,771,798
					1984	ADLV8404	8,200,591	76,787	8,277,378
						LV8405	8,140,084	103,652	8,243,736
						RV8405	9,624,505	81,106	9,705,611
					1985	ADLV8504	2,565,696	50,881	2,616,577
						LV8512	7,406,561	75,708	7,482,269
						RV8514	7,412,906	76,078	7,488,984
					1986	ADLV8605	4,079,517	50,562	4,130,079
						ADRV8605	3,523,461	101,098	3,624,559
						LV8604	3,993,954	51,507	4,045,461
						NOCM8608	1,220,667	-	1,220,667
						RV8606	3,449,882	106,032	3,555,914
					1987	025333	1,077,436	26,443	1,103,879
						025334	1,106,957	27,164	1,134,121
						ADRV8703	1,979,077	51,445	2,030,522
						LV8705	2,860,348	100,912	2,961,260
						NOCM8707	1,802,289	-	1,802,289
						NOCM8708	225,000	-	225,000
						RV8703	2,815,580	99,949	2,915,529
					1988	025642	3,699,239	78,828	3,778,067
						ADLV8803	2,272,407	51,388	2,323,795

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	1988	ADRV8803	3,798,205	76,910	3,875,115
						LV8807	3,314,757	75,584	3,390,341
						RV8806	3,199,843	101,547	3,301,390
					1989	020628	1,717,203	27,211	1,744,414
						020629	1,587,475	25,150	1,612,625
						025902		94,532	94,532
						ADLV8903		91,804	91,804
						ADRV8904	4,621,280	103,989	4,725,269
						LV8903	5,253,147	79,502	5,332,649
						NOCM8912	198,301	-	198,301
						NOCM8913	480,966	-	480,966
						NOCM8914	761,275	-	761,275
						NOCM8915	641,753	-	641,753
						NOCM8916	1,635,414	-	1,635,414
						NOCM8917	1,597,635	-	1,597,635
						NOCM8918	190,904	-	190,904
						NOCM8919	1,564,748	-	1,564,748
						RV8902		100,652	100,652
						RV8903	2,915,147	50,980	2,966,127
					1990	021541	3,133,601	53,472	3,187,073
						ADLV9005	8,890,351	100,573	8,990,924
						ADRV9005	3,197,174	52,343	3,249,517
						NOCM9022	414,185	-	414,185
						RV9007	7,486,360	104,190	7,590,550
					1991	ADRV9102	9,083,332	102,631	9,185,963
						LV9104	710,173	69,578	779,751
						NOCM9108	828,413	-	828,413
						NOCM9109	201,887	-	201,887
						NOCM9110	9,334,615	-	9,334,615
						NOCM9111	978,672	-	978,672

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	1991	NOCM9112	266,990	-	266,990
						RV9103	8,877,516	78,526	8,956,042
					1992	025904	6,725,511	105,180	6,830,691
						ADRV9202	6,020,621	104,141	6,124,762
						LV9205	1,429,733	78,910	1,508,643
						NOCM9221	2,368,725	-	2,368,725
						NOCM9222	5,624,529	-	5,624,529
						RV9208	1,669,100	83,810	1,752,910
					1993	ADRV9302	15,213,898	103,768	15,317,666
						LV9303	6,128,243	79,707	6,207,950
						NOCM9322	1,614,011	-	1,614,011
						RV9303	5,141,239	83,028	5,224,267
					1994	ADRV9404	13,471,605	107,797	13,579,402
						LV9409	9,784,240	80,882	9,865,122
						NOCM9437	2,359,830	-	2,359,830
						RV9408	4,943,642	83,084	5,026,726
					1995	ADRV9505	15,964,115	101,272	16,065,387
						LV9509	3,258,407	77,977	3,336,384
						NOCM95141	1,999,646	-	1,999,646
						RV9507	3,170,230	78,278	3,248,508
					1996	ADRV9606	7,793,677	111,134	7,904,811
						LV9604	10,209,175	78,048	10,287,223
						NOCM96100	928,711	-	928,711
						NOCM96101	4,293,872	-	4,293,872
						NOCM9699	4,730,186	-	4,730,186
						RV9607	3,720,152	76,482	3,796,634
					1997	ADRV9704	13,334,717	84,717	13,419,434
						LV9706	6,554,665	89,236	6,643,901
						NOCM97104	1,699,019	-	1,699,019
						NOCM97105	171,897	-	171,897

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	1997	NOCM97106	3,128,817	-	3,128,817
						NOCM97184	3,063,949	-	3,063,949
						RV9707	6,178,764	83,362	6,262,126
					1998	ADLV9803	8,248,614	100,666	8,349,280
						ADRV9802	8,557,977	101,203	8,659,180
						LV9806	8,305,934	77,870	8,383,804
						NOCM98144	1,263,666	-	1,263,666
						RV9806	8,723,288	75,838	8,799,126
					1999	NOCM9985	7,334,461	-	7,334,461
						NOCM9986	639,833	-	639,833
						NOCM9987	7,952,483	-	7,952,483
						NOCM9988	7,794,730	-	7,794,730
					2000	NOCM0085	5,153,902	-	5,153,902
					2001	NOCM0121	1,613,025	-	1,613,025
						NOCM0122	9,255,243	-	9,255,243
						NOCM0123	1,549,821	-	1,549,821
						NOCM0124	13,211,039	-	13,211,039
						NOCM0125	4,627,554	-	4,627,554
					2002	NOCM02189	1,441,361	-	1,441,361
						NOCM02190	3,014,384	-	3,014,384
						NOCM02191	2,645,999	-	2,645,999
						NOCM02192	1,474,141	-	1,474,141
						NOCM02193	11,100,152	-	11,100,152
						NOCM02194	5,997,307	-	5,997,307
					2003	NOCM0365	3,929,479	-	3,929,479
						NOCM0366	972,036	-	972,036
						NOCM0367	914,194	-	914,194
						NOCM0368	7,196,170	-	7,196,170
						NOCM0369	1,544,302	-	1,544,302
						NOCM0370	9,212,578	-	9,212,578

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	2004	NOCM04100	9,818,934	-	9,818,934
						NOCM04101	7,658,883	-	7,658,883
						NOCM04102	1,420,865	-	1,420,865
						NOCM04110	13,178,342	-	13,178,342
						NOCM04111	2,028,449	-	2,028,449
						NOCM04112	1,210,674	-	1,210,674
					2005	NOCM0541	5,928,683	-	5,928,683
						NOCM0542	13,137,336	-	13,137,336
						NOCM0543	16,530,186	-	16,530,186
						NOCM0544	1,128,000	-	1,128,000
						NOCM0545	2,739,742	-	2,739,742
					2006	NOCM0647	9,126,723	-	9,126,723
						NOCM0648	867,515	-	867,515
						NOCM0649	12,632,727	-	12,632,727
						NOCM0650	1,074,270	-	1,074,270
						NOCM0651	1,038,581	-	1,038,581
						NOCM0652	2,585,428	-	2,585,428
						NOCM0653	1,584,127	-	1,584,127
					2007	NOCM0720	5,081,221	-	5,081,221
						NOCM0721	7,922,918	-	7,922,918
					2008	NOCM0825	7,631,058	-	7,631,058
					2009	NOCM0914	1,187,244	-	1,187,244
						NOCM0915	4,065,505	-	4,065,505
					2010	NOCM1042	3,809,006	-	3,809,006
						NOCM1043	10,373,576	-	10,373,576
					2011	NOCM1106	2,687,395	-	2,687,395
						NOCM1107	6,482,726	-	6,482,726
						NOCM1108	16,133,165	-	16,133,165
					2012	NOCM1205	2,623,137	-	2,623,137
						NOCM1206	2,952,078	-	2,952,078

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	Nitinat R	Fall	2012	NOCM1207	5,141,158	-	5,141,158
						NOCM1208	714,772	-	714,772
						NOCM1209	4,381,886	-	4,381,886
					2013	NOCM1308	4,426,086	-	4,426,086
						NOCM1309	5,312,356	-	5,312,356
					2014	NOCM1401	10,720,439	-	10,720,439
						NOCM1402	7,047,082	-	7,047,082
					2015	NOCM1502	7,988,837	-	7,988,837
						NOCM1503	10,247,463	-	10,247,463
					2016	NOCM1613	13,648,692	-	13,648,692
						NOCM1614	12,794,613	-	12,794,613
					2017	NOCM1725	7,894,803	-	7,894,803
					2018	NOCM1808	8,553,682	-	8,553,682
						NOCM1809	7,959,304	-	7,959,304
		San Juan R	Four Mile Cr/SWVI	Fall	1977	NOCM7704	12,000	-	12,000
					1981	NOCM8112	7,820	-	7,820
			Gordon R	Fall	1988	NOCM8875	43,500	-	43,500
			Gordon R+Granite	Fall	1986	NOCM8623	18,300	-	18,300
						NOCM8624	16,000	-	16,000
			Granite Cr	Fall	1979	NOCM7908	2,000	-	2,000
					1980	NOCM8011	4,330	-	4,330
					1982	NOCM8227	2,000	-	2,000
			San Juan R	Fall	1983	NOCM8323	2,700	-	2,700
					1985	NOCM8532	2,430	-	2,430
					1990	NOCM9047	7,810	-	7,810
					1991	NOCM91144	5,000	-	5,000
					1992	NOCM9299	4,500	-	4,500
					1993	NOCM9334	50,000	-	50,000
					1994	NOCM9426	2,800	-	2,800
					1995	NOCM9579	4,400	-	4,400

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	San Juan R	San Juan R	Fall	1996	NOCM9694	7,500	-	7,500
					1997	NOCM97117	16,000	-	16,000
					1998	NOCM9898	1,500	-	1,500
					2001	NOCM0182	3,000	-	3,000
					2002	NOCM02176	5,000	-	5,000
		Thornton Cr	Mercer Cr/SWVI	Fall	2004	NOCM0407	15,247	-	15,247
						NOCM0408	35,582	-	35,582
			Salmon Cr/SWVI	Fall	1992	NOCM92149	9,400	-	9,400
						NOCM9252	80,390	-	80,390
					1993	NOCM9306	90,511	-	90,511
					1994	NOCM9425	114,629	-	114,629
					1995	NOCM9528	5,186	-	5,186
					1996	NOCM9609	30,091	-	30,091
					1997	NOCM9774	200,000	-	200,000
						NOCM9775	60,000	-	60,000
					1998	NOCM98142	111,063	-	111,063
						NOCM98143	505,430	-	505,430
					1999	NOCM9980	120,864	-	120,864
						NOCM9981	102,153	-	102,153
					2000	NOCM00113	47,254	-	47,254
					2001	NOCM0134	380,714	-	380,714
						NOCM0135	226,964	-	226,964
					2002	NOCM02202	536,070	-	536,070
						NOCM02203	100,881	-	100,881
					2003	NOCM0324	181,052	-	181,052
					2004	NOCM0410	511,318	-	511,318
						NOCM0411	96,979	-	96,979
					2005	NOCM0520	515,515	-	515,515
						NOCM0521	86,131	-	86,131
					2006	NOCM0680	98,949	-	98,949

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Thornton Cr	Salmon Cr/SWVI	Fall	2007	NOCM0746	16,689	-	16,689
					2008	NOCM0838	234,173	-	234,173
					2009	NOCM09106	605,219	-	605,219
					2010	NOCM1032	204,936	-	204,936
					2011	NOCM1118	642,888	-	642,888
					2012	NOCM1245	43,742	-	43,742
					2013	NOCM1362	210,880	-	210,880
						NOCM1363	318,861	-	318,861
					2014	NOCM14111	249,030	-	249,030
						NOCM14112	280,783	-	280,783
						NOCM14113	67,982	-	67,982
					2015	NOCM1538	419,749	-	419,749
					2016	NOCM1697	182,552	-	182,552
					2018	NOCM1819	270,221	-	270,221
			Thornton Cr	Fall	1982	H20304	26,524	42,527	69,051
						H20305	46,313	50,190	96,503
						NOCM8233	209,019	-	209,019
					1983	H20306		37,133	37,133
						H20307	35,512	49,589	85,101
					1984	NOCM8435	288,960	-	288,960
					2018	NOCM1820	53,810	-	53,810
			Thornton+Salmon Cr	Fall	1981	ADLV8107	1,200,302	76,568	1,276,870
			Toquart R	Fall	2014	NOCM14110	88,126	-	88,126
					2015	NOCM1540	152,334	-	152,334
					2016	NOCM16129	92,264	-	92,264
					2017	NOCM17144	74,248	-	74,248
					2018	NOCM1818	52,512	-	52,512
			Twin R E	Fall	2004	NOCM0409	59,009	-	59,009
					2005	NOCM0522	54,581	-	54,581
					2006	NOCM0681	10,668	-	10,668

Prod Area	Stock CU	Project	Stock	Run	Brood Year	Release Code	Sum of Unmarked	Sum of Marked	Total Release
SWVI	SOUTHWEST VANCOUVER ISLAND	Thornton Cr Vols	Thornton+Salmon Cr	Fall	1981	NOCM8125	26,000	-	26,000
		Thornton Pilot	Thornton Cr	Fall	1976	LV7602	715,631	98,002	813,633
						RV7601		60,470	60,470
					1977	LV7702	883,957	102,590	986,547
						RV7701	10,017	79,563	89,580
					1978	LV7806	1,242,054	145,038	1,387,092
	(blank)	Hot Springs Cv	Refuge Cr	Fall	1983	NOCM8370	100	-	100
		Sproat Lake ES	Somass R	Fall	2013	NOCM13139	8,312	-	8,312
						NOCM13140	8,313	-	8,313

Table 7 Data Sources Needed for Chum Assessment Using Chum and Pink DBMS

Data Source Name	Stratum	Years
EPAD	Releases by mark Escapement estimates Escapement mark samples	1990-2018
NuSEDs	Infilling escapement estimates	As needed
FOS	Commercial catch, test catch, FN catch	2005 - 2018
PacHarv	Commercial catch, test catch, FN catch	1980 - 2004
Krest	Recreational catch estimates	1990 - 2018
J.O. Thomas files	Catch mark samples	1980-2018

Table 8 Average Proportion Incorrect Clips of Total Clips by Stock and Target Clip

Stock	LV	RV	Ad	ADLV	ADRV	AD Dorsal	Ad Anal	Mean Over All Years	Std Dev Over All Years
Big Qualicum R	6%	6%	4%	4%	5%		3%	5%	4.0%
Chilliwack R	0%	0%		0%				0%	0.2%
Conuma R	2%	4%		5%	3%			4%	2.3%
Deserted R/NWVI		5%		10%	5%			6%	3.6%
Fish Cr+Airport Ch	6%	2%		3%	1%			4%	5.8%
Hirsch Cr	1%	1%		5%	3%			3%	2.2%
Humphreys Cr				10%	7%			9%	1.6%
Kildala R		10%		6%	4%			5%	2.7%
Kildala+Dala				8%	8%			8%	0.4%
Kimsquit R				2%				2%	
Kitasoo Cr	3%	3%		2%				3%	1.5%
Kitimat Low+Hirsch	8%	3%						6%	3.6%
Kitimat R	4%	2%			8%			3%	3.3%
L Qualicum R	6%			4%	4%			5%	2.6%
Mathers Cr	2%	4%						3%	7.1%
Necleetsconnay R		2%		1%	3%			2%	1.1%
Nitinat R	1%	1%		1%	1%			1%	1.1%
Pallant Cr	4%	2%		4%	11%			6%	10.5%
Puntledge R				2%				2%	0.5%
Saloompt R	3%	2%			3%			2%	1.7%
Snootli Cr	2%	4%	2%	6%	5%	3%		5%	3.5%
Sucwoa R	2%	4%		7%	1%			3%	3.0%
Thornton Cr	4%	1%						2%	1.6%
Thorsen Cr/CCST	5%	5%		1%				4%	2.3%
Tlupana R	13%	4%			4%			5%	3.9%

Table 9 Mark Mortality Rates by Stock and Return Year, 1990 - 2018

Stock	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Big Qualicum R	-31.29	18.4	48.98	41.58	62.17	61.28	-7.51	-3.48	30	49.5	53.7	58.07	70.85	70.3	70.39	34.35	66.31	71.71	61.89	50.48	48.91	83.62	80.95	91.34	81.39	-30.42	71.6	-12.12	
Blaney Cr/LWFR	30	30	30																										
Cheakamus R								30	30	30	30																		
Chehalis R	0	30	0	0	15	0	30	30	0	30	30	30	30	30															
Chehalis+ Squakum	0	30	0																										
Chilliwack R	-12.22	30	30	30	0	30	30	15	0	30	30	30	30									30							
Conuma R	30	30	30	30	30	30	30	0	0	30	30	30		30															
Deserted R/NWVI		30	30	30	30	30					30	30		30															
Fish Cr+Airport Ch	30											30	30	30	30	30													
Harrison R	30																												
Hirsch Cr		30	30	30	30	30	30	30	30	30		30	30	30	30														
Inch Cr	30	30	30	30	0	30	30	30	30	30	30	30	30	30	30	30	30												
Kildala R	30	30	30	30	30				30	30	30	30	30																
Kildala+Dala	30	30	30																										
Kimsquit R		30	30	30	30																								
Kitasoo Cr			30	30	30	30	30	30	30	30	30	30	30	30															
Kitimat Low+Hirsch	30	30																											
Kitimat R	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30														
Kumealon Cr																						30	30	30					
Kwakusdis R					30	30	30	30	30	30	30	30																	
L Qualicum R	-16.37	30	30	30	30	0	30	30					30	30	30	30	30	30											
Lang Cr								30	30		30	30																	
Mathers Cr	0	30	30	30	30	30	30	30	30	30	30	30																	
McLoughlin Bay Cr	30	30	30	30	30	30	30			30	30	30	30													30	30		
Necleetsconnay R	30	30	30	30	30																								
Nimpkish R Low			30	30	30	30	30																						
Nitinat R	0	30	30	30	30	30	30	30	30	30	30	0																	
Orford R						30	30	30	30	30																			

Stock	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pallant Cr	15	30	15	30	30	30	30	0	0	30	30	30	30																
Pitt R Up				30	30	30	30	30	30	30	30	30																	
Puntledge R	30	30	30	30	30	30	30	30	30	30	30	30	30																
Saloompt R	30	30	30	30			30	30	30	30					30	30	30	30	30										
Sliammon R	30						30	30	30	30	30	30	30	30	30	30													
Snootli Cr	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Stave R	30	30	30	30	30	30	30	30	30	30	30	30	30																
Sucwoa R	30	30	30	30	30	30	30	30	30	30	30	30		30															
Sugsaw Cr																						30							
Tenderfoot Cr																						30							
Theodosia Cr																30	30	30											
Thorsen Cr/CCST	30	30							30	30	30	30	30	30															
Tlupana R	30	30	30					30	30	30	30	30																	

Table 10 Unmarked Release Groups Associated with Marked Groups by Brood Year and CU

Conservation Unit	Marked Stock	Unmarked Stock	Brood Year
GEORGIA STRAIT	Big Qualicum R	L Qualicum R	1993
			1994
			1995
			1996
			1997
			1998
			2003
			2004
			2005
			2006
			2007
			2008
			2009
			2010
			2011
			2012
			2013
			2014
			2015
LOWER FRASER	Chehalis R	Inch Cr	1989
		Squakum Cr	1985
SOUTHWEST VANCOUVER ISLAND	Conuma R	Canton Cr	1985
			1988
			1989
			1990
			1995
			1996
			1997
			1998
			1999
			2000
		Deserted R/NWVI	1985
			1986
			1987
			1990
			1992
			1993
			2001
		Tlupana R	1985
			1986
			1999
			2000

Conservation Unit	Marked Stock	Unmarked Stock	Brood Year
BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Necleetsconnay R	1985
		Saloompt R	1999
		Snootli Cr	1985
		Thorsen Cr/CCST	1985
DOUGLAS-GARDNER	Hirsch Cr	Bish Cr	1990
			1991
			1992
		Dala R	1990
			1992
		Kildala R	1992
			1993
			1994
			1998
		Kitimat R	1992
DOUGLAS-GARDNER	Kildala R	Bish Cr	1985
			1989
		Dala R	1985
			1987
			1989
		Hirsch Cr	1985
			1995
			1996
			1997
		Humphreys Cr	1985
		Kitimat Low+Hirsch	1987
DOUGLAS-GARDNER	Kildala+Dala	Bish Cr	1986
DOUGLAS-GARDNER	Kitimat R	Bish Cr	1985
			1987
			1988
		Dala R	1985
			1987
			1988
			1991
		Hirsch Cr	1985
			1989
		Humphreys Cr	1985
			1988
			1989
		Kildala R	1990
			1991
		Kitimat Low+Hirsch	1987
EAST HG	Mathers Cr	Pallant Cr	1985
			1986
			1988

Conservation Unit	Marked Stock	Unmarked Stock	Brood Year
			1989
BELLA COOLA RIVER-LATE	Necleetsconnay R	Fish Cr+Airport Ch	1987
		Saloompt R	1987
		Snootli Cr	1987
		Thorsen Cr/CCST	1987
EAST HG	Pallant Cr	Mathers Cr	1990
			1997
BELLA COOLA RIVER-LATE	Saloompt R	Fish Cr+Airport Ch	1986
			1987
			1994
			2001
			2002
			2003
		Necleetsconnay R	1985
		Snootli Cr	1985
			1986
			1987
		Thorsen Cr/CCST	1985
			1987
			1994
			2001
			2002
			2003
BELLA COOLA RIVER-LATE	Snootli Cr	Fish Cr+Airport Ch	1988
			1989
			1990
			1991
			1992
			1993
			1994
			1996
			1997
			2001
			2002
			2003
			2005
			2006
			2007
			2008
			2009
BELLA COOLA RIVER-LATE	Snootli Cr	Fish Cr+Airport Ch	2010
			2011
			2012
			2013

Conservation Unit	Marked Stock	Unmarked Stock	Brood Year
			2014
			2015
BELLA COOLA RIVER-LATE	Snootli Cr	Fish Cr+Airport Ch	2016
		Necleetsconnay R	1990
			1991
		Saloompt R	1988
			1989
			1990
			1991
			1992
			1995
			1998
			2000
			2005
			2006
			2007
			2008
			2009
			2010
			2011
			2012
			2013
			2014
			2015
			2016
		Thorsen Cr/CCST	1988
			1989
			1990
			1991
			1992
			1993
			1994
			1998
			1999
			2000
			2001
			2002
			2003
			2005
			2006
BELLA COOLA RIVER-LATE	Snootli Cr	Thorsen Cr/CCST	2007
			2008
			2009
			2010

Conservation Unit	Marked Stock	Unmarked Stock	Brood Year
			2011
			2012
			2013
BELLA COOLA RIVER-LATE	Snootli Cr	Thorsen Cr/CCST	2014
			2015
			2016
LOWER FRASER	Stave R	Blaney Cr/LWFR	1985
SOUTHWEST VANCOUVER ISLAND	Sucwoa R	Canton Cr	1986
			1987
			1991
			1992
			1993
			2000
		Conuma R	1988
		Deserted R/NWVI	1985
			1991
			1994
			1995
			1996
			2001
		Sucwoa R	1998
		Tlupana R	1988
			1989
			1990
			1991
			1992
			1993
			1997
			1998
GEORGIA STRAIT	Theodosia Cr	Sliammon R	2002
BELLA COOLA RIVER-LATE	Thorsen Cr/CCST	Fish Cr+Airport Ch	1995
		Saloompt R	1996
			1997
SOUTHWEST VANCOUVER ISLAND	Tlupana R	Canton Cr	1994
			2001
		Conuma R	1994

Table 11 Unallocated Clips Observed in Catch by Recovery Year, 1990 - 2016

	Fin Clip						
Recovery Year	**AD**	**ADLV**	**ADRV**	**ADStLV**	**ADStRV**	**LV**	**RV**
1990		3	1			3	8
1992		3	1	1	1	4	
1993						1	
1995		4	14		1	19	
1996			1				
1999			1			2	
2000						12	
2001						188	22
2002						176	129
2003						155	160
2004	1					132	138
2005						41	39
2006	21					15	116
2007	8					126	152
2008	1					60	92
2009	6	3				151	133
2010	12					2	1
2011	4					63	139
2012	233					133	134
2013	14	2	6			104	77
2014	17					1	
2016						1	

Table 12 Unallocated Clips Observed in Escapement by Recovery Year, 1989 - 2018

Unallocated Clips		Recovery Year																														
Stock	Clip	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Grand Total
Big Qualicum R*	AD				4	16		6	6	29	11	5	5	11	9	13	4	8	4			1								3		135
	ADLV						1				1	2															5					9
	ADLVRV							1					1																			2
	ADRV																3						5									8
	LV					3	4	2	1	1	6	2	1	4	4	2	2	2	1		1											36
	LVRV		1																													1
	RV			1	13	33	5	1		2	12			4	4	2	6	1	4		1	1										90
Canton Cr	ADLV		1									0		1																		2
	RV							1																								1
Chehalis R	ADRV			22																												22
Chilliwack R	AD		9		1	5					8																					23
	ADLV		2		1						2																					5
	ADRV		1	1						1	1	1																				5
	LV		10	7		12	20			10	25	4																				88
	LVRV					7	4																									11
Conuma R	AD										8																					8
	ADLV			3					0																							3
	ADRV			1		1			7																							9
	RV							1																								1
Deserted R/NWVI	AD											1																				1
	LVRV				1																											1
Fish Cr+Airport Ch	AD		2			1			1																	13						17
	LV				2																											2
Hirsch Cr	ADRV							4																								4
Inch Cr	LV		1																													1
Kildala R	AD				2																											2
	ADLV					7																										7

Unallocated Clips		Recovery Year																														
Stock	Clip	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Grand Total
	RV					3																										3
Kitasoo Cr	LV							8	13				1				18															40
	RV												1				2															3
Kitimat R	ADRV							2	1																							3
	LV								1																							1
	RV		4				1																									5
L Qualicum R	AD				3	1		8	6	2			1			20		10	5													56
	ADLV	7	1	4	14	2												3	91													123
	ADRV		1		2																											3
	LV						1			3						2																6
	RV				2				1	1																						4
Necleetsconnay R	LV			1																												1
Nitinat R	AD												4	3																		7
	ADLV		2				1					1																				4
	ADRV		3																													3
	LV						18	3	2																							23
	LVRV					1				2	1																					4
Noohalk Cr	AD		1																													1
Pallant Cr	ADLV						2																									2
	LVRV						1																									1
Puntledge R	ADLV									11																						11
	LV				3																											3
Saloompt R	AD		4	2						1																						7
	LV								1																							1
	RV											1																				1
Snootli Cr	AD						1		1		2		8			1																13
	ADLV														27																	27
	ADRV				5	3									21																	29
	LV					2	2																									4

Unallocated Clips		Recovery Year																														
Stock	**Clip**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Grand Total**
Stave R	LV		3																													3
	RV		3																													3
Thorsen Cr/CCST	AD			2																												2
	ADRV					1																										1
Grand Total		7	50	44	53	98	61	37	41	63	77	17	22	23	65	40	35	24	105		2	2	5			13	5			3		893

* Big Qualicum unallocated clips in escapement were allocated to Big Qualicum (for the most part, or Little Qualicum in rare cases) in this report.

Table 13 DNA Analysis of Chum LV Clips Recovered in 2011 Net Fisheries

Species = Chum Number of populations = 94 Baseline Description = Chum south coast Number of loci = 14 Max missing loci = 5 Number of chains = 10 Number of Reps = 20000 Reps Kept = 1000

Fish	Stock 1	Region 1	Prob 1	Stock 2	Region 2	Prob 2	Stock 3	Region 3	Prob 3	Stock 4	Region 4	Prob 4	Stock 5	Region 5	Prob 5
Area12/13 GN+SN	**2011**														
Area12/13Com(11) seine279_1	Tzoonie	35	0.54	Skykomish	45	0.21	Squakum	42	0.10	Big_Qual	38	0.05	Deserted_Ck	35	0.03
Area12/13Com(11) seine279_10	Tzoonie	35	0.36	Big_Qual	38	0.32	Squakum	42	0.11	Shovelnose_Cr	35	0.06	Puntledge	38	0.03
Area12/13Com(11) seine279_11	Squakum	42	0.90	Harrison_L	42	0.04	Blaney_Cr	42	0.01	Silverdale	42	0.01	McIntyre	42	0.01
Area12/13Com(11) seine279_12	Big_Qual	38	0.39	Squakum	42	0.14	Shovelnose_Cr	35	0.11	Squamish	35	0.09	Puntledge	38	0.06
Area12/13Com(11) seine279_13	Big_Qual	38	0.51	Tzoonie	35	0.35	Shovelnose_Cr	35	0.05	Squakum	42	0.03	Skykomish	45	0.02
Area12/13Com(11) seine279_14	Big_Qual	38	0.53	Tzoonie	35	0.18	Squakum	42	0.07	Skykomish	45	0.02	Lang_Creek	35	0.02
Area12/13Com(11) seine279_15	Squakum	42	0.70	Tzoonie	35	0.11	Big_Qual	38	0.10	Alouette_N	42	0.05	Deserted_Ck	35	0.01
Area12/13Com(11) seine279_16	Tzoonie	35	0.46	Big_Qual	38	0.20	Shovelnose_Cr	35	0.14	Squakum	42	0.07	Stawamus	35	0.05
Area12/13Com(11) seine279_17	Big_Qual	38	0.58	Squakum	42	0.13	Shovelnose_Cr	35	0.09	Deserted_Ck	35	0.04	Puntledge	38	0.02
Area12/13Com(11) seine279_18	Squakum	42	0.82	Tzoonie	35	0.09	Big_Qual	38	0.03	Chilqua_Cr	42	0.02	Serpentine	42	0.02
Area12/13Com(11) seine279_19	Squakum	42	0.75	Tzoonie	35	0.10	Big_Qual	38	0.07	Skykomish	45	0.03	Harrison_L	42	0.02
Area12/13Com(11) seine279_2	Squakum	42	0.53	Tzoonie	35	0.27	Big_Qual	38	0.14	Chilqua_Cr	42	0.01	Skykomish	45	0.01
Area12/13Com(11) seine279_20	Squakum	42	0.64	Tzoonie	35	0.21	Big_Qual	38	0.06	Serpentine	42	0.01	Shovelnose_Cr	35	0.01
Area12/13Com(11) seine279_21	Squakum	42	0.51	Big_Qual	38	0.24	Shovelnose_Cr	35	0.13	Tzoonie	35	0.06	Puntledge	38	0.01
Area12/13Com(11) seine279_22	Squakum	42	0.92	Harrison_L	42	0.03	Tzoonie	35	0.02	Chilliwack	42	0.01	Blaney_Cr	42	0.01

Fish	Stock 1	Region 1	Prob 1	Stock 2	Region 2	Prob 2	Stock 3	Region 3	Prob 3	Stock 4	Region 4	Prob 4	Stock 5	Region 5	Prob 5
Area12/13Com(11) seine279_23	Squakum	42	0.53	Big_Qual	38	0.20	Tzoonie	35	0.15	Harrison_L	42	0.01	Serpentine	42	0.01
Area12/13Com(11) seine279_24	Tzoonie	35	0.36	Big_Qual	38	0.28	Squakum	42	0.16	Deserted_Ck	35	0.03	Lang_Creek	35	0.03
Area12/13Com(11) seine279_25	Tzoonie	35	0.51	Big_Qual	38	0.39	Shovelnose_Cr	35	0.09	Skykomish	45	0.00	Alouette_N	42	0.00
Area12/13Com(11) seine279_3	Big_Qual	38	0.56	Tzoonie	35	0.17	Chemainus	38	0.05	Alouette_N	42	0.04	Puntledge	38	0.04
Area12/13Com(11) seine279_4	Squakum	42	0.52	Tzoonie	35	0.19	Big_Qual	38	0.17	Puntledge	38	0.03	Skykomish	45	0.02
Area12/13Com(11) seine279_5	Squakum	42	0.83	Tzoonie	35	0.06	Big_Qual	38	0.05	Chilliwack	42	0.01	Harrison_L	42	0.01
Area12/13Com(11) seine279_6	Squakum	42	0.59	Tzoonie	35	0.17	Shovelnose_Cr	35	0.11	Big_Qual	38	0.07	Alouette_N	42	0.01
Area12/13Com(11) seine279_7	Skykomish	45	0.48	Big_Qual	38	0.18	Quinault	49	0.13	Squakum	42	0.09	Nitinat	39	0.02
Area12/13Com(11) seine279_8	Big_Qual	38	0.41	Tzoonie	35	0.25	Squakum	42	0.16	Shovelnose_Cr	35	0.04	Alouette_N	42	0.04
Area12/13Com(11) seine279_9	Squakum	42	0.85	Tzoonie	35	0.06	Harrison_L	42	0.02	Alouette_N	42	0.01	Big_Qual	38	0.01
Area 14 SN	**2011**														
Area14(11) seine312_127	Big_Qual	38	0.85	Cold_Cr	38	0.03	Skykomish	45	0.02	Wahleach	42	0.02	Tzoonie	35	0.01
Area14(11) seine312_128	Big_Qual	38	0.64	Sweltzer	42	0.11	Hopedale_Cr	42	0.09	Squakum	42	0.03	Alouette	42	0.03
Area14(11) seine312_129	Big_Qual	38	0.72	Deserted_Ck	35	0.23	Tzoonie	35	0.01	Grant_Cr	45	0.01	Skykomish	45	0.01
Area14(11) seine312_130	Big_Qual	38	0.66	Algard	35	0.23	Skykomish	45	0.02	Cold_Cr	38	0.02	Wortley_Cr	35	0.01
Area14(11) seine312_131	Big_Qual	38	0.93	Algard	35	0.03	Cold_Cr	38	0.01	Alouette	42	0.01	Nooksack	45	0.00
Area14(11) seine319_132	Big_Qual	38	0.85	Goodspeed	39	0.06	Cold_Cr	38	0.04	Pegattum_Cr	39	0.01	Siberia_Cr	45	0.01

Fish	Stock 1	Region 1	Prob 1	Stock 2	Region 2	Prob 2	Stock 3	Region 3	Prob 3	Stock 4	Region 4	Prob 4	Stock 5	Region 5	Prob 5
Area14(11) seine319_133	Big_Qual	38	0.75	Deserted_Ck	35	0.15	Skykomish	45	0.05	Cold_Cr	38	0.01	Little_Qua	38	0.01
Area14(11) seine319_134	Big_Qual	38	0.47	Deserted_Ck	35	0.08	Cold_Cr	38	0.08	Tzoonie	35	0.08	Nooksack	45	0.07
Area14(11) seine319_135	Big_Qual	38	0.64	Deserted_Ck	35	0.20	Skykomish	45	0.07	Harrison_L	42	0.01	Squakum	42	0.01
Area14(11) seine319_136	Big_Qual	38	0.95	Deserted_Ck	35	0.01	Kakweiken	34	0.01	Squakum	42	0.01	Serpentine	42	0.00
Area14(11) seine319_137	Big_Qual	38	0.92	Deserted_Ck	35	0.04	Goodspeed	39	0.03	Skykomish	45	0.01	Little_Qua	38	0.01
Area14(11) seine319_138	Big_Qual	38	0.96	Deserted_Ck	35	0.03	Little_Qua	38	0.01	Skykomish	45	0.00	Puntledge	38	0.00
Area14(11) seine319_139	Big_Qual	38	0.84	Algard	35	0.03	Coghlan	42	0.02	Little_Qua	38	0.02	Siberia_Cr	45	0.01
Area14(11) seine319_140	Big_Qual	38	0.95	Little_Qua	38	0.02	Deserted_Ck	35	0.01	Nimpkish	34	0.01	Stawamus	35	0.00
Area14(11) seine319_141	Big_Qual	38	0.93	Deserted_Ck	35	0.05	Little_Qua	38	0.01	Puntledge	38	0.01	Nimpkish	34	0.00
Area14(11) seine319_142	Big_Qual	38	0.97	Deserted_Ck	35	0.00	Nanaimo	38	0.00	Tzoonie	35	0.00	Harrison_L	42	0.00
Area14(11) seine319_143	Big_Qual	38	0.54	Deserted_Ck	35	0.25	Skykomish	45	0.09	Serpentine	42	0.02	Tzoonie	35	0.02
Area14(11) seine319_144	Big_Qual	38	0.54	Deserted_Ck	35	0.26	Skykomish	45	0.09	Serpentine	42	0.02	Tzoonie	35	0.02
Area14(11) seine319_145	Big_Qual	38	0.75	Deserted_Ck	35	0.11	Tzoonie	35	0.03	Algard	35	0.03	Little_Qua	38	0.02
Area14(11) seine319_146	Big_Qual	38	0.80	Nimpkish	34	0.06	Goodspeed	39	0.04	Skykomish	45	0.02	Pegattum_Cr	39	0.02
Area14(11) seine319_147	Big_Qual	38	0.86	Deserted_Ck	35	0.13	Demamiel	39	0.00	Skykomish	45	0.00	Stawamus	35	0.00
Area14(11) seine319_148	Big_Qual	38	0.99	Little_Qua	38	0.00	Hopedale_Cr	42	0.00	Deserted_Ck	35	0.00	Puntledge	38	0.00
Area 14 GN	**2011**														

Fish	Stock 1	Region 1	Prob 1	Stock 2	Region 2	Prob 2	Stock 3	Region 3	Prob 3	Stock 4	Region 4	Prob 4	Stock 5	Region 5	Prob 5
Area14Com(11) gill307 26	Chehalis	42	0.17	Stave	42	0.12	Serpentine	42	0.11	Grant_Cr	45	0.10	Squamish	35	0.09

Table 14 Stocks and Brood Years Prior to 1991 Having Mark Recoveries in Catch or Escapement

Stock Production Area	Stock CU Name	Stock	Brood Year													
			1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
CCST	BELLA COOLA RIVER-LATE	Fish Cr			√											
		Fish Cr+Airport Ch				√	√				√					
		Snootli Cr		√				√	√	√				√	√	√
	BELLA COOLA-DEAN RIVERS	Kimsquit R												√		
		Necleetsconnay R					√		√	√		√	√	√		
		Saloompt R			√	√	√	√	√	√	√	√	√			
		Thorsen Cr/CCST										√				
	HECATE LOWLANDS	Kitasoo Cr													√	√
	SPILLER-FITZ HUGH-BURKE	McLoughlin Bay Cr											√	√		√
		Neekas R						√								
GSMN	GEORGIA STRAIT	Sliammon R								√	√					
GSVI	GEORGIA STRAIT	Big Qualicum R		√	√	√	√	√	√	√	√	√	√	√	√	√
		L Qualicum R			√	√	√	√	√	√	√	√	√	√	√	√
		Puntledge R				√	√	√	√	√	√	√	√	√	√	√
JNST	NORTHEAST VANCOUVER ISLAND	Nimpkish R Low													√	√
LWFR	LOWER FRASER	Blaney Cr/LWFR		√			√			√		√				
		Chehalis R							√	√	√	√		√	√	√
		Chilliwack R				√	√	√	√	√	√	√	√	√	√	√
		Harrison R							√	√	√					
		Inch Cr	√	√	√	√		√	√	√	√	√	√	√		√
		Squakum Cr						√	√	√						
		Stave R						√			√	√	√	√	√	√
		Weaver Sp Ch						√								
NCST	DOUGLAS-GARDNER	Hirsch Cr												√		√
		Humphreys Cr								√						
		Kildala R									√		√	√	√	
		Kitimat R								√	√		√	√	√	√
NWVI	SOUTHWEST VANCOUVER ISLAND	Canton Cr					√									

Stock Production Area	Stock CU Name	Stock	Brood Year													
			1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
		Conuma R		√	√	√		√		√	√	√	√	√	√	√
		Deserted R/NWVI			√	√	√		√					√	√	
NWVI	SOUTHWEST VANCOUVER ISLAND	Sucwoa R		√	√	√	√	√	√	√	√	√	√	√	√	√
		Tlupana R			√	√	√	√					√			
QCI	EAST HG	Mathers Cr				√	√		√		√	√	√	√	√	√
		Pallant Cr		√	√	√	√	√	√	√	√	√	√	√	√	√
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R				√	√	√	√	√	√	√	√	√	√	√

Table 15 Stocks and Brood Years 1991-2004 Having Mark Recoveries in Catch or Escapement

Stock Production Area	Stock CU Name	Stock	Brood Year													
			1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch								√	√	√				
		Snootli Cr	√	√	√	√	√	√	√	√	√	√	√	√	√	
	BELLA COOLA-DEAN RIVERS	Saloompt R			√	√							√	√	√	
		Thorsen Cr/CCST					√	√	√							
	HECATE LOWLANDS	Kitasoo Cr	√	√	√	√	√	√	√	√	√					
	SPILLER-FITZ HUGH-BURKE	Kwakusdis R	√		√		√	√								
		McLoughlin Bay Cr	√					√	√	√						
GSMN	GEORGIA STRAIT	Sliammon R			√	√	√	√	√		√	√				
		Theodosia Cr												√		
	HOWE SOUND-BURRARD INLET	Cheakamus R				√	√									
GSVI	GEORGIA STRAIT	Big Qualicum R		√	√	√	√	√	√	√	√		√	√	√	√
		L Qualicum R	√	√							√		√	√		
		Puntledge R	√	√	√	√	√	√	√							
LWFR	LOWER FRASER	Chehalis R	√	√	√	√		√	√	√						
		Chilliwack R	√	√	√	√	√	√	√							
		Inch Cr	√	√	√	√		√	√	√	√	√	√			
		Stave R	√	√	√	√	√	√	√							
NCST	DOUGLAS-GARDNER	Hirsch Cr	√	√	√	√				√	√	√				
		Kildala R					√	√	√							
		Kitimat R	√		√	√	√	√	√	√	√	√				
NWVI	SOUTHWEST VANCOUVER ISLAND	Conuma R	√	√	√	√	√	√	√	√	√	√				
		Deserted R/NWVI							√	√	√	√				
		Sucwoa R	√		√	√	√	√	√	√	√	√				
		Tlupana R				√	√	√								
QCI	EAST HG	Mathers Cr	√	√	√	√	√	√								
		Pallant Cr	√	√	√	√	√	√	√							
SWVI	SOUTHWEST VANCOUVER ISLAND	Nitinat R	√	√	√	√	√	√	√	√						

Table 16 Stocks and Brood Years 2005-2014 Having Mark Recoveries in Catch or Escapement

Stock Production Area	Stock CU Name	Stock	Brood Year										
			2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	√	√	√	√	√	√	√	√	√	√	√
	SPILLER-FITZ HUGH-BURKE	McLoughlin Bay Cr							√	√	√		
GSVI	GEORGIA STRAIT	Big Qualicum R	√	√	√	√	√	√	√	√	√		

Table 17 Net Fishery Sampling Summary by Return Year, Statistical Area and Week, 1990-2018

* N/A refers to data removed to protect privacy under 'three party rule'

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	1	N	075			923	1	4008	23%	0.108%
1990	1	N	083			13		1571	1%	0.000%
1990	1	N	084			93		131	71%	0.000%
1990	1,3	N	074	142	1	734	2	14342	5%	0.488%
1990	2E	N	083			3135	1	4562	69%	0.032%
1990	2E	N	084			972		4925	20%	0.000%
1990	2E	N	091	147	1	1861	1	8778	21%	0.367%
1990	2E	N	093	2620	29	3278	8	22225	15%	0.676%
1990	2E	N	101	21442	35	21447	30	84294	25%	0.152%
1990	2E	N	102	10042	19	10042	7	49018	20%	0.130%
1990	2E	N	103	33880	5	33880	4	123335	27%	0.013%
1990	2W	N	074			22		127	17%	0.000%
1990	2W	N	075			1019	2	3865	26%	0.196%
1990	2W	N	082			1782	1	2430	73%	0.056%
1990	2W	N	083			1470		5473	27%	0.000%
1990	2W	N	101	13099	11	13099	2	24843	53%	0.050%
1990	3	N	063			326		903	36%	0.000%
1990	3	N	064			132		665	20%	0.000%
1990	3	N	071			223		1342	17%	0.000%
1990	3	N	072			450		1880	24%	0.000%
1990	3	N	073			3093	9	7327	42%	0.291%
1990	3	N	074	104	1	2964	8	12594	24%	0.616%
1990	3	N	075			2427	5	6392	38%	0.206%
1990	3	N	081			3377	3	11530	29%	0.089%
1990	3	N	082			1011		3558	28%	0.000%
1990	3	N	083			21		1262	2%	0.000%
1990	3	N	084			15		559	3%	0.000%
1990	3	N	091			13				0.000%
1990	3	N	092			251		481	52%	0.000%
1990	3,4	N	064			131	1	1527	9%	0.763%
1990	3,4	N	071			417	1	3927	11%	0.240%
1990	3,4	N	072			426	1	3933	11%	0.235%
1990	3,4	N	073			449	1	11843	4%	0.223%
1990	3,4	N	074			1130	5	20259	6%	0.443%
1990	3,4	N	075			587	1	10989	5%	0.170%
1990	3,4	N	081			1632	1	18278	9%	0.061%
1990	3,4	N	082			173	1	6460	3%	0.578%
1990	3,4	N	083			466		3650	13%	0.000%
1990	3,4	N	084			10		1417	1%	0.000%
1990	3,4,5	N	064			32		2590	1%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	3,4,5	N	072			312	1	4808	6%	0.321%
1990	3,4,5	N	074			283		24168	1%	0.000%
1990	3,4,5	N	081	332	1	669	1	25501	3%	0.225%
1990	3,5	N	075	2632	13	2632	1	7570	35%	0.266%
1990	3,5	N	081	147	1	163		18753	1%	0.340%
1990	3,5	N	082	137		137	1	5838	2%	0.365%
1990	4	N	064	49	1	141		862	16%	1.020%
1990	4	N	071			938	3	2585	36%	0.320%
1990	4	N	072			539	2	2053	26%	0.371%
1990	4	N	073			565	1	4516	13%	0.177%
1990	4	N	074			1555	1	7665	20%	0.064%
1990	4	N	075			1252	3	4597	27%	0.240%
1990	4	N	081			1130	3	6748	17%	0.266%
1990	4	N	082			994	2	2902	34%	0.201%
1990	4	N	083			1216		2388	51%	0.000%
1990	4	N	084			181		858	21%	0.000%
1990	4	N	091			90		367	25%	0.000%
1990	4	N	092			99		152	65%	0.000%
1990	4,5	N	064			1		1925	0%	0.000%
1990	4,5	N	075			109		5775	2%	0.000%
1990	4,5	N	081	185		490	1	13971	4%	0.102%
1990	5	N	064			523	1	1063	49%	0.191%
1990	5	N	071			595	1	1479	40%	0.168%
1990	5	N	072			563	1	875	64%	0.178%
1990	5	N	073			437		1712	26%	0.000%
1990	5	N	074	30	1	568		3909	15%	1.667%
1990	5	N	075	98	1	131		1178	11%	0.510%
1990	5	N	081	661		721	1	7223	10%	0.069%
1990	5	N	082	91		588	1	2280	26%	0.085%
1990	6	N	073	8756	59	8639		25311	35%	0.337%
1990	6	N	074	6259	28	6142	2	13818	45%	0.240%
1990	6	N	075	10397	86	10397	3	47779	22%	0.428%
1990	6	N	081	9857	59	9815	6	27526	36%	0.330%
1990	6	N	082	3636	14	4036		5918	68%	0.193%
1990	6	N	083	5923	13	5923	1	15021	39%	0.118%
1990	6	N	084	2721	7	3573	1	16752	21%	0.143%
1990	6	N	091	215		215		922	23%	0.000%
1990	6	N	093	129		129		234	55%	0.000%
1990	7	N	073	59		59		1525	4%	0.000%
1990	7	N	074	267	3	267		4034	7%	0.562%
1990	7	N	081	389		389		7217	5%	0.000%
1990	7	N	084	2192	10	2192		44482	5%	0.228%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	7	N	091	3883	3	4152		31124	13%	0.039%
1990	7	N	092	49		49				0.000%
1990	7	N	093	5370	39	5370		17684	30%	0.363%
1990	7	N	094	6462	24	6462	1	24626	26%	0.193%
1990	7	N	101	2170	19	2170	1	4675	46%	0.461%
1990	7	N	102	4078	1	4078	1	32377	13%	0.025%
1990	7	N	103	717	1	717		6283	11%	0.070%
1990	7,8	N	083	1496	12	2616	4	43502	6%	0.478%
1990	7,8	N	084	10817	40	10726		87913	12%	0.185%
1990	7,8	N	091	7829	23	7829	1	77258	10%	0.153%
1990	8	N	062	10		10		12	83%	0.000%
1990	8	N	063	61		61		64	95%	0.000%
1990	8	N	064	269	7	269		275	98%	1.301%
1990	8	N	071	3442	48	3442	1	10602	32%	0.712%
1990	8	N	072	9756	127	9756	2	21262	46%	0.661%
1990	8	N	073	40755	370	40755	19	146742	28%	0.477%
1990	8	N	074	65541	438	65540	30	188686	35%	0.357%
1990	8	N	075	49191	237	49532	6	134818	37%	0.247%
1990	8	N	081	5758	88	5758	5	62120	9%	0.808%
1990	8	N	084	2677	9	2677		43431	6%	0.168%
1990	8	N	091	5141	9	5187	3	46134	11%	0.117%
1990	8	N	092	199		1901		4984	38%	0.000%
1990	8,9	N	082	3000	15	3000		11251	27%	0.250%
1990	9	N	072	64		64		3102	2%	0.000%
1990	9	N	073	60		99		1773	6%	0.000%
1990	9	N	075	228	1	228		2687	8%	0.219%
1990	9	N	081	435		435		4779	9%	0.000%
1990	9	N	082	26		71		2100	3%	0.000%
1990	9,10	N	072	80	2	80		3875	2%	1.250%
1990	10	N	072	11		11		773	1%	0.000%
1990	10	N	073	7		7		543	1%	0.000%
1990	11	N	081	235	1	235		1427	16%	0.213%
1990	11	N	082	86		243		2949	8%	0.000%
1990	11	N	083	574		624		1618	39%	0.000%
1990	11	N	084	59		59		540	11%	0.000%
1990	12	N	072	1		1		2	50%	0.000%
1990	12	N	073	1		1		2	50%	0.000%
1990	12	N	074	1		1		50	2%	0.000%
1990	12	N	075	75		75		374	20%	0.000%
1990	12	N	081	506		506		2860	18%	0.000%
1990	12	N	082	923	1	3070	1	10019	31%	0.071%
1990	12	N	083	2949	1	2907	2	8967	33%	0.051%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	12	N	084	1233	3	1235	1	7497	16%	0.162%
1990	12	N	091	881	2	881		7615	12%	0.114%
1990	12	N	093	21969	45	21969	29	94101	23%	0.168%
1990	12	N	102	45723	145	45723	95	272459	17%	0.262%
1990	12	N	103	2990	18	2990	4	23139	13%	0.368%
1990	12	N	104	35625	97	35625	54	169985	21%	0.212%
1990	12,13	N	081	323	1	323		2904	11%	0.155%
1990	12,13	N	082	612		612		11334	5%	0.000%
1990	13	N	082	14		14		1315	1%	0.000%
1990	13	N	083	324		324	1	1634	20%	0.154%
1990	13	N	084	170		170		2956	6%	0.000%
1990	13	N	091	263		263		2908	9%	0.000%
1990	13	N	093	15350	35	15350	11	29681	52%	0.150%
1990	13	N	102	57706	177	57819	101	307798	19%	0.241%
1990	13	N	104	52616	186	52616	82	226502	23%	0.255%
1990	14	N	103	16694	63	16694	46	70068	24%	0.327%
1990	14	N	104	8377	29	8377	13	34846	24%	0.251%
1990	14	N	105	8114	39	8114	9	40629	20%	0.296%
1990	16	N	075	7		7		6		0.000%
1990	16	N	091	11		11		210	5%	0.000%
1990	18	N	111	6273	7	6273	3	24790	25%	0.080%
1990	18	N	112	1912	1	1912		11599	16%	0.026%
1990	18	N	114	2650	1	2650	1	8918	30%	0.038%
1990	20	N	082	1		1		142	1%	0.000%
1990	20	N	083	25		41		854	5%	0.000%
1990	20	N	084	26		32		512	6%	0.000%
1990	21	N	093	957	2	855		3273	29%	0.105%
1990	21	N	094	3100	24	3100	2	7968	39%	0.419%
1990	21	N	103	4866	40	4866	2	13289	37%	0.432%
1990	29	N	081	2		2		154	1%	0.000%
1990	29	N	084	24		24		367	7%	0.000%
1990	29	N	091	41		37		236	17%	0.000%
1990	29	N	094			31		880	4%	0.000%
1990	29	N	101			376		1530	25%	0.000%
1990	29	N	102			1003		2997	33%	0.000%
1990	29	N	103			1014		3267	31%	0.000%
1990	29	N	104	20119	76	21166	81	70731	30%	0.380%
1990	29	N	105	771	3	1819	7	1646		0.387%
1990	29	N	111	13058	52	13317	54	29483	45%	0.402%
1990	29	N	112			32		489	7%	0.000%
1990	29	N	113			98		574	17%	0.000%
1990	29	N	114			24		478	5%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1991	1	N	074			115		211	55%	0.000%
1991	1	N	075			345	3	1115	31%	0.870%
1991	1	N	081			70		1211	6%	0.000%
1991	2E	N	091	1028	16	1028		3310	31%	0.778%
1991	2E	N	092	12274	40	12274	50	45282	27%	0.367%
1991	2E	N	093	14061	39	14061	49	56810	25%	0.313%
1991	2E	N	094	19570	31	19570	35	100463	19%	0.169%
1991	2E	N	101	20298	11	20298	66	59193	34%	0.190%
1991	2W	N	075			356		671	53%	0.000%
1991	2W	N	081			501	2	1873	27%	0.399%
1991	2W	N	094	9183	2	9183	2	30133	30%	0.022%
1991	2W	N	101	563		563		9830	6%	0.000%
1991	3	N	064			880	2	1780	49%	0.227%
1991	3	N	071			450	1	2818	16%	0.222%
1991	3	N	072			193	1	3983	5%	0.518%
1991	3	N	073			6692	7	25879	26%	0.105%
1991	3	N	074	881		8968	8	36347	25%	0.045%
1991	3	N	075			11254	11	31230	36%	0.098%
1991	3	N	081	354	1	8138	10	27993	29%	0.203%
1991	3	N	082			5569		12055	46%	0.000%
1991	3	N	083			3785	3	11918	32%	0.079%
1991	3	N	084			3872	2	7478	52%	0.052%
1991	3,4	N	071			1080	1	3718	29%	0.093%
1991	3,4	N	072			1699	2	8299	20%	0.118%
1991	3,4	N	082	38		1519	3	14749	10%	0.099%
1991	3,4	N	084			1		8723	0%	0.000%
1991	3,4,5	N	072			139	2	8628	2%	1.439%
1991	3,4,5	N	084	1298		1298	7	9024	14%	0.270%
1991	4	N	071			286	1	900	32%	0.350%
1991	4	N	072			874	1	4316	20%	0.114%
1991	4	N	073			3595	3	13446	27%	0.083%
1991	4	N	074	450		2002	2	13391	15%	0.050%
1991	4	N	075	426		1186		9577	12%	0.000%
1991	4	N	081	684		919		4648	20%	0.000%
1991	4	N	082	1006		980		2694	37%	0.000%
1991	4	N	083	909		3323	2	2255		0.030%
1991	4	N	084	845		835		1245	68%	0.000%
1991	4,5	N	082	23		23		3458	1%	0.000%
1991	5	N	073			2028	1	10463	19%	0.049%
1991	5	N	074	195		821		4945	17%	0.000%
1991	5	N	081	48		48		2709	2%	0.000%
1991	5	N	082	56		56		764	7%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1991	5	N	083	52		52		326	16%	0.000%
1991	5	N	084	15		15		301	5%	0.000%
1991	6	N	073	2421	28	2618		13484	19%	0.578%
1991	6	N	074	4334	19	4583		12272	37%	0.219%
1991	6	N	075	2324	8	2324	2	10117	23%	0.215%
1991	6	N	081	3829	7	4238	1	10507	40%	0.103%
1991	6	N	082	1306	5	1454		4367	33%	0.191%
1991	7	N	081	419	2	719	1	12247	6%	0.308%
1991	7	N	084	3484	67	3602		25563	14%	0.962%
1991	7	N	091	368	17	368		6002	6%	2.310%
1991	7	N	092	5513	90	5513	1	22456	25%	0.825%
1991	7	N	094	466	3	466		18120	3%	0.322%
1991	7	N	103	2968		2968	3	30079	10%	0.051%
1991	7,8	N	081	5302	18	4883		29998	18%	0.170%
1991	7,8	N	082	3341	26	3341	1	14876	22%	0.404%
1991	8	N	062			8		18	44%	0.000%
1991	8	N	063	22		22		29	76%	0.000%
1991	8	N	064			98		210	47%	0.000%
1991	8	N	071			12		3045	0%	0.000%
1991	8	N	072	3060	39	3060		17537	17%	0.637%
1991	8	N	073	9186	79	7570		33962	27%	0.430%
1991	8	N	074	14033	108	14034	5	67714	21%	0.403%
1991	8	N	075	9925	90	6791	2	85240	12%	0.468%
1991	8	N	082	873	3	873		9480	9%	0.172%
1991	8,9,10	N	071	611	4	793	1	4099	19%	0.390%
1991	9	N	071	182				840	22%	0.000%
1991	9	N	072	9		178		684	26%	0.000%
1991	9	N	075			8		1798	0%	0.000%
1991	9,10	N	072	27		46		1372	3%	0.000%
1991	10	N	071			5		214	2%	0.000%
1991	10	N	072			250		688	36%	0.000%
1991	10	N	073			49		1772	3%	0.000%
1991	10	N	074	17		127		4891	3%	0.000%
1991	10	N	075	47		108		8551	1%	0.000%
1991	10	N	081			70		1924	4%	0.000%
1991	10	N	091			4				0.000%
1991	11	N	081			128		3789	3%	0.000%
1991	11	N	082			12		829	1%	0.000%
1991	11	N	084			13		485	3%	0.000%
1991	11	N	091			8		77	10%	0.000%
1991	12	N	074			8		184	4%	0.000%
1991	12	N	075			59		2680	2%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1991	12	N	081			515		4657	11%	0.000%
1991	12	N	082			287		4881	6%	0.000%
1991	12	N	083	626		695		5485	13%	0.000%
1991	12	N	084			600	1	9163	7%	0.167%
1991	12	N	091			28		2173	1%	0.000%
1991	12	N	092	1457	2	1189		9861	15%	0.069%
1991	12	N	094	27159	43	30161	19	115788	26%	0.111%
1991	12,13	N	092	460		460		14229	3%	0.000%
1991	13	N	081			13		659	2%	0.000%
1991	13	N	082			2		2221	0%	0.000%
1991	13	N	092	51		263		4368	6%	0.000%
1991	13	N	094	15179	22	15169	3	48488	31%	0.082%
1991	14	N	103	11695	60	11695	33	65565	18%	0.398%
1991	14	N	104	15577	62	15576	41	93648	17%	0.331%
1991	14	N	105	15588	58	15393	36	52032	30%	0.303%
1991	14	N	111	20631	104	20630	69	57854	36%	0.419%
1991	14,17	N	104	6981	22	6981	19	109717	6%	0.294%
1991	16	N	083			5		27	19%	0.000%
1991	17	N	104	3295	4	3295	3	16069	21%	0.106%
1991	18	N	111	2666	2	2666	2	10411	26%	0.075%
1991	18	N	112	14865	3	14865	5	48560	31%	0.027%
1991	18	N	113	17361	4	17361		71067	24%	0.012%
1991	18	N	114	5284		5284		24135	22%	0.000%
1991	20	N	083			8		172	5%	0.000%
1991	20	N	084			37		427	9%	0.000%
1991	20	N	091	8		8		117	7%	0.000%
1991	21	N	094	811	1	811	2	3820	21%	0.185%
1991	21	N	101	6368	31	6368	9	32856	19%	0.314%
1991	21	N	102	15972	83	15972	25	55682	29%	0.338%
1991	21	N	103	48107	291	48107	82	164711	29%	0.388%
1991	21	N	104	63661	359	64603	74	230974	28%	0.339%
1991	29	N	092			20		175	11%	0.000%
1991	29	N	093			97		171	57%	0.000%
1991	29	N	094			228		566	40%	0.000%
1991	29	N	101	1329		1795		7208	25%	0.000%
1991	29	N	102			356		1689	21%	0.000%
1991	29	N	103			425		3235	13%	0.000%
1991	29	N	104	4252	13	4538	10	26990	17%	0.263%
1991	29	N	112	5740	30	5740	12	16797	34%	0.366%
1992	1	N	074	80	1	199		1078	18%	0.625%
1992	1	N	075			1692	1	2543	67%	0.059%
1992	1	N	081			1214	1	2929	41%	0.082%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1992	1	N	082			797	3	1117	71%	0.376%
1992	1	N	083			1083	1	1100	98%	0.092%
1992	1	N	084			2		2	100%	0.000%
1992	1	N	091			39		50	78%	0.000%
1992	1	N	093			60		190	32%	0.000%
1992	2E	N	091	2203	1	2203	41	16187	14%	0.953%
1992	2E	N	092	10021	8	7733	223	45184	22%	1.482%
1992	2E	N	093	11794	13	16772	245	55834	30%	0.786%
1992	2E	N	094	5226	6	5226	58	15261	34%	0.612%
1992	2W	N	075			319	1	1978	16%	0.314%
1992	2W	N	081			72		1461	5%	0.000%
1992	2W	N	082			620		1628	38%	0.000%
1992	3	N	071	205		202	1	3745	5%	0.248%
1992	3	N	072	2093		3820	8	15701	24%	0.105%
1992	3	N	073	946	2	5497	6	16190	34%	0.160%
1992	3	N	074	1013	1	2586	5	9813	26%	0.146%
1992	3	N	075	222		6348	11	26727	24%	0.087%
1992	3	N	081	338		3916	1	27025	14%	0.013%
1992	3	N	082			4038	2	12906	31%	0.050%
1992	3	N	083			9422	2	20524	46%	0.021%
1992	3	N	091			2822	1	4173	68%	0.035%
1992	3	N	092			2770	18	1367		0.650%
1992	3,4	N	071	241		546	1	6795	8%	0.092%
1992	3,4	N	081			2824	3	47103	6%	0.106%
1992	3,4	N	083			2857	6	25502	11%	0.210%
1992	3,4,5	N	071	640		640	2	7687	8%	0.156%
1992	4	N	071	899		926	1	3050	30%	0.054%
1992	4	N	072	367		726		3466	21%	0.000%
1992	4	N	073			1035		10372	10%	0.000%
1992	4	N	074	1017	1	5010	7	15401	33%	0.119%
1992	4	N	075	683	2	6112	12	23340	26%	0.245%
1992	4	N	081	147	1	4796	3	20078	24%	0.371%
1992	4	N	082			2062		6604	31%	0.000%
1992	4	N	083			1766	1	4978	35%	0.057%
1992	4	N	091			790	1	1641	48%	0.127%
1992	4,5	N	071			50		3942	1%	0.000%
1992	5	N	071	1		1		892	0%	0.000%
1992	5	N	072	41		41		544	8%	0.000%
1992	5	N	073	172		437	2	1872	23%	0.229%
1992	5	N	074	85		88	1	669	13%	0.568%
1992	5	N	075			102		1710	6%	0.000%
1992	5	N	081			18		3006	1%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1992	5	N	082			860	1	2004	43%	0.116%
1992	6	N	072	133	2	133				0.752%
1992	6	N	073	5011	23	5487		9968	55%	0.230%
1992	6	N	074	2500		3315		4340	76%	0.000%
1992	6	N	075	2617	8	3332	2	12763	26%	0.183%
1992	6	N	081	2922	11	3829		7023	55%	0.188%
1992	6	N	082	739	2	947		2916	32%	0.135%
1992	6	N	083	2208	4	2538	1	5217	49%	0.110%
1992	7	N	091	4023	59	4023		19343	21%	0.733%
1992	7	N	092	2786	101	3522	1	5465	64%	1.827%
1992	7	N	093	2140	14	2140	1	9790	22%	0.351%
1992	7	N	094	344	1	344		3788	9%	0.145%
1992	7,8	N	082			2851	3	10261	28%	0.105%
1992	8	N	063	6		18		44	41%	0.000%
1992	8	N	064	211		211		407	52%	0.000%
1992	8	N	071	342	1			2254	15%	0.292%
1992	8	N	072	4072	49	4097		13053	31%	0.602%
1992	8	N	073	9593	96	6801	4	31013	31%	0.530%
1992	8	N	074	4293	73	4293	1	21478	20%	0.862%
1992	8	N	075	12529	82	12529	5	50459	25%	0.347%
1992	8	N	081	4413	28	2834	1	23365	19%	0.335%
1992	8	N	082	2851	34			7361	39%	1.193%
1992	8	N	083	946	8	946		5439	17%	0.423%
1992	9	N	073	17		17		4991	0%	0.000%
1992	9	N	074	42		42		5329	1%	0.000%
1992	9	N	075	54	1	54		6599	1%	0.926%
1992	9	N	081	62		78		2379	3%	0.000%
1992	9,10	N	072	306	2	306		1925	16%	0.327%
1992	9,10	N	074	888	3	888	1	10120	9%	0.225%
1992	9,10	N	075	1775	16	1915		10247	19%	0.451%
1992	10	N	071	120		127		370	34%	0.000%
1992	10	N	074			3		4791	0%	0.000%
1992	10	N	075	8		8		3648	0%	0.000%
1992	10	N	082	60		163		428	38%	0.000%
1992	11	N	081	3		3		1016	0%	0.000%
1992	11	N	082	228		276		7226	4%	0.000%
1992	11	N	083	1		1		1125	0%	0.000%
1992	12	N	081	2		232		1739	13%	0.000%
1992	12	N	082	150		137		8704	2%	0.000%
1992	12	N	083	61		94		3335	3%	0.000%
1992	12	N	084	68		68		922	7%	0.000%
1992	12	N	094	37151	45	38543	26	178147	22%	0.094%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1992	12	N	102	72786	168	73412	87	343267	21%	0.175%
1992	12	N	104	28332	67	28486	28	229442	12%	0.167%
1992	12	N	114	6378	2	6378	7	23662	27%	0.071%
1992	12,13	N	082			108		10112	1%	0.000%
1992	13	N	081			53		113	47%	0.000%
1992	13	N	082	1		1		1408	0%	0.000%
1992	13	N	083	4		4		1327	0%	0.000%
1992	13	N	094	15774	20	19824	5	64951	31%	0.076%
1992	13	N	102	62441	201	66882	67	255371	26%	0.211%
1992	13	N	104	69352	221	70195	68	234344	30%	0.208%
1992	14	N	103	13257	85	13257	9	46218	29%	0.355%
1992	14	N	111	20180	69	20180	14	61332	33%	0.206%
1992	14	N	112	19480	61	19480	14	120150	16%	0.193%
1992	14	N	113	46327	135	46327	19	201410	23%	0.166%
1992	16	N	082	1		1		20	5%	0.000%
1992	16	N	083	1		1		99	1%	0.000%
1992	16	N	105	2988	1	2988	2	10463	29%	0.050%
1992	16	N	112	1647		1647		8735	19%	0.000%
1992	17	N	105	4895	9	4895	5	17162	29%	0.143%
1992	17	N	111	326	2	326	1	3665	9%	0.460%
1992	18	N	111	4807	17	4807		15581	31%	0.177%
1992	18	N	112	2649	1	2649	1	11563	23%	0.038%
1992	20	N	081			1		100	1%	0.000%
1992	20	N	082	39		43		584	7%	0.000%
1992	20	N	083	35		38		1159	3%	0.000%
1992	20	N	084	6		6		104	6%	0.000%
1992	21	N	101	29598	113	31553	10	137494	23%	0.207%
1992	21	N	102	113533	386	124935	156	368333	34%	0.232%
1992	21	N	103	142407	533	132586	223	368977	39%	0.271%
1992	21	N	104	37808	118	38353	72	150198	26%	0.250%
1992	21	N	105	16889	55	17127	46	50696	34%	0.297%
1992	25	N	092			638	2	1275	50%	0.314%
1992	25	N	094	9945	35	9945	9	35942	28%	0.221%
1992	25	N	101	9271	27	9271	17	60097	15%	0.237%
1992	25	N	102	10914	49	10914	19	32405	34%	0.312%
1992	25	N	104	4741	23	4741	23	21522	22%	0.485%
1992	29	N	081			1		11	9%	0.000%
1992	29	N	083			14		13		0.000%
1992	29	N	105	19152	37	19179	96	41760	46%	0.347%
1993	1	N	074			1664	2	4712	35%	0.120%
1993	1	N	075			1011	3	4557	22%	0.297%
1993	1	N	081			576	1	2682	21%	0.174%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	1	N	082			165		633	26%	0.000%
1993	1	N	083			273	1	265		0.366%
1993	1	N	084			319	1	301		0.314%
1993	1	N	104	2641		2641		10166	26%	0.000%
1993	2E	N	091	1002	1	1002	2	2798	36%	0.150%
1993	2E	N	092	1217	3	1217	11	4103	30%	0.575%
1993	2E	N	093	4627	17	4627	27	45445	10%	0.476%
1993	2E	N	094	7040	31	7040	8	38169	18%	0.277%
1993	2E	N	101	5455	9	5455	20	11350	48%	0.266%
1993	2E	N	102	4728	33	4728	9	12461	38%	0.444%
1993	2W	N	081			2406	6	9819	25%	0.249%
1993	2W	N	082			433		1102	39%	0.000%
1993	3	N	063			252		446	57%	0.000%
1993	3	N	064			985	6	3682	27%	0.609%
1993	3	N	071			2554	13	8418	30%	0.509%
1993	3	N	072			5340	30	28021	19%	0.562%
1993	3	N	073			3085	20	10374	30%	0.648%
1993	3	N	074	128		7668	45	46077	17%	0.293%
1993	3	N	075			34891	169	153027	23%	0.484%
1993	3	N	081			20662	60	54308	38%	0.290%
1993	3	N	082			14616	52	31130	47%	0.356%
1993	3	N	083			12393	29	20217	61%	0.234%
1993	3	N	084			19727	47	54421	36%	0.238%
1993	3	N	091			14795	62	27164	54%	0.419%
1993	3	N	092			1095	4	1699	64%	0.365%
1993	3,4	N	071			2054	9	17512	12%	0.438%
1993	3,4,5	N	071			1542	7	18609	8%	0.454%
1993	4	N	071			1376	4	9094	15%	0.291%
1993	4	N	072			9416	37	34048	28%	0.393%
1993	4	N	073			10663	41	42683	25%	0.385%
1993	4	N	074			15231	46	47784	32%	0.302%
1993	4	N	075			8152	18	37422	22%	0.221%
1993	4	N	081			2784	3	14147	20%	0.108%
1993	4	N	082			1068	3	4317	25%	0.281%
1993	4	N	083			1363	1	2613	52%	0.073%
1993	4	N	084			306	1	1212	25%	0.327%
1993	4,5	N	071			244	1	10191	2%	0.410%
1993	5	N	071			107		1097	10%	0.000%
1993	5	N	072			20		2475	1%	0.000%
1993	5	N	073			154		676	23%	0.000%
1993	5	N	074			166		2769	6%	0.000%
1993	5	N	075			764	3	7117	11%	0.393%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	5	N	081			96		280	34%	0.000%
1993	5	N	082			312	1	734	43%	0.321%
1993	6	N	074			536	1	1099	49%	0.187%
1993	6	N	075	3675	16	3675	8	9719	38%	0.327%
1993	7	N	075	216		216		220	98%	0.000%
1993	7	N	081	251	2	251		271	93%	0.398%
1993	7	N	082	1038	7	1038		5890	18%	0.337%
1993	7	N	083	592	6	592		1124	53%	0.507%
1993	7	N	091	7		7		6066	0%	0.000%
1993	7	N	092	1865	70	2346	77	31532	7%	3.518%
1993	7	N	093	2109	7	2154	68	14749	15%	1.744%
1993	7	N	094	1793	67	1793	3	8031	22%	1.952%
1993	7	N	101	3586	8	3586	91	22166	16%	1.380%
1993	7	N	103	783	2	783		3314	24%	0.128%
1993	7	N	104	3018		3018	1	5484	55%	0.017%
1993	8	N	062			5		20	25%	0.000%
1993	8	N	071	454	1	454		2564	18%	0.110%
1993	8	N	072	1001	7	1001	2	5746	17%	0.450%
1993	8	N	073	367	1	367		7657	5%	0.136%
1993	8	N	074	2840	17	2840		21248	13%	0.299%
1993	8	N	075	6965	50	6973	3	31349	22%	0.380%
1993	8	N	081	520	6	520		38099	1%	0.577%
1993	8	N	082	11043	82	8017	3	53356	21%	0.390%
1993	8	N	083	4837	19	4837		17948	27%	0.196%
1993	8	N	091	1163	2	1163		6390	18%	0.086%
1993	9	N	073	27		27		1176	2%	0.000%
1993	9	N	074	51		183		769	24%	0.000%
1993	10	N	072			370	1	1498	25%	0.270%
1993	10	N	074	4		6		423	1%	0.000%
1993	10	N	075	103	1	128		2630	5%	0.485%
1993	10	N	081	142	1	177		5316	3%	0.352%
1993	10	N	082			451	1	1599	28%	0.222%
1993	11	N	082			200	1	2622	8%	0.500%
1993	11	N	083	11		21		925	2%	0.000%
1993	11	N	091			23		31	74%	0.000%
1993	12	N	075			11		329	3%	0.000%
1993	12	N	081			131		1395	9%	0.000%
1993	12	N	082			490	1	7718	6%	0.204%
1993	12	N	083	3		474	1	6096	8%	0.106%
1993	12	N	091			676	1	16102	4%	0.148%
1993	12	N	092	789		840		14525	6%	0.000%
1993	12	N	094	16814	27	16852	7	44952	37%	0.101%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	12	N	103	2971	10	2971	8	20130	15%	0.303%
1993	12	N	105	58816	125	58816	74	368352	16%	0.169%
1993	12	N	111	18373	56	18373	31	144300	13%	0.237%
1993	12,13	N	091			658	3	17877	4%	0.456%
1993	13	N	081			41		103	40%	0.000%
1993	13	N	082			98		666	15%	0.000%
1993	13	N	083			19		491	4%	0.000%
1993	13	N	091			87		1775	5%	0.000%
1993	13	N	092	203		209		6243	3%	0.000%
1993	13	N	094	7971	8	6506	2	34397	23%	0.066%
1993	13	N	105	55866	182	55866	102	359840	16%	0.254%
1993	13	N	111	35270	72	35270	39	217290	16%	0.157%
1993	14	N	104	8435	41	8435	9	47443	18%	0.296%
1993	14	N	105	7189	30	7189	8	42822	17%	0.264%
1993	14	N	111	5990	59	5990	3	49269	12%	0.518%
1993	14	N	112	23378	123	17511	13	100921	23%	0.300%
1993	14	N	114	51235	200	51235	13	137472	37%	0.208%
1993	16	N	091			38		1284	3%	0.000%
1993	16	N	092	19		20		210	10%	0.000%
1993	16	N	111	2167	4	2167		20648	10%	0.092%
1993	16	N	112	4864	4	4864	1	64952	7%	0.051%
1993	17	N	111	105		105		6606	2%	0.000%
1993	17	N	112	3724	5	5520	6	10727	51%	0.122%
1993	18	N	112	5847	18	5847	1	7597	77%	0.163%
1993	18	N	113	764		764		17661	4%	0.000%
1993	18	N	114	2137	2	2137		15315	14%	0.047%
1993	18	N	121	7680	8	7680	4	39629	19%	0.078%
1993	20	N	081			2		15	13%	0.000%
1993	20	N	082			4		65	6%	0.000%
1993	21	N	101	6888	33	6888	5	40992	17%	0.276%
1993	21	N	102	7811	29	7811	25	69724	11%	0.346%
1993	21	N	103	10373	41	10373	17	67771	15%	0.280%
1993	21	N	104	3498	19	3498	5	56881	6%	0.343%
1993	21	N	105	94249	326	96704	92	398761	24%	0.221%
1993	21	N	111	14733	77	12842	41	115762	13%	0.421%
1993	21	N	112	5062	24	4914	7	13609	37%	0.308%
1993	23	N	092			1				0.000%
1993	25	N	091			34		236	14%	0.000%
1993	25	N	094	944	5	944		4735	20%	0.265%
1993	25	N	101	1517	7	1772		6263	28%	0.231%
1993	25	N	102	4998	24	4998	7	12588	40%	0.310%
1993	25	N	103	7989	34	8170	24	27133	30%	0.360%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	25	N	104	9643	56	9643	39	54641	18%	0.493%
1993	25	N	105	3910	20	3910	29	11330	35%	0.627%
1993	29	N	082			2		4	50%	0.000%
1993	29	N	091			20		89	22%	0.000%
1993	29	N	092			23		149	15%	0.000%
1993	29	N	111	18729	46	18729	105	73348	26%	0.403%
1994	1	N	074			16		358	4%	0.000%
1994	1	N	075			2640	7	6254	42%	0.265%
1994	1	N	081			2003	4	3375	59%	0.200%
1994	1	N	083			899	4	909	99%	0.445%
1994	1	N	093			229		691	33%	0.000%
1994	1,2W	N	082			1926	6	5119	38%	0.312%
1994	1,2W	N	083			531	2	2008	26%	0.377%
1994	2E	N	084	494		494		905	55%	0.000%
1994	2E	N	091	1112	1	1112	1	3747	30%	0.090%
1994	2E	N	092	2377	10	2377	4	7884	30%	0.295%
1994	2E	N	093	4802	50	5489	2	16884	33%	0.539%
1994	2E	N	094	8289	80	7289	1	32234	26%	0.489%
1994	2E	N	101	15531	146	14556	2	50588	31%	0.477%
1994	2E	N	104	8273	9	8273		20855	40%	0.054%
1994	2W	N	082			469	4	3958	12%	0.853%
1994	2W	N	083			514	1	1099	47%	0.195%
1994	2W	N	084			1		338	0%	0.000%
1994	3	N	063			1035	8	4988	21%	0.773%
1994	3	N	064			2623	9	13672	19%	0.343%
1994	3	N	071			3966	6	21815	18%	0.151%
1994	3	N	072			2144	9	31067	7%	0.420%
1994	3	N	073			4030	10	54459	7%	0.248%
1994	3	N	074			16050	65	59341	27%	0.405%
1994	3	N	075			11529	25	39450	29%	0.217%
1994	3	N	081			7749	28	23740	33%	0.361%
1994	3	N	082			11296	25	17813	63%	0.221%
1994	3	N	083			3797	4	7798	49%	0.105%
1994	3	N	084			3001	8	6282	48%	0.267%
1994	3	N	091			932	1	2187	43%	0.107%
1994	3,4	N	064			2742	7	13893	20%	0.255%
1994	3,4	N	071			8950	32	32604	27%	0.358%
1994	3,4	N	072			12302	41	52275	24%	0.333%
1994	3,4	N	073			13433	48	88057	15%	0.357%
1994	3,4,5	N	072			7047	21	54988	13%	0.298%
1994	3,4,5	N	073			1657	4	93234	2%	0.241%
1994	4	N	071			738	4	10789	7%	0.542%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1994	4	N	072			4619	17	21208	22%	0.368%
1994	4	N	073			3715	15	33598	11%	0.404%
1994	4	N	074			18977	65	48179	39%	0.343%
1994	4	N	075			8697	30	32482	27%	0.345%
1994	4	N	081			1180	5	10871	11%	0.424%
1994	4	N	082			517	1	2281	23%	0.193%
1994	4	N	083			592	1	1877	32%	0.169%
1994	4	N	093			208		448	46%	0.000%
1994	4	N	094			750	2	1521	49%	0.267%
1994	4,5	N	072			336	2	23921	1%	0.595%
1994	4,5	N	073			419	1	38775	1%	0.239%
1994	5	N	071			298		2970	10%	0.000%
1994	5	N	072			296		2713	11%	0.000%
1994	5	N	073			577	4	5177	11%	0.693%
1994	5	N	074			1195		5469	22%	0.000%
1994	5	N	075			493		8898	6%	0.000%
1994	5	N	081			625	4	2170	29%	0.640%
1994	6	N	073	326	2	326	1	10249	3%	0.460%
1994	6	N	074	6393	26	4748	2	21173	30%	0.224%
1994	6	N	075	3870	14	6077	10	16868	36%	0.263%
1994	6	N	081	3188	22	3188	1	20503	16%	0.361%
1994	6	N	082	3906	12	3906	3	6161	63%	0.192%
1994	7	N	084	328	3	977	3	3580	27%	0.611%
1994	7	N	091	960	1	10275	989	16013	64%	4.865%
1994	7	N	093	2237	1	2313	136	10024	23%	2.962%
1994	7	N	094	4121	110	4121	315	10329	40%	5.157%
1994	7	N	101	1464	14	2439	2	11064	22%	0.519%
1994	7	N	102	8509	12	8509	1	34091	25%	0.076%
1994	7	N	103	9960	6	14514	1	95101	15%	0.034%
1994	7	N	104	961	3	961	3	8911	11%	0.312%
1994	8	N	062			7		18	39%	0.000%
1994	8	N	064	301	7	301		1048	29%	1.163%
1994	8	N	071	480	8	480	1	1562	31%	0.938%
1994	8	N	072	1751	5	2287		44666	5%	0.143%
1994	8	N	073	12338	53	12465	7	71820	17%	0.243%
1994	8	N	074	18109	70	24265	5	94930	26%	0.204%
1994	8	N	075	23599	120	24074	19	73723	33%	0.294%
1994	8	N	081	10112	36	10112	4	76064	13%	0.198%
1994	8	N	082	3290	5	3205	4	56121	6%	0.138%
1994	8	N	083	8247	32	8247		36321	23%	0.194%
1994	8	N	084	2530	18	4533	13	29632	15%	0.499%
1994	8	N	091	2438	10	2438	1	7615	32%	0.226%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1994	8,9,10	N	072	4932	25	3411	3	56954	9%	0.297%
1994	9	N	073	325	1	346		2958	12%	0.154%
1994	9	N	074			22		2250	1%	0.000%
1994	9	N	081			26		2035	1%	0.000%
1994	10	N	072			447	2	9501	5%	0.447%
1994	10	N	073	997	3	997	1	4579	22%	0.201%
1994	10	N	074			367		5098	7%	0.000%
1994	11	N	081			391		1476	26%	0.000%
1994	11	N	082			242	1	2639	9%	0.413%
1994	11	N	083			72		1413	5%	0.000%
1994	11	N	084			71		484	15%	0.000%
1994	12	N	075			8		27	30%	0.000%
1994	12	N	081	252		1560	5	1287		0.160%
1994	12	N	082			871	3	3820	23%	0.344%
1994	12	N	083			864		3772	23%	0.000%
1994	12	N	084			1627	4	5495	30%	0.246%
1994	12	N	091	357		1177	3	4214	28%	0.127%
1994	12	N	092	88	1					1.136%
1994	12	N	101	64920	97	70473	57	173087	41%	0.115%
1994	12	N	103	101701	211	102031	174	271428	38%	0.189%
1994	12	N	105	38331	62	38331	50	210994	18%	0.146%
1994	13	N	081			3		18	17%	0.000%
1994	13	N	082			22		417	5%	0.000%
1994	13	N	083			46		310	15%	0.000%
1994	13	N	084			51		376	14%	0.000%
1994	13	N	091	205		370		1362	27%	0.000%
1994	13	N	101	26846	45	27125	4	55056	49%	0.091%
1994	13	N	103	79572	226	79865	74	259580	31%	0.188%
1994	13	N	105	98816	207	98235	137	271034	36%	0.175%
1994	14	N	104	27706	74	27706	33	69584	40%	0.193%
1994	14	N	105	5750	10	5750	6	26916	21%	0.139%
1994	14	N	111	7183	11	7228	26	21959	33%	0.256%
1994	14	N	113	40104	85	34150	16	91353	44%	0.129%
1994	14	N	114	42972	138	42348	20	153432	28%	0.184%
1994	14	N	121	2134	4	2134		5593	38%	0.094%
1994	16	N	082			1		3	33%	0.000%
1994	16	N	091			3		37	8%	0.000%
1994	17	N	105	2430		2430		8482	29%	0.000%
1994	20	N	081			4		106	4%	0.000%
1994	20	N	082			2		443	0%	0.000%
1994	20	N	084			8		75	11%	0.000%
1994	21	N	101	4899	24	5549	2	66862	8%	0.263%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1994	21	N	102	27436	119	29403	25	87913	33%	0.259%
1994	21	N	103	25168	109	23104	18	105318	24%	0.256%
1994	21	N	104	118308	389	116686	66	414942	29%	0.193%
1994	21	N	105	26605	68	29439	14	120829	24%	0.152%
1994	21	N	111	1561	3	1561		26953	6%	0.096%
1994	21	N	112	946	1	946		3379	28%	0.053%
1994	23	N	071			39	1	54	72%	2.564%
1994	23	N	073			6		8	75%	0.000%
1994	25	N	101	2462	35	2462	9	11802	21%	0.894%
1994	25	N	102	8377	90	8377	11	33024	25%	0.603%
1994	25	N	103	12368	139	12373	24	55421	22%	0.659%
1994	25	N	104	10375	95	10375	21	41157	25%	0.559%
1994	25	N	105	14922	203	14922	30	45725	33%	0.781%
1994	25	N	111	7559	37	7559	6	10773	70%	0.284%
1994	29	N	082			5		1		0.000%
1994	29	N	084			1		39	3%	0.000%
1994	29	N	091			16		191	8%	0.000%
1994	29	N	105	7273	18	7749	21	39391	20%	0.259%
1994	29	N	111	19188	31	19141	54	73220	26%	0.222%
1994	29	N	113	2166		2166	11	7683	28%	0.254%
1995	1	N	071			161		250	64%	0.000%
1995	1	N	072			181		819	22%	0.000%
1995	1	N	073			940		2436	39%	0.000%
1995	1	N	074			752	2	3339	23%	0.266%
1995	1	N	075			593	4	3019	20%	0.675%
1995	1	N	081			5067	5	11305	45%	0.099%
1995	1	N	083			566		1476	38%	0.000%
1995	1	T	071			1148	3	2358	49%	0.261%
1995	2E	N	084	1198		1198	10	2477	48%	0.417%
1995	2E	N	091	512	6	512		2141	24%	0.586%
1995	2E	N	092	846	15	846	4	3170	27%	1.123%
1995	2E	N	093	3021	33	3021	1	14794	20%	0.563%
1995	2E	N	102	807	2	807		1170	69%	0.124%
1995	3	N	062			909	2	2043	44%	0.220%
1995	3	N	063			4297	14	9726	44%	0.326%
1995	3	N	064			3428	10	20706	17%	0.292%
1995	3	N	071			4499	12	43620	10%	0.267%
1995	3	N	072			8494	31	34927	24%	0.365%
1995	3	N	073			10179	41	71782	14%	0.403%
1995	3	N	074			18568	43	88383	21%	0.232%
1995	3	N	075			15507	24	46526	33%	0.155%
1995	3	N	081			9459	14	37523	25%	0.148%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1995	3	N	082			7878	11	35536	22%	0.140%
1995	3	N	083			4178	5	10433	40%	0.120%
1995	3,4	N	064			5434	17	23950	23%	0.313%
1995	3,4	N	071			7091	24	94373	8%	0.339%
1995	3,4	N	072			10100	33	61964	16%	0.327%
1995	3,4	N	073			15792	35	146549	11%	0.222%
1995	3,4	N	074			5301	7	111487	5%	0.132%
1995	3,4	N	075			2754	2	50897	5%	0.073%
1995	3,4	N	081			1729	2	39523	4%	0.116%
1995	3,4	N	082			2107	5	37196	6%	0.237%
1995	3,4	N	083			1705		12818	13%	0.000%
1995	3,4,5	N	064			961		24869	4%	0.000%
1995	3,4,5	N	071			3827	10	100167	4%	0.261%
1995	3,4,5	N	072			5716	8	68232	8%	0.140%
1995	3,4,5	N	073			4966	18	153542	3%	0.363%
1995	3,4,5	N	074			1119	4	118745	1%	0.358%
1995	3,4,5	N	075			779		52875	1%	0.000%
1995	3,4,5	N	081			776	2	39824	2%	0.258%
1995	3,4,5	N	082			183		37909	0%	0.000%
1995	3,5	N	073			909	1	78775	1%	0.110%
1995	3,5	N	075			1682	2	48504	3%	0.119%
1995	3,5	N	082			190	1	36249	1%	0.526%
1995	3,5	N	083			233		10433	2%	0.000%
1995	4	N	064			835	1	3244	26%	0.120%
1995	4	N	071			5370	24	50753	11%	0.447%
1995	4	N	072			8998	24	27037	33%	0.267%
1995	4	N	073			14427	40	74767	19%	0.277%
1995	4	N	074			5528	6	23104	24%	0.109%
1995	4	N	075			750	2	4371	17%	0.267%
1995	4	N	081			552		2000	28%	0.000%
1995	4	N	082			367		1660	22%	0.000%
1995	4	N	083			379		2385	16%	0.000%
1995	4	N	092			876	1	1892	46%	0.114%
1995	4,5	N	073			413		81760	1%	0.000%
1995	4,5	N	075			660		6349	10%	0.000%
1995	4,5	N	081			79		2301	3%	0.000%
1995	5	N	064			70	1	919	8%	1.429%
1995	5	N	071			699		5794	12%	0.000%
1995	5	N	072			68		6268	1%	0.000%
1995	5	N	073			657		6993	9%	0.000%
1995	5	N	074			321		7258	4%	0.000%
1995	5	N	075			1117		1978	56%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1995	5	N	081			117		301	39%	0.000%
1995	5	N	082			78		713	11%	0.000%
1995	6	N	072	200	2	200		4140	5%	0.500%
1995	6	N	073	5308	17	6779		19148	35%	0.160%
1995	6	N	074	554		1116		4523	25%	0.000%
1995	7	N	075	3017	3	3017	1	8352	36%	0.066%
1995	7	N	082	875		938	6	4198	22%	0.320%
1995	7	N	083	2889	8	2889	60	5503	52%	1.177%
1995	7	N	084	5730	9	5730	101	18204	31%	0.960%
1995	7	N	091	9609	19	9482	29	48957	20%	0.252%
1995	7	N	092	14246	20	14246	172	25319	56%	0.674%
1995	7	N	094	4197	3	4108	9	16409	26%	0.145%
1995	7	N	102	14026	11	18967	11	72810	26%	0.068%
1995	7,8	N	084	550		550	11	23133	2%	1.000%
1995	7,8,9	N	084	4038	90	4038	3	23133	17%	1.152%
1995	8	N	061			20	1	134	15%	5.000%
1995	8	N	062			130		238	55%	0.000%
1995	8	N	063			732		1585	46%	0.000%
1995	8	N	064			770	1	4066	19%	0.130%
1995	8	N	071	7387	52	6617	1	49817	15%	0.360%
1995	8	N	072	19341	155	19341	6	106685	18%	0.416%
1995	8	N	073	32237	134	30471	16	118496	27%	0.234%
1995	8	N	074	36290	147	38853	20	162273	24%	0.228%
1995	8	N	075	28049	90	23094	16	95737	29%	0.195%
1995	8	N	081	18442	110	17602	9	81371	23%	0.324%
1995	8	N	082	13593	32	19103	60	68088	28%	0.275%
1995	8	N	083	7453	14	7706	10	15202	51%	0.159%
1995	9	N	072	83		83		5766	1%	0.000%
1995	9	N	073	2486	17	3048		11181	27%	0.342%
1995	11	N	081			96	1	1126	9%	1.042%
1995	12	N	071			2		8	25%	0.000%
1995	12	N	073			5		57	9%	0.000%
1995	12	N	075			6		21	29%	0.000%
1995	12	N	081			1468	5	7365	20%	0.341%
1995	12	N	082			63		83	76%	0.000%
1995	12	N	083			1196		3441	35%	0.000%
1995	12	N	084			912	2	9780	9%	0.219%
1995	12	N	091			1128		8750	13%	0.000%
1995	12	N	092			3058		14997	20%	0.000%
1995	12	N	094	17360	26	17460	31	44368	39%	0.164%
1995	12	N	102	9623	16	9623	22	12378	78%	0.197%
1995	12	N	105	9682	16	9682	11	47304	20%	0.139%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1995	12,13	N	091			1179	1	14311	8%	0.085%
1995	12,13	N	092			4382	3	20309	22%	0.069%
1995	13	N	081			266	1	816	33%	0.376%
1995	13	N	083			312		1205	26%	0.000%
1995	13	N	084			372	1	1278	29%	0.269%
1995	13	N	091			146	1	5561	3%	0.685%
1995	13	N	092			414	2	5312	8%	0.483%
1995	13	N	094	9637	5	9637	9	23297	41%	0.073%
1995	13	N	105	21628	39	21628	38	72691	30%	0.178%
1995	14	N	105	9924	15	9924	21	18297	54%	0.181%
1995	20	N	083			82		339	24%	0.000%
1995	20	N	084			17		374	5%	0.000%
1995	20	N	091			39	1	815	5%	2.564%
1995	21	N	093	1714	6	1714	1	1783	96%	0.204%
1995	21	N	094	534	3	534		4103	13%	0.281%
1995	21	N	101	18938	76	18938	11	37584	50%	0.230%
1995	21	N	102	19589	71	19589	11	64147	31%	0.209%
1995	21	N	103	39813	138	39860	30	74437	54%	0.211%
1995	21	N	104	13225	44	13225	23	26374	50%	0.253%
1995	25	N	101	3254	27	3254	2	10514	31%	0.446%
1995	25	N	102	1610	9	1610	1	7804	21%	0.311%
1995	25	N	103	3764	30	3764		9146	41%	0.399%
1995	26	N	094			81		105	77%	0.000%
1995	29	N	082			2		226	1%	0.000%
1995	29	N	083			3		24	13%	0.000%
1995	29	N	084			13		18	72%	0.000%
1995	29	N	105	17330	29	17279	69	42764	41%	0.283%
1996	1	N	084			1		4	25%	0.000%
1996	1	N	091			5		11	45%	0.000%
1996	1	N	092			39		202	19%	0.000%
1996	2E	N	091	2088	12	2227	1	2246	99%	0.310%
1996	2E	N	092	5624	86	5624		20710	27%	0.765%
1996	2E	N	093	5461	117	6390		38213	17%	1.071%
1996	2E	N	094	9708	98	10893	1	55251	20%	0.509%
1996	2E	N	102	1090	4	1090		4695	23%	0.184%
1996	3	N	062			221		314	70%	0.000%
1996	3	N	063			669	1	1202	56%	0.150%
1996	3	N	064			267		13250	2%	0.000%
1996	3	N	071			534		28485	2%	0.000%
1996	3	N	072			12746	15	39124	33%	0.118%
1996	3	N	073			4658	7	34407	14%	0.150%
1996	3	N	074			3918	1	24410	16%	0.026%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1996	3	N	075			2592	4	23510	11%	0.154%
1996	3	N	081			18960	20	45943	41%	0.106%
1996	3	N	082			6986	14	12736	55%	0.200%
1996	3	N	084			4996	7	9422	53%	0.140%
1996	3,4	N	064			6869	11	20874	33%	0.160%
1996	3,4	N	071			14971	25	54834	27%	0.167%
1996	3,4	N	072			10353	12	60816	17%	0.116%
1996	3,4	N	073			11571	13	79409	15%	0.112%
1996	3,4	N	074			3163	2	43108	7%	0.063%
1996	3,4	N	075			4000	2	37972	11%	0.050%
1996	3,4	N	081			3343	4	51672	6%	0.120%
1996	3,4	N	082			3820	5	17479	22%	0.131%
1996	3,4,5	N	064			3025	4	21990	14%	0.132%
1996	3,4,5	N	071			2418	5	57805	4%	0.207%
1996	3,4,5	N	072			1075	2	62827	2%	0.186%
1996	3,4,5	N	073			972	4	84025	1%	0.412%
1996	3,4,5	N	074			1264	1	48921	3%	0.079%
1996	3,4,5	N	075			4010	5	39887	10%	0.125%
1996	3,4,5	N	081			757	5	53526	1%	0.661%
1996	3,5	N	064			218		14366	2%	0.000%
1996	3,5	N	074			1736	3	30223	6%	0.173%
1996	3,5	N	075			151		25425	1%	0.000%
1996	3,5	N	081			1171	3	47797	2%	0.256%
1996	3,5	N	082			119		13149	1%	0.000%
1996	4	N	064			558	5	7624	7%	0.896%
1996	4	N	071			2277	6	26349	9%	0.264%
1996	4	N	072			3553	3	21692	16%	0.084%
1996	4	N	073			9725	10	45002	22%	0.103%
1996	4	N	074			3946	4	18698	21%	0.101%
1996	4	N	075			1094		14462	8%	0.000%
1996	4	N	081			886	1	5729	15%	0.113%
1996	4	N	082			1659		4743	35%	0.000%
1996	4	N	084			38		24		0.000%
1996	4	N	092			124		440	28%	0.000%
1996	4	N	093			140		359	39%	0.000%
1996	4,5	N	072			245		23703	1%	0.000%
1996	4,5	N	073			581		49618	1%	0.000%
1996	4,5	N	074			824	1	24511	3%	0.121%
1996	4,5	N	075			226		16377	1%	0.000%
1996	4,5	N	081			400		7583	5%	0.000%
1996	5	N	071			125		2971	4%	0.000%
1996	5	N	072			12		2011	1%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1996	5	N	073			215	1	4616	5%	0.465%
1996	5	N	074			1453		5813	25%	0.000%
1996	5	N	075			39		1915	2%	0.000%
1996	5	N	081			494		1854	27%	0.000%
1996	5	N	082			230		413	56%	0.000%
1996	6	N	073	2041	5	2071		2062		0.123%
1996	6	N	074	3877	17	4637	5	17112	27%	0.273%
1996	6	N	075	338	1	338		1804	19%	0.148%
1996	6	N	081	349	5	555		4963	11%	0.716%
1996	6	N	082	241	2	509		1552	33%	0.415%
1996	6	N	084	1209	6	1209		1905	63%	0.248%
1996	7	N	082	4889		6533	4	6463		0.031%
1996	7	N	083	5172	1	4950	3	6253	83%	0.040%
1996	7	N	084	3398	2	3398		12144	28%	0.029%
1996	7	N	091	1067	1	1100		11052	10%	0.047%
1996	7	N	092	5764	35	5764		17864	32%	0.304%
1996	7	N	093	311	1	311		2761	11%	0.161%
1996	7	N	094	1487	3	2026		7455	27%	0.101%
1996	8	N	062	9		9		22	41%	0.000%
1996	8	N	063	55		55		200	28%	0.000%
1996	8	N	064	355	3	355		743	48%	0.423%
1996	8	N	071	933	9	933		5178	18%	0.482%
1996	8	N	072	4801	38	4801	5	24420	20%	0.448%
1996	8	N	073	9997	44	9997	3	35868	28%	0.235%
1996	8	N	074	5316	27	4410		39396	13%	0.254%
1996	8	N	075	12138	32	12538	3	46448	27%	0.144%
1996	8	N	081	24608	54	26097	2	54564	48%	0.114%
1996	8	N	082	1637	10	2444	4	25922	9%	0.387%
1996	8	N	083	4284	10	4284		17534	24%	0.117%
1996	8	N	084	2593	4	2593	3	17568	15%	0.135%
1996	8	N	091	693	6	693		7991	9%	0.433%
1996	10	N	071			33		847	4%	0.000%
1996	12	N	074			2		2	100%	0.000%
1996	12	N	075			11		12	92%	0.000%
1996	12	N	081			346	2	646	54%	0.578%
1996	12	N	082			1249	12	3040	41%	0.961%
1996	12	N	094	8067	12	9223	6	28914	32%	0.107%
1996	12	N	103	7704	27	7704	2	14571	53%	0.188%
1996	13	N	082			38		510	7%	0.000%
1996	13	N	094	7644	10	7644	2	34410	22%	0.079%
1996	20	N	082			82	5	384	21%	6.098%
1996	21	N	093	3873	16	3873		6616	59%	0.207%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1996	21	N	094	5251	9	5251		5054		0.086%
1996	21	N	101	2099	7	2099		5509	38%	0.167%
1996	21	N	102	21737	78	21737	7	28266	77%	0.196%
1996	21	N	103	1989	12	1989	2	17924	11%	0.352%
1996	21	N	104	39539	216	39539	5	93135	42%	0.280%
1996	21	N	105	82286	380	82292		146710	56%	0.231%
1996	21	N	111	28332	92	28242		38933	73%	0.162%
1996	29	N	082			5		96	5%	0.000%
1996	29	N	094			20		441	5%	0.000%
1996	29	N	101			78		1279	6%	0.000%
1996	29	N	102			55		869	6%	0.000%
1996	29	N	103			95		1442	7%	0.000%
1996	29	N	104			54		2283	2%	0.000%
1996	29	N	105			393		3151	12%	0.000%
1996	29	N	111			81		818	10%	0.000%
1997	1	N	072			1377	5	2868	48%	0.363%
1997	1	N	073			7673	18	10962	70%	0.235%
1997	1	N	074			16715	11	18521	90%	0.066%
1997	1	N	075			9650	9	13691	70%	0.093%
1997	1	N	081			171		N/A	N/A	0.000%
1997	1	N	101			30				0.000%
1997	2E	N	084	293	5	293		540	54%	0.853%
1997	2E	N	091	611	15	823		1785	46%	1.228%
1997	2E	N	092	955	6	955		1555	61%	0.314%
1997	2E	N	093	2518	12	2524		4637	54%	0.238%
1997	2E	N	094	3526	26	3526		6260	56%	0.369%
1997	2E	N	101	11863	257	12004		35142	34%	1.083%
1997	2W	N	083			684		1236	55%	0.000%
1997	3	N	062			10		23	43%	0.000%
1997	3	N	063			39		206	19%	0.000%
1997	3	N	064			1		1085	0%	0.000%
1997	3	N	071			884	2	8786	10%	0.226%
1997	3	N	072			1371	4	12431	11%	0.292%
1997	3	N	073			15175	37	33225	46%	0.244%
1997	3	N	074			13945	51	36230	38%	0.366%
1997	3	N	075			6703	17	17193	39%	0.254%
1997	3	N	081			6281	5	8533	74%	0.080%
1997	3	N	082			1419		1675	85%	0.000%
1997	3,4	N	071			3149	5	18966	17%	0.159%
1997	3,4	N	072			9785	13	31812	31%	0.133%
1997	3,4,5	N	071			669		19512	3%	0.000%
1997	3,4,5	N	072			1688	3	33988	5%	0.178%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1997	3,5	N	072			245		14607	2%	0.000%
1997	4	N	064			106		675	16%	0.000%
1997	4	N	071			5140	10	10180	50%	0.195%
1997	4	N	072			4255	4	19381	22%	0.094%
1997	4	N	073			2720	10	14214	19%	0.368%
1997	4	N	074			3804	3	7152	53%	0.079%
1997	4	N	075			1545	1	6224	25%	0.065%
1997	4	N	081			86		1925	4%	0.000%
1997	4	N	082			45		1279	4%	0.000%
1997	4,5	N	071			108	1	10726	1%	0.926%
1997	4,5	N	072			358		21557	2%	0.000%
1997	5	N	071			28		546	5%	0.000%
1997	5	N	074			408		881	46%	0.000%
1997	6	N	075	660	12	660		N/A	N/A	0.909%
1997	6	N	082	1622	11	2769		4531	61%	0.339%
1997	6	N	083	37	1	1531		4265	36%	1.351%
1997	6	N	084			879		1320	67%	0.000%
1997	6,7	N	083	1308	9	1308		12990	10%	0.344%
1997	7	N	083	6120	16	7348		8725	84%	0.131%
1997	7	N	084	2492	25	3079		6533	47%	0.502%
1997	7	N	091	2500	13	2733		9522	29%	0.260%
1997	7	N	093	6447	56	6447	1	8525	76%	0.442%
1997	7	N	094	3980	24	3980		10135	39%	0.302%
1997	7	N	101	6246	615	6246		12093	52%	4.923%
1997	8	N	071			24		2723	1%	0.000%
1997	8	N	072	403	3	403		1854	22%	0.372%
1997	8	N	073	2574	34	2809	1	7994	35%	0.678%
1997	8	N	074	8206	84	8206	5	16745	49%	0.542%
1997	8	N	075	18432	194	17785	3	39795	46%	0.535%
1997	8	N	081	12964	95	12622	1	45919	28%	0.370%
1997	8	N	082	23073	149	26791	6	59876	45%	0.334%
1997	8	N	083	14070	52	12842		41080	34%	0.185%
1997	8	N	084	9882	52	10211	1	11439	89%	0.268%
1997	8	N	091	462	2	462		7209	6%	0.217%
1997	11	N	075			12		18	67%	0.000%
1997	11	N	081			42		284	15%	0.000%
1997	11	N	082			104		377	28%	0.000%
1997	11	N	083			24	1	63	38%	4.167%
1997	12	N	073			1		N/A	N/A	0.000%
1997	12	N	074			1		50	2%	0.000%
1997	12	N	075			397	9	1256	32%	2.267%
1997	12	N	081			1412	8	2848	50%	0.567%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1997	12	N	082			1244	19	4795	26%	1.527%
1997	12	N	083			859	16	2475	35%	1.863%
1997	12	N	084			513	6	2089	25%	1.170%
1997	12	N	091			1562	13	4522	35%	0.832%
1997	12	N	092			1347	4	3274	41%	0.297%
1997	12	N	093			4319	13	8786	49%	0.301%
1997	12	N	094	8418	30	8418	5	20626	41%	0.208%
1997	12	N	103	9684	50	9684	11	N/A	N/A	0.315%
1997	13	N	075			80	2	191	42%	2.500%
1997	13	N	081			58	1	204	28%	1.724%
1997	13	N	082			153	1	710	22%	0.654%
1997	13	N	083			122	1	503	24%	0.820%
1997	13	N	084			193	6	1459	13%	3.109%
1997	13	N	091			498	4	1158	43%	0.803%
1997	13	N	092			432	2	1528	28%	0.463%
1997	13	N	093			3447	9	5906	58%	0.261%
1997	13	N	094	12889	43	12889	10	14856	87%	0.206%
1997	16	N	091			26		154	17%	0.000%
1997	16	N	092			5		44	11%	0.000%
1997	16	N	093			8		12	67%	0.000%
1997	20	N	082			73	1	95	77%	1.370%
1997	20	N	083			56		96	58%	0.000%
1997	20	N	084			122		168	73%	0.000%
1997	21	N	094	212	4	212	1	1042	20%	1.179%
1997	21	N	102	15531	156	15531	5	61965	25%	0.518%
1997	21	N	103	24296	132	24296	1	93394	26%	0.274%
1997	21	N	104	150459	804	154601	6	733225	21%	0.269%
1997	21	N	105	28051	193	28051		118184	24%	0.344%
1997	21	N	111	8125	95	8125	1	36487	22%	0.591%
1997	23	N	071			2		N/A	N/A	0.000%
1997	25	N	101	3823	29	3823		9870	39%	0.379%
1997	25	N	102	2332	20	2332	2	22527	10%	0.472%
1997	25	N	103	7430	68	7434	2	26511	28%	0.471%
1997	25	N	104	9052	82	9052	2	24202	37%	0.464%
1997	25	N	105	2497	30	2497	1	5360	47%	0.621%
1997	29	N	072			1				0.000%
1997	29	N	082			2		124	2%	0.000%
1997	29	N	083			1		N/A	N/A	0.000%
1997	29	N	084			10		13	77%	0.000%
1997	29	N	091			19		33	58%	0.000%
1997	29	N	092			1		N/A	N/A	0.000%
1997	29	N	093			15		N/A	N/A	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1997	29	N	094			64		N/A	N/A	0.000%
1997	29	N	101			66		N/A	N/A	0.000%
1997	29	N	102			5		N/A	N/A	0.000%
1997	29	N	111	5496	17	5496	15	13091	42%	0.291%
1998	1	N	084			145		N/A	N/A	0.000%
1998	1	N	094	111	1	111		N/A	N/A	0.451%
1998	1	N	101	99		99		N/A	N/A	0.000%
1998	1	N	102			533		N/A	N/A	0.000%
1998	2E	N	084			94	1	488	19%	1.064%
1998	2E	N	092	2881	30	2881		6146	47%	0.521%
1998	2E	N	093	6050	52	6050		20556	29%	0.430%
1998	2E	N	094	10326	53	10326		22366	46%	0.257%
1998	2E	N	101	2366	20	2366		7914	30%	0.423%
1998	2E	N	102	15445	169	14985	1	24809	62%	0.550%
1998	2W	N	083			485	1	8875	5%	0.206%
1998	2W	N	084			921		5256	18%	0.000%
1998	3	N	063			121		685	18%	0.000%
1998	3	N	064			2171	1	8847	25%	0.046%
1998	3	N	071			2521	2	12429	20%	0.079%
1998	3	N	072			1554	3	16462	9%	0.193%
1998	3	N	073			5546	15	21346	26%	0.271%
1998	3	N	074			10591	7	26763	40%	0.066%
1998	3	N	075			17029	15	64267	26%	0.088%
1998	3	N	081			18082	14	43929	41%	0.077%
1998	3	N	082			14623	8	37768	39%	0.055%
1998	3	N	083			9081	2	10888	83%	0.022%
1998	3	N	084			2217		5333	42%	0.000%
1998	3,4	N	071			3903	11	15425	25%	0.282%
1998	3,4	N	072			2887	7	24983	12%	0.243%
1998	4	N	071			163		2996	5%	0.000%
1998	4	N	072			964	2	8521	11%	0.208%
1998	4	N	073			1729	1	4835	36%	0.058%
1998	4	N	074			486		1079	45%	0.000%
1998	6	N	072	1492	9	1492		15209	10%	0.302%
1998	6	N	073	9841	41	9160	1	46674	21%	0.214%
1998	6	N	074	17583	53	14376		80955	22%	0.151%
1998	6	N	075	18178	78	18178		105910	17%	0.215%
1998	6	N	081	1916	1	1916		26225	7%	0.026%
1998	6	N	082	10313	15	10313	1	98246	10%	0.078%
1998	6	N	083	6901	22	6901	2	50982	14%	0.174%
1998	7	N	083	1693	23	1693		13065	13%	0.679%
1998	7	N	091	5830	32	5830		11802	49%	0.274%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1998	7	N	092	10631	64	10631	3	43449	24%	0.315%
1998	7	N	093	3126	30	3126		27822	11%	0.480%
1998	8	N	062			1		N/A	N/A	0.000%
1998	8	N	063			2		23	9%	0.000%
1998	8	N	064			34		56	61%	0.000%
1998	8	N	071	482	7	482		1519	32%	0.726%
1998	8	N	072	1015	15	1015	1	6901	15%	0.788%
1998	8	N	073	2190	13	1945		8725	25%	0.297%
1998	8	N	074	24901	170	17758	2	73112	34%	0.347%
1998	8	N	075	24086	131	23046	3	111166	22%	0.279%
1998	8	N	081	27045	77	28203	2	84612	33%	0.146%
1998	8	N	082	56809	255	56859	2	153630	37%	0.226%
1998	8	N	083	33144	121	31914	2	117212	28%	0.186%
1998	8	N	084	29517	97	29517	2	79095	37%	0.168%
1998	8	N	091	2417	6	2417		5365	45%	0.124%
1998	12	N	075			262	2	661	40%	0.763%
1998	12	N	081			504	1	762	66%	0.198%
1998	12	N	102	4669	8	4669	8	13827	34%	0.171%
1998	12	N	103	30251	65	30657	15	185770	17%	0.132%
1998	12	N	104	63708	270	63122	65	228580	28%	0.263%
1998	12	N	105	9254	25	9254	12	13086	71%	0.200%
1998	12	N	111	17179	78	17179	13	60427	28%	0.265%
1998	12	N	112	2324	18	2324	2	20684	11%	0.430%
1998	12	N	114	8595	59	8595	1	14443	60%	0.349%
1998	13	N	075			6		51	12%	0.000%
1998	13	N	081			140		216	65%	0.000%
1998	13	N	102	5449	19	5449	2	16921	32%	0.193%
1998	13	N	103	109757	243	111670	116	449371	25%	0.163%
1998	13	N	104	59291	237	59291	70	154289	38%	0.259%
1998	13	N	105	75		479		N/A	N/A	0.000%
1998	13	N	111	76771	432	76761	68	245638	31%	0.326%
1998	13	N	112	8668	73	8668	9	28097	31%	0.473%
1998	14	N	104	7488	19	7746	7	12943	60%	0.172%
1998	14	N	105	7936	25	8036	9	10363	78%	0.214%
1998	14	N	111	79378	495	80054	10	246226	33%	0.318%
1998	14	N	112	65614	532	65614	19	278052	24%	0.420%
1998	14	N	113	6596	37	6596		15033	44%	0.281%
1998	21	N	101	6253	53	6253		12241	51%	0.424%
1998	21	N	102	26040	196	26040		72141	36%	0.376%
1998	21	N	103	74686	420	74686	5	345973	22%	0.285%
1998	21	N	104	49654	300	42675	3	148027	34%	0.306%
1998	21	N	105	38381	264	38381	5	114540	34%	0.350%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1998	25	N	101	6211	71	6211		10570	59%	0.572%
1998	25	N	102	35490	193	35488	1	59183	60%	0.273%
1998	25	N	103	7360	23	6554		8528	86%	0.156%
1998	25	N	104	16231	136	15878	1	23441	69%	0.422%
1998	29	N	112	4033	32	4033	11	6397	63%	0.533%
1998	29	N	113	363	2	363	2	493	74%	0.551%
1999	2E	N	091			476		N/A	N/A	0.000%
1999	2E	N	092	367	6	367		5289	7%	0.817%
1999	2E	N	093	3689	24	3693		11193	33%	0.325%
1999	2E	N	094	8362	34	8362		28176	30%	0.203%
1999	2E	N	101	5630	18	5630		52854	11%	0.160%
1999	2E	N	102	2507	9	2507		15285	16%	0.180%
1999	2E	N	103			1600		14027	11%	0.000%
1999	2W	N	093	5618	4	5618		34502	16%	0.036%
1999	2W	N	094	7099	3	7099		35609	20%	0.021%
1999	2W	N	101	3025	4	3025		N/A	N/A	0.066%
1999	2W	N	102	2014		2014		N/A	N/A	0.000%
1999	3	N	063			83		132	63%	0.000%
1999	3	N	064			143		193	74%	0.000%
1999	3	N	071			1568	1	2306	68%	0.064%
1999	3	N	072			1827		4870	38%	0.000%
1999	3	N	073			10820	10	19422	56%	0.092%
1999	3	N	074	184		15289	20	35898	43%	0.065%
1999	3	N	075	1271	7	11759	7	21489	55%	0.305%
1999	3	N	081			5830	6	13585	43%	0.103%
1999	3	N	082			5999		20971	29%	0.000%
1999	3	N	083	147		6291	5	15538	40%	0.040%
1999	3	N	084			5131	3	9765	53%	0.059%
1999	4	N	083			2		N/A	N/A	0.000%
1999	5	N	082			1				0.000%
1999	6	N	064	35		35		269	13%	0.000%
1999	6	N	073	1739	7	1739		15558	11%	0.201%
1999	6	N	074	3321	12	3321	1	10490	32%	0.196%
1999	6	N	075	679	2	679		4988	14%	0.147%
1999	7	N	082	4399	47	4399		14311	31%	0.534%
1999	7	N	083	1915	13	1915	5	3754	51%	0.470%
1999	7	N	092	5129	50	4939	91	17180	30%	1.409%
1999	7	N	093	3727	25	3727	12	24149	15%	0.496%
1999	7	N	094	4662	13	4662	3	20258	23%	0.172%
1999	8	N	064	36	1	36		123	29%	1.389%
1999	8	N	071	1		1		1387	0%	0.000%
1999	8	N	072	1711	13	1711		7471	23%	0.380%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1999	8	N	073	6277	22	6277		15141	41%	0.175%
1999	8	N	074	10492	72	10492		24743	42%	0.343%
1999	8	N	075	24505	132	24505	3	51673	47%	0.276%
1999	8	N	081	20811	145	20811	6	38035	55%	0.363%
1999	8	N	082	7100	47	7100	3	19670	36%	0.352%
1999	8	N	083	5144	34	5144	6	10484	49%	0.389%
1999	8	N	084	6699	84	6699	10	11158	60%	0.702%
1999	12	N	075	2		66	1	150	44%	0.758%
1999	12	N	082			57				0.000%
1999	12	N	102	831	6	831		949	88%	0.361%
1999	12	N	103	5906	38	5906	1	21163	28%	0.330%
1999	12	N	104	3331	21	3331	7	10770	31%	0.420%
1999	12	N	105	192	3	192		922	21%	0.781%
1999	21	N	101	1991	13	1991		6737	30%	0.327%
1999	21	N	102	12898	98	12898		26732	48%	0.380%
1999	21	N	103	6329	35	6329	2	43507	15%	0.292%
1999	21	N	104	9773	64	9773		19903	49%	0.327%
1999	25	N	094	2263	37	2263		8806	26%	0.818%
1999	25	N	101	4416	54	4416	1	13839	32%	0.623%
1999	25	N	102	9399	78	9399	2	29143	32%	0.426%
1999	25	N	103	8634	51	8634		31553	27%	0.295%
1999	25	N	104	1689	11	1689		19039	9%	0.326%
1999	25	N	105	743	1	1083		1834	59%	0.067%
1999	29	N	093			1		N/A	N/A	0.000%
1999	29	N	111	3744	7	4783	12	29847	16%	0.219%
1999	29	N	112			224		N/A	N/A	0.000%
1999	29	N	113			112		N/A	N/A	0.000%
2000	1	N	071			159		242	66%	0.000%
2000	2E	N	084	915		915				0.000%
2000	2E	N	091	3896	35	3896		14271	27%	0.449%
2000	2E	N	092	4208	31	4208		21304	20%	0.368%
2000	2E	N	093	2283	6	2283				0.131%
2000	2E	N	094	3342	13	3342		11949	28%	0.195%
2000	2E	N	103			1151		3558	32%	0.000%
2000	2E	N	104			6021		17643	34%	0.000%
2000	2W	N	084	7518	7	7518		30513	25%	0.047%
2000	3	N	063			36		63	57%	0.000%
2000	3	N	064			200		388	52%	0.000%
2000	3	N	071			264		2172	12%	0.000%
2000	3	N	072			825		6890	12%	0.000%
2000	3	N	073			10671	24	22561	47%	0.225%
2000	3	N	074			4485	11	11049	41%	0.245%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2000	3	N	075			3829	11	8447	45%	0.287%
2000	3	N	081			5799	2	14130	41%	0.035%
2000	3	N	082			1915		4529	42%	0.000%
2000	3	N	083			231		2015	11%	0.000%
2000	3,4	N	072			1020	6	12008	8%	0.588%
2000	3,4	N	073			6053	13	31407	19%	0.215%
2000	3,4	N	074			3011	4	16882	18%	0.133%
2000	3,4	N	075			456	1	12310	4%	0.219%
2000	3,4	N	081			1832	1	15388	12%	0.055%
2000	3,4,5	N	072			456	2	12740	4%	0.439%
2000	3,4,5	N	073			1661	5	32947	5%	0.301%
2000	3,4,5	N	074			910		19882	5%	0.000%
2000	3,5	N	074			721	4	14049	5%	0.555%
2000	4	N	071			914	4	3826	24%	0.438%
2000	4	N	072			1775	7	5118	35%	0.394%
2000	4	N	073	58		1789	2	8846	20%	0.056%
2000	4	N	074			1717	3	5833	29%	0.175%
2000	4	N	075			846		3863	22%	0.000%
2000	4	N	081			1301		1258		0.000%
2000	4	N	082			94		808	12%	0.000%
2000	4,5	N	072			198		5850	3%	0.000%
2000	4,5	N	074			2436	5	8833	28%	0.205%
2000	5	N	071			49		480	10%	0.000%
2000	5	N	072			192	1	732	26%	0.521%
2000	5	N	073			80		1540	5%	0.000%
2000	5	N	074			60		3000	2%	0.000%
2000	6	N	073	591		591				0.000%
2000	6	N	074	651	2	651				0.154%
2000	6	N	075	2832	25	2832		10048	28%	0.441%
2000	6	N	081	73		73		1369	5%	0.000%
2000	6	N	082	62		62		753	8%	0.000%
2000	6	N	083	33		83		679	12%	0.000%
2000	6	N	084	29		35		1783	2%	0.000%
2000	6	N	091	1		1		378	0%	0.000%
2000	7	N	092	5688	14	5688	136	18191	31%	1.319%
2000	7	N	093	4678	11	4852	30	9042	54%	0.427%
2000	8	N	063	2		2		N/A	N/A	0.000%
2000	8	N	064	16		38		42	90%	0.000%
2000	8	N	071	101	1	101		257	39%	0.495%
2000	8	N	072	543	11	543		968	56%	1.013%
2000	8	N	073	585	10	585		1117	52%	0.855%
2000	8	N	074	1941	63	1941		7363	26%	1.623%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2000	8	N	075	2270	43	2379		3618	66%	0.947%
2000	8	N	081	3052	43	3143		5553	57%	0.705%
2000	8	N	082	4043	42	4029	1	14630	28%	0.532%
2000	8	N	083	5329	13	5329	5	7731	69%	0.169%
2000	8	N	084	1126	5	1126		5746	20%	0.222%
2000	11	N	082	93						0.000%
2000	11	N	082			93				0.000%
2000	12	N	074	1		1		N/A	N/A	0.000%
2000	12	N	075	1		2		N/A	N/A	0.000%
2000	12	N	081	70		123	4	433	28%	1.626%
2000	12	N	082	1593	4	1718	8	2962	58%	0.358%
2000	12	N	083	416	2	626	1	1627	38%	0.320%
2000	12	N	084	285	1	412		1093	38%	0.175%
2000	12	N	101	3519	10			N/A	N/A	0.284%
2000	12	N	102	12382	21	16998	76	93748	18%	0.308%
2000	12	N	103	710	7	710		8089	9%	0.493%
2000	13	N	082	375		375	4	870	43%	0.533%
2000	13	N	083	64		84	1	116	72%	0.595%
2000	13	N	084	415	2	415	1	945	44%	0.361%
2000	13	N	101	1249						0.000%
2000	13	N	102	6396	9	8659	26	59512	15%	0.221%
2000	13	N	105			1231				0.000%
2000	21	N	102	1419	5	1419		3971	36%	0.176%
2000	23	N	064	1		1		N/A	N/A	0.000%
2000	25	N	101	1443	11	1443		3131	46%	0.381%
2000	25	N	102	2268	7	2268		4743	48%	0.154%
2000	25	N	103	10248	104	10248	2	12592	81%	0.517%
2000	25	N	104	2945	11	2945		5449	54%	0.187%
2000	25	N	105			430		1259	34%	0.000%
2000	29	N	075	1		1		N/A	N/A	0.000%
2000	29	N	082	2		2		N/A	N/A	0.000%
2000	29	N	084	5		5		30	17%	0.000%
2000	29	N	111			1671	4	4258	39%	0.239%
2001	2E	N	091	1220	6	1220				0.246%
2001	2E	N	094	2055	9			N/A	N/A	0.438%
2001	2E	N	102	9065	2	8363		25312	36%	0.011%
2001	2E	N	103	2523		2523		10254	25%	0.000%
2001	3	N	062			164		404	41%	0.000%
2001	3	N	063			294		576	51%	0.000%
2001	3	N	064			2534	3	5440	47%	0.118%
2001	3	N	071			853		2365	36%	0.000%
2001	3	N	072			355		1297	27%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2001	3	N	073			3556	1	6268	57%	0.028%
2001	3	N	074			6530	15	8319	78%	0.230%
2001	3	N	075			5460	7	10393	53%	0.128%
2001	3	N	081			449		513	88%	0.000%
2001	3	N	082	2		61		N/A	N/A	0.000%
2001	4	N	063			3		3	100%	0.000%
2001	4	N	071			673	2	1730	39%	0.297%
2001	4	N	072			3273		6158	53%	0.000%
2001	4	N	073			2224		4359	51%	0.000%
2001	4	N	074			2428	6	3372	72%	0.247%
2001	4	N	075			1232	2	5900	21%	0.162%
2001	4	N	081			155		650	24%	0.000%
2001	4	N	082	20		29		37	78%	0.000%
2001	5	N	073			745	1	2226	33%	0.134%
2001	5	N	074			241		473	51%	0.000%
2001	5	N	082	3		3				0.000%
2001	5	N	083			8				0.000%
2001	6	N	064	299		299		1777	17%	0.000%
2001	6	N	072	378		762	2	2296	33%	0.131%
2001	6	N	073	1992	9	2630		18508	14%	0.226%
2001	6	N	074	769	3	769		6747	11%	0.195%
2001	6	N	075	2179	18	1793		11577	19%	0.413%
2001	6	N	081	3332	24	3332		11883	28%	0.360%
2001	6	N	082	89		91		N/A	N/A	0.000%
2001	6	N	083	44		44		N/A	N/A	0.000%
2001	6	N	084	3		3				0.000%
2001	7	N	082	830	2	830	5	5396	15%	0.422%
2001	7	N	083	2102		2102	50	23777	9%	1.189%
2001	7	N	084	4529	16	2861	188	32211	14%	3.462%
2001	7	N	092	8717	17	8604	6	33367	26%	0.132%
2001	7	N	093	9711	26	9435	5	39124	25%	0.160%
2001	7	N	094	988	2	988		8975	11%	0.101%
2001	7	N	103	878	4	878	1	6681	13%	0.285%
2001	7,8	N	084	7644	30	7644	73	50975	15%	0.674%
2001	8	N	061			2		N/A	N/A	0.000%
2001	8	N	062	39		39		47	83%	0.000%
2001	8	N	063	70		70		179	39%	0.000%
2001	8	N	064	592	5	592		934	63%	0.422%
2001	8	N	071	2060	43	2060		5054	41%	1.044%
2001	8	N	072	4849	107	4849		10470	46%	1.103%
2001	8	N	073	16529	317	209		47170	35%	0.959%
2001	8	N	074	12792	332			31700	40%	2.595%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2001	8	N	075	19776	296	1327		40728	49%	0.748%
2001	8	N	081	22924	257	4871		49343	46%	0.561%
2001	8	N	082	17748	74	9865	5	51342	35%	0.234%
2001	8	N	083	13271	42	11092	37	48424	27%	0.325%
2001	8	N	084	1420	1	830	2	18764	8%	0.156%
2001	11	N	075	91		91	2	337	27%	1.099%
2001	12	N	075	352		352		978	36%	0.000%
2001	12	N	081	82		82		408	20%	0.000%
2001	12	N	082	29		29		51	57%	0.000%
2001	12	N	091	107		107	1	913	12%	0.467%
2001	12	N	101	18541	82	19803	18	94934	21%	0.267%
2001	12	N	102	1175	8			6843	17%	0.681%
2001	12,13	N	081	300		300	2	580	52%	0.333%
2001	13	N	075	2		2		195	1%	0.000%
2001	13	N	091	40		40		301	13%	0.000%
2001	13	N	101	11024	17	11024	10	69382	16%	0.123%
2001	13	N	102	5251	23	1978	3	761		0.295%
2001	14	N	104	12421	72	493		16654	75%	0.290%
2001	14	N	105	8582	74	4543	6	17098	50%	0.497%
2001	14	N	111	5869	67	158		13483	44%	0.571%
2001	14	N	112	1267	13	196		1578	80%	0.513%
2001	14	N	113	1149	8			1052		0.696%
2001	17	N	111	126		126		617	20%	0.000%
2001	18	N	112	4277	44			10532	41%	1.029%
2001	18	N	113	1403	6	583		3765	37%	0.214%
2001	20	N	081	77		77	24	26		15.584%
2001	21	N	101	2094	6			N/A	N/A	0.287%
2001	21	N	102	3810	18	3213		11281	34%	0.236%
2001	21	N	103	16366	115			39391	42%	0.703%
2001	21	N	104	31525	207	23891		99809	32%	0.328%
2001	21	N	105	5486	53	1658		12699	43%	0.483%
2001	25	N	094	6519	82	6226		8648	75%	0.629%
2001	25	N	101	1234	17			6610	19%	1.378%
2001	25	N	102	20431	205	14565	1	20562	99%	0.505%
2001	25	N	103	5580	57	984		31338	18%	0.511%
2001	25	N	104	989	14	351		2053	48%	0.708%
2001	29	N	103	2383	5	2021	1	5628	42%	0.130%
2001	29	N	104	4998	15	2356	1	11671	43%	0.171%
2001	29	N	111	5974	30	5707		19890	30%	0.251%
2001	29	N	112	772	3	772	1	3364	23%	0.259%
2002	2E	N	092	1401	1			430		0.071%
2002	2W	N	091	1196		1196		N/A	N/A	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2002	2W	N	094	2611	7			39004	7%	0.268%
2002	3	N	062			1		234	0%	0.000%
2002	3	N	063			117		320	37%	0.000%
2002	3	N	064			397		949	42%	0.000%
2002	3	N	071			6688		16399	41%	0.000%
2002	3	N	072			1241	1	8704	14%	0.081%
2002	3	N	073			3854	2	10109	38%	0.052%
2002	3	N	074			4901	2	11486	43%	0.041%
2002	3	N	075			1670		5012	33%	0.000%
2002	3	N	081			202		1796	11%	0.000%
2002	3	N	082			123				0.000%
2002	3	N	083			4				0.000%
2002	3,4	N	071			333	1	17152	2%	0.300%
2002	3,4	N	074			737	1	14817	5%	0.136%
2002	4	N	071			291		753	39%	0.000%
2002	4	N	072			1834		3523	52%	0.000%
2002	4	N	073	34		1157		5749	20%	0.000%
2002	4	N	074			644		3331	19%	0.000%
2002	4	N	075			624		1480	42%	0.000%
2002	4	N	081			231		689	34%	0.000%
2002	4	N	082			2		N/A	N/A	0.000%
2002	4	N	083			5		N/A	N/A	0.000%
2002	5	N	073			285		298	96%	0.000%
2002	5	N	082			16				0.000%
2002	5	N	083			9				0.000%
2002	6	N	072	1323	6	1323		6395	21%	0.227%
2002	6	N	073	2448	9	991		5403	45%	0.184%
2002	6	N	074	13050	35	13214		56872	23%	0.134%
2002	6	N	075	6674	20	6674		43203	15%	0.150%
2002	6	N	081	3345	13	2012		42384	8%	0.194%
2002	6	N	082	4560	14	4575		36942	12%	0.154%
2002	6	N	083	1174	2	1174		7835	15%	0.085%
2002	7	N	082	1704	4	1704		1889	90%	0.117%
2002	7	N	084	7341	18	7341	5	37627	20%	0.157%
2002	7	N	092	16526	25	16526	27	92589	18%	0.157%
2002	7	N	093	2927	1	1644		31365	9%	0.017%
2002	8	N	062	6		6		24	25%	0.000%
2002	8	N	063	31	4	31		403	8%	6.452%
2002	8	N	064	401	10	401		860	47%	1.247%
2002	8	N	072	2174	30	2174		6993	31%	0.690%
2002	8	N	073	5606	98	2822		13956	40%	0.874%
2002	8	N	074	10021	158	6095		43023	23%	0.788%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2002	8	N	075	11150	170	5471		63828	17%	0.762%
2002	8	N	081	17284	107	9908		108717	16%	0.310%
2002	8	N	082	16894	87	13160	3	67576	25%	0.269%
2002	8	N	083	9276	21	9276		43994	21%	0.113%
2002	8	N	084	1015	3	1015		27926	4%	0.148%
2002	11	N	075	360	1	360		709	51%	0.139%
2002	12	N	075	896	5	896		2454	37%	0.279%
2002	12	N	081	149	1	226		1162	19%	0.336%
2002	12	N	082	890	2	971	1	1714	57%	0.164%
2002	12	N	084	69		69		1385	5%	0.000%
2002	12	N	101	9177	21	8886	4	69067	13%	0.137%
2002	12	N	102	14121	18	14121	18	42823	33%	0.128%
2002	12	N	104	10582	27	10582	6	78126	14%	0.156%
2002	12,13	N	084	409	2	409	2	1722	24%	0.489%
2002	12,13	N	102	20199	82	9741	11	66321	30%	0.259%
2002	13	N	075	13		13		112	12%	0.000%
2002	13	N	082	44	2	43		219	20%	2.273%
2002	13	N	084	204	1	242	3	337	72%	0.865%
2002	13	N	101	10402	25	10402	1	91930	11%	0.125%
2002	13	N	102	110		110	1	23498	0%	0.455%
2002	13	N	103	9180	31	9180	2	20750	44%	0.180%
2002	13	N	104	40329	93	39010	18	181016	22%	0.138%
2002	14	N	103	15792	68	12674	13	38852	41%	0.267%
2002	14	N	104	10722	44	7381	8	43418	25%	0.259%
2002	14	N	105	11100	17	11100	3	63824	17%	0.090%
2002	20	N	075	1		1		14	7%	0.000%
2002	20	N	081	2		2		N/A	N/A	0.000%
2002	23	N	082			1				0.000%
2002	29	N	075	7		7				0.000%
2002	29	N	081	1		1				0.000%
2002	29	N	082	11		11		8		0.000%
2002	29	N	104	7300	16	4777	3	28656	25%	0.141%
2002	29	N	111	128		128		2558	5%	0.000%
2003	2E	N	093	2962	11	2962		2758		0.186%
2003	3	N	062			322		1072	30%	0.000%
2003	3	N	083			69				0.000%
2003	4	N	083			7		N/A	N/A	0.000%
2003	4,5	N	083			5		N/A	N/A	0.000%
2003	5	N	082			1				0.000%
2003	5	N	083			6				0.000%
2003	6	N	074	14726	34	13906		127419	12%	0.115%
2003	6	N	075	13433	52	10819		120090	11%	0.194%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2003	6	N	081	5524	20	5524		57707	10%	0.181%
2003	6	N	082	7820	36	5414		70678	11%	0.230%
2003	6	N	083			28		11901	0%	0.000%
2003	7	N	083	1452		1452		46281	3%	0.000%
2003	7	N	084	8518	14	8518		43649	20%	0.082%
2003	7	N	092	5949	134	5949		71354	8%	1.126%
2003	7	N	093	5562	14	5136		16350	34%	0.126%
2003	7	N	094	5316	11	1475		20504	26%	0.104%
2003	7	N	101	9541	43	4124		39511	24%	0.225%
2003	7	N	102	2302	3	2302		N/A	N/A	0.065%
2003	8	N	072	30	1	30		1531	2%	1.667%
2003	8	N	074	7026	121	3805		65720	11%	0.861%
2003	8	N	075	9659	109	5103		122074	8%	0.564%
2003	8	N	081	14481	173	7460		109123	13%	0.597%
2003	8	N	082	10823	104	7876		147355	7%	0.481%
2003	8	N	083	12338	27	8490		174383	7%	0.109%
2003	8	N	091	1234	2	1234		2694	46%	0.081%
2003	12	N	081	588		698	1	20737	3%	0.072%
2003	12	N	101	2901	14	2901		19795	15%	0.241%
2003	12	N	102	24688	60	22533	8	152418	16%	0.139%
2003	12	N	103	2603	6	2603	1	19635	13%	0.135%
2003	12	N	104	15086	44	15086	6	178241	8%	0.166%
2003	13	N	075	16		16		53	30%	0.000%
2003	13	N	081	246		246		5161	5%	0.000%
2003	13	N	101	1267	2	1052	3	11530	11%	0.222%
2003	13	N	102	17844	23	14504	4	148661	12%	0.078%
2003	13	N	103	8708	28	8489	2	37073	23%	0.173%
2003	13	N	104	52008	130	48162	21	165418	31%	0.147%
2003	13	N	105	1258	5	1258		27529	5%	0.199%
2003	14	N	103	3151	14	3151		12298	26%	0.222%
2003	14	N	104	2688	15	1243		8150	33%	0.279%
2003	14	N	105	3396	17	270		14437	24%	0.250%
2003	14	N	111	2451	11			7172	34%	0.449%
2003	25	N	094	3288	38	1886		8556	38%	0.578%
2003	25	N	101	6197	60	6197		17109	36%	0.484%
2003	25	N	102	14447	258	14447		31555	46%	0.893%
2003	25	N	103	1241	13	1241		35217	4%	0.524%
2003	29	N	081	4		15		N/A	N/A	0.000%
2003	29	N	082	2		2		N/A	N/A	0.000%
2003	29	N	105	2159	6	2159		14096	15%	0.139%
2003	29	N	111	2247	4	2247		11913	19%	0.089%
2003	29	N	112	550		550		1445	38%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2004	3	N	062			89		201	44%	0.000%
2004	3	N	063			253		577	44%	0.000%
2004	3	N	064			650		3393	19%	0.000%
2004	3	N	071			3212		10380	31%	0.000%
2004	3	N	072			1567		18230	9%	0.000%
2004	3	N	073			791		18879	4%	0.000%
2004	4	N	073			141		1696	8%	0.000%
2004	6	N	073	6		6		2174	0%	0.000%
2004	8	N	072	784	20	532		1954	40%	1.276%
2004	8	N	073	3724	39	3724		27598	13%	0.524%
2004	12	N	102	31683	60	22006	13	285493	11%	0.124%
2004	12	N	103	5313	3	470		58747	9%	0.028%
2004	12	N	104	8453	9	8453	1	127952	7%	0.059%
2004	13	N	102	32048	33	17386	9	134125	24%	0.077%
2004	13	N	103	2672	8	1149		17693	15%	0.150%
2004	13	N	104	76364	111	64763	38	215413	35%	0.102%
2004	14	N	104	7593	12	3610	1	22094	34%	0.093%
2004	14	N	105	21199	17	14143	1	38214	55%	0.044%
2004	14	N	111	5020	14	2049	1	20837	24%	0.164%
2004	14	N	112	12046	21	3187	2	17259	70%	0.119%
2004	29	N	104	5733	4	2175		38329	15%	0.035%
2004	29	N	111	10939	11	10345	13	21649	51%	0.113%
2005	8	N	073	1219	1	1219		19950	6%	0.041%
2005	8	N	074	15578	124	6372	5	73845	21%	0.437%
2005	8	N	075	12396	77	7777	4	60603	20%	0.336%
2005	8	N	081	15453	53	7795	2	43976	35%	0.184%
2005	8	N	082	7471	25	1570	1	31929	23%	0.199%
2005	8	N	083	8360	8	5651	3	27768	30%	0.074%
2005	8	N	084	3770	3	3222	1	13376	28%	0.055%
2005	12	N	102	26875	20	24530	14	161453	17%	0.066%
2005	13	N	102	30569	25	23742	19	136374	22%	0.081%
2005	13	N	103	5002		5002	4	142380	4%	0.040%
2005	13	N	104	4223	3			44419	10%	0.071%
2005	13	N	105	36730	49	28950	15	138678	26%	0.093%
2005	14	N	103	798		798	1	4248	19%	0.063%
2005	14	N	104	3589	10	2381		5542	65%	0.139%
2005	14	N	105	4221	9	3362	4	18416	23%	0.166%
2005	14	N	111	141		141	1	1824	8%	0.355%
2005	14	N	112	809	3			N/A	N/A	0.371%
2005	29	N	105	10222	4	9906	8	36864	28%	0.060%
2005	29	N	111	3500	1	2485	8	23826	15%	0.175%
2006	4	N	073			1		N/A	N/A	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2006	4	N	084			1		N/A	N/A	0.000%
2006	8	N	073	8131	91	2527		33975	24%	0.560%
2006	8	N	074	9106	102	3702		84483	11%	0.560%
2006	8	N	075	13924	92	2958		74681	19%	0.330%
2006	8	N	081	12673	86	4607		63595	20%	0.339%
2006	8	N	082	8829	9	5242		37920	23%	0.051%
2006	8	N	083	3025	10			35646	8%	0.331%
2006	8	N	084	1835	50	456		12579	15%	1.362%
2006	12	N	101	40112	41			257834	16%	0.102%
2006	12	N	103	1851				25551	7%	0.000%
2006	12	N	104	2125	5			77441	3%	0.235%
2006	12,13	N	103	2538	5			52201	5%	0.197%
2006	13	N	101	43936	48			208862	21%	0.109%
2006	13	N	102	16148	31			16593	97%	0.192%
2006	13	N	103	3112	6			26650	12%	0.193%
2006	13	N	104	25790	39			154363	17%	0.151%
2006	14	N	103	872	2			4750	18%	0.229%
2006	14	N	104	9721	7			44922	22%	0.072%
2006	14	N	105	4515	3			22101	20%	0.066%
2006	14	N	111	924				7994	12%	0.000%
2006	29	N	104	20881	57			63772	33%	0.273%
2006	29	N	105	24195	32			84003	29%	0.132%
2006	29	N	111	6001	8			20921	29%	0.133%
2007	8	N	071	535	9			2352	23%	1.682%
2007	8	N	072	7136	38			17031	42%	0.533%
2007	8	N	073	11575	72			50018	23%	0.622%
2007	8	N	074	14546	78			61765	24%	0.536%
2007	8	N	075	17249	82			62978	27%	0.475%
2007	8	N	081	11990	62			42133	28%	0.517%
2007	8	N	082	3893	18			14848	26%	0.462%
2007	12	N	101	19523	59			39425	50%	0.302%
2007	12	N	102	91				9682	1%	0.000%
2007	12	N	103	37				5300	1%	0.000%
2007	12,13	N	102	9659	19			31934	30%	0.197%
2007	12,13	N	103	6906	16			23380	30%	0.232%
2007	13	N	101	7550	9			84035	9%	0.119%
2007	13	N	102	8125	39			22252	37%	0.480%
2007	13	N	103	5253	24			18080	29%	0.457%
2007	13	N	104	45611	61			234866	19%	0.134%
2007	13	N	105	5204	21			11253	46%	0.404%
2007	14	N	104	6756	19			14518	47%	0.281%
2007	14	N	105	2589	9			5582	46%	0.348%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2007	14	N	111	2105	19			3690	57%	0.903%
2007	29	N	104	6740	21			31124	22%	0.312%
2007	29	N	105	1633				N/A	N/A	0.000%
2008	8	N	072	208				901	23%	0.000%
2008	8	N	073	544	5			2266	24%	0.919%
2008	8	N	074	220	3			6529	3%	1.364%
2008	12	N	101	14578	35			27058	54%	0.240%
2008	12	N	102	5181	10			10426	50%	0.193%
2008	12	N	103	5979	24			28075	21%	0.401%
2008	12	N	104	1695	8			43981	4%	0.472%
2008	13	N	101	2635	8			32334	8%	0.304%
2008	13	N	102	2463	5			12980	19%	0.203%
2008	13	N	103	1555	7			10922	14%	0.450%
2008	13	N	104	26913	64			112550	24%	0.238%
2008	14	N	111	389				631	62%	0.000%
2008	29	N	105	8030	11			38783	21%	0.137%
2009	8	N	072	1868	4			3737	50%	0.214%
2009	8	N	073	952	6			3435	28%	0.630%
2009	8	N	074	6034	28			9811	62%	0.464%
2009	8	N	075	3312	4			13992	24%	0.121%
2009	8	N	081	5056	7			8887	57%	0.138%
2009	12	N	101	4801	7			18318	26%	0.146%
2009	12	N	102	19295	42			116141	17%	0.218%
2009	12	N	104	7768	19			32072	24%	0.245%
2009	13	N	101	4085	10			9762	42%	0.245%
2009	13	N	102	19145	63			115697	17%	0.329%
2009	13	N	104	38714	102			147338	26%	0.264%
2009	14	N	103	9935	18			19760	50%	0.181%
2009	14	N	104	4435	11			20228	22%	0.248%
2009	14	N	105	2594	10			5805	45%	0.386%
2009	14	N	111	738	2			2846	26%	0.271%
2009	29	N	105	8172	15			43249	19%	0.184%
2010	8	N	072	263				551	48%	0.000%
2010	8	N	073	477				1021	47%	0.000%
2010	8	N	075	683				2305	30%	0.000%
2010	12	N	102	3052	9			24149	13%	0.295%
2010	12,13	N	102	9960	19			47419	21%	0.191%
2011	8	N	072	155	1			541	29%	0.645%
2011	8	N	073	957	7			2507	38%	0.732%
2011	8	N	074	1059	4			4969	21%	0.378%
2011	12	N	102	11630	19			126226	9%	0.163%
2011	12	N	103	135				30136	0%	0.000%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2011	12	N	104	12557	25			147412	9%	0.199%
2011	12	N	105	393				15095	3%	0.000%
2011	12,13	N	101	1192				17979	7%	0.000%
2011	12,13	N	103	6212	3			50159	12%	0.048%
2011	12,13	N	105	9733	6			34706	28%	0.062%
2011	13	N	102	16110	22			102031	16%	0.137%
2011	13	N	103	6914	2			20023	35%	0.029%
2011	13	N	104	64702	47			136689	47%	0.073%
2011	14	N	111	6736	4			22694	30%	0.059%
2011	14	N	112	53670	101			280372	19%	0.188%
2011	14	N	113	24634	60			147674	17%	0.244%
2011	14	N	114	1373	1			1226		0.073%
2011	29	N	111	4062	1			22993	18%	0.025%
2011	29	N	112	1246	1			13657	9%	0.080%
2012	8	N	071	289	2			996	29%	0.692%
2012	8	N	072	1200	9			6042	20%	0.750%
2012	8	N	073	4633	21			17771	26%	0.453%
2012	8	N	074	11859	76			38497	31%	0.641%
2012	8	N	075	7190	69			37482	19%	0.960%
2012	8	N	081	8702	80			42665	20%	0.919%
2012	8	N	082	2407	24			16496	15%	0.997%
2012	12	N	101	14561	80			115095	13%	0.549%
2012	12	N	102	2910	16			18845	16%	0.550%
2012	12	N	104	3280	30			7478	44%	0.915%
2012	13	N	101	26791	89			111113	24%	0.332%
2012	13	N	104	11837	33			89964	13%	0.279%
2012	14	N	105	2394	6			14058	17%	0.251%
2012	29	N	104	11133	35			66322	17%	0.314%
2013	8	N	064	348	7			525	66%	2.012%
2013	8	N	071	873	10			3881	22%	1.146%
2013	8	N	072	5896	134			19577	30%	2.273%
2013	8	N	073	11474	83			55393	21%	0.723%
2013	8	N	074	17812	299			71797	25%	1.679%
2013	8	N	075	15025	162			69071	22%	1.078%
2013	8	N	081	12378	76			64434	19%	0.614%
2013	8	N	083	7006	21			46706	15%	0.300%
2013	8	N	084	9750	19			30210	32%	0.195%
2013	12	N	101	20172	8			108094	19%	0.040%
2013	12	N	102	11293	14			44310	25%	0.124%
2013	12	N	104	9089	16			78586	12%	0.176%
2013	12	N	105	2981	9			1723		0.302%
2013	13	N	101	34659	33			144478	24%	0.095%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2013	13	N	103	10695	8			12410	86%	0.075%
2013	13	N	104	34078	56			124063	27%	0.164%
2013	14	N	111	8501	14			25781	33%	0.165%
2013	29	N	103	2950	9			6535	45%	0.305%
2013	29	N	104	14549	19			97064	15%	0.131%
2014	8	N	071	74	2			412	18%	2.703%
2014	8	N	072	463	18			2363	20%	3.888%
2014	8	N	073	1459	37			4427	33%	2.536%
2014	8	N	074	1184	33			5647	21%	2.787%
2014	8	N	075	2024	32			9448	21%	1.581%
2014	8	N	081	1200	29			5407	22%	2.417%
2014	12	N	102	7683	5			36400	21%	0.065%
2014	12	N	103	1361				33231	4%	0.000%
2014	12	N	105	3767				5017	75%	0.000%
2014	12,13	N	101	541				12681	4%	0.000%
2014	13	N	102	9705	3			25387	38%	0.031%
2014	13	N	103	5661	1			18173	31%	0.018%
2014	13	N	104	42778	24			158604	27%	0.056%
2015	7	N	082	1149	1			10376	11%	0.087%
2015	7	N	083	15854	32			100481	16%	0.202%
2015	7	N	091	37219	575			144487	26%	1.545%
2015	8	N	072	989	17			8035	12%	1.719%
2015	8	N	073	2610	17			8632	30%	0.651%
2015	8	N	074	9286	185			60763	15%	1.992%
2015	8	N	075	22779	142			112606	20%	0.623%
2015	8	N	081	23807	100			119009	20%	0.420%
2015	8	N	082	9438	47			48873	19%	0.498%
2015	8	N	083	10106	19			120063	8%	0.188%
2016	7	N	091	4904	15			30614	16%	0.306%
2016	7	N	093	2053	46			13128	16%	2.241%
2016	8	N	072	3150	37			12987	24%	1.175%
2016	8	N	073	8122	69			42392	19%	0.850%
2016	8	N	074	8618	84			50278	17%	0.975%
2016	8	N	075	18211	121			92490	20%	0.664%
2016	8	N	081	23814	57			140290	17%	0.239%
2016	8	N	082	10020	14			57585	17%	0.140%
2016	8	N	084	2747	5			13138	21%	0.182%
2016	13	N	103	8525	7			48851	17%	0.082%
2017	8	N	064	148	1			997	15%	0.676%
2017	8	N	071	1357	13			9261	15%	0.958%
2017	8	N	072	4381	50			26601	16%	1.141%
2017	8	N	073	8579	45			52858	16%	0.525%

Year	StatisticalArea	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2017	8	N	074	15243	105			76401	20%	0.689%
2017	8	N	075	11647	56			74157	16%	0.481%
2017	8	N	081	5385	16			34012	16%	0.297%
2017	8	N	082	6554	17			38961	17%	0.259%
2018	8	N	071	4685	33			29032	16%	0.704%
2018	8	N	072	783	14			27336	3%	1.788%
2018	8	N	073	6152	81			37394	16%	1.317%
2018	8	N	074	9208	95			50837	18%	1.032%
2018	8	N	075	15721	39			84563	19%	0.248%
2018	8	N	081	20460	68			90944	22%	0.332%
2018	8	N	082	22203	32			129205	17%	0.144%

Table 18 Troll Fishery Sampling Summary by Return Year, Catch Region and Week, 1990-2005

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	NWTR	T	064	11		11		117	9%	
1990	NWTR	T	071	71		97		644	15%	
1990	NWTR	T	072	181		183		703	26%	
1990	NWTR	T	073	64		64		300	21%	
1990	NWTR	T	074	110		124		1646	8%	
1990	NWTR	T	075	89	2	77		133	58%	
1990	NWTR	T	081	22		22		232	9%	
1990	NWTR	T	082	169		162		1941	8%	
1990	NWTR	T	083	40		58		826	7%	
1990	NWTR	T	084	92		90		323	28%	
1990	NWTR	T	091	21		21		380	6%	
1990	NWTR	T	092	122		122	1	227	54%	0.8%
1990	SWTR	T	064			2		7	29%	
1990	SWTR	T	071			10		69	14%	
1990	SWTR	T	072			7		208	3%	
1990	SWTR	T	073			1		36	3%	
1990	SWTR	T	082			4		106	4%	
1990	GSTR	T	084			1		16	6%	
1990	GSTR	T	091	1		6		64	9%	
1990	GSTR	T	092			1		91	1%	
1990	GSTR	T	093			2		120	2%	
1990	GSTR	T	094	1328		1328		5103	26%	
1990	NTR	T	064			13		80	16%	
1990	NTR	T	071	1		247		945	26%	
1990	NTR	T	072			218		1634	13%	
1990	NTR	T	073	2		691		3319	21%	
1990	NTR	T	074	24		221		2769	8%	
1990	NTR	T	075			323		5099	6%	
1990	NTR	T	081			288		2929	10%	
1990	NTR	T	082			216		1098	20%	
1990	NTR	T	083	33		893		7915	11%	
1990	NTR	T	084	6		483		1541	31%	
1990	NTR	T	091			131		1532	9%	
1990	NTR	T	092			480		2754	17%	
1990	NTR	T	093			61		351	17%	
1990	NTR	T	094			99		352	28%	
1990	NTR	T	101			75	1	303	25%	1.3%
1990	NWTR & CTR	T	071	2		2		1042	0%	
1990	NWTR & CTR	T	072			3		1336	0%	
1990	NWTR & SWTR	T	072			2		911	0%	
1990	NCTR	T	072	11		11		240	5%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1990	NCTR	T	073	689		673		1092	62%	
1990	NCTR	T	074	300		252		968	26%	
1990	NCTR	T	075	131	1	119		159	75%	
1990	NCTR	T	081	228		187		815	23%	
1990	NCTR	T	082	3				148		
1990	NCTR	T	083	76		1		249	0%	
1990	NCTR	T	084	73		58		115	50%	
1990	NCTR	T	091	4		4		251	2%	
1990	NCTR	T	092			8		145	6%	
1990	NCTR	T	093	3		5		124	4%	
1990	NCTR	T	094			4		96	4%	
1990	SCTR	T	064			8		35	23%	
1990	SCTR	T	071	94		34		385	9%	
1990	SCTR	T	072	51		221		393	56%	
1990	SCTR	T	073	248		185		1245	15%	
1990	SCTR	T	074	106		37		801	5%	
1990	SCTR	T	075	155		146		1340	11%	
1990	SCTR	T	081	153		147		1084	14%	
1990	SCTR	T	082	22		21		319	7%	
1990	SCTR	T	083	20		5		127	4%	
1990	SCTR	T	084	42		43		110	39%	
1990	SCTR	T	091	7		14		99	14%	
1991	NWTR	T	064			52		198	26%	
1991	NWTR	T	071	1		842		1059	80%	
1991	NWTR	T	072			116		1367	8%	
1991	NWTR	T	073	2		233		853	27%	
1991	NWTR	T	074			81		392	21%	
1991	NWTR	T	075			54		333	16%	
1991	NWTR	T	081			77		968	8%	
1991	NWTR	T	082			69	1	823	8%	1.4%
1991	NWTR	T	083			609	1	3788	16%	0.2%
1991	NWTR	T	084			3		560	1%	
1991	NWTR	T	091	23		55		664	8%	
1991	NWTR	T	092	31		32		495	6%	
1991	NWTR	T	093	244		245		301	81%	
1991	SWTR	T	071			5		40	13%	
1991	SWTR	T	072			1		25	4%	
1991	SWTR	T	073			2		32	6%	
1991	SWTR	T	074	10		12		38	32%	
1991	SWTR	T	081			3		78	4%	
1991	SWTR	T	082			22		92	24%	
1991	SWTR	T	083			32		565	6%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1991	SWTR	T	084			6		19	32%	
1991	SWTR	T	091			1		77	1%	
1991	SWTR	T	092			3		70	4%	
1991	GSTR	T	082			12		118	10%	
1991	GSTR	T	083			8		32	25%	
1991	GSTR	T	084			8		1326	1%	
1991	GSTR	T	091			15		20/2	7%	
1991	GSTR	T	092			78		408	19%	
1991	GSTR	T	093			3		875	0%	
1991	GSTR	T	094			681		13010	5%	
1991	GSTR	T	101	4362	6	8429	7	34818	24%	0.1%
1991	CTR	T	075			18				
1991	NTR	T	071			235		996	24%	
1991	NTR	T	072			393		2382	16%	
1991	NTR	T	073			344		4467	8%	
1991	NTR	T	074			404		4407	9%	
1991	NTR	T	075			498		4130	12%	
1991	NTR	T	081			498	1	8587	6%	0.2%
1991	NTR	T	082			335		708	47%	
1991	NTR	T	083			1250		7828	16%	
1991	NTR	T	084			578	2	1488	39%	0.3%
1991	NTR	T	091			478		1838	26%	
1991	NTR	T	092			685	4	1750	39%	0.6%
1991	NTR	T	093			949	3	3586	26%	0.3%
1991	NTR	T	094			112		2483	5%	
1991	NTR	T	101			89		1053	8%	
1991	NWTR & CTR	T	072			6		1752	0%	
1991	NWTR & CTR	T	075			7		3277	0%	
1991	NCTR	T	071			4		15	27%	
1991	NCTR	T	072			29		135	21%	
1991	NCTR	T	073			7		108	6%	
1991	NCTR	T	074			36		72	50%	
1991	NCTR	T	075			125		117	107%	
1991	NCTR	T	081			94		460	20%	
1991	NCTR	T	083			15		297	5%	
1991	NCTR	T	084	11	1	52		295	18%	
1991	NCTR	T	091	18		92		409	22%	
1991	NCTR	T	092			16		95	17%	
1991	NCTR	T	093			10		457	2%	
1991	SCTR	T	071			7		71	10%	
1991	SCTR	T	072			17		101	17%	
1991	SCTR	T	073			143		196	73%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1991	SCTR	T	074	13		87		117	74%	
1991	SCTR	T	075			92		244	38%	
1991	SCTR	T	081			28		55	51%	
1991	SCTR	T	082			19		35	54%	
1991	SCTR	T	083			29		139	21%	
1991	SCTR	T	084			62		282	22%	
1991	SCTR	T	091			117		180	65%	
1991	SCTR	T	092	11		45		116	39%	
1991	SCTR	T	093			21		125	17%	
1992	NWTR	T	071	56		64		311	21%	
1992	NWTR	T	072	212	1	231		1442	16%	
1992	NWTR	T	073	208	2	206		975	21%	
1992	NWTR	T	074	666	1	1249	1	4898	26%	0.1%
1992	NWTR	T	075	207		408		5109	8%	
1992	NWTR	T	081	352		354		2381	15%	
1992	NWTR	T	082	111		40		1445	3%	
1992	NWTR	T	083	52		131		533	25%	
1992	NWTR	T	084	39		54		1039	5%	
1992	NWTR	T	091	138		218		1539	14%	
1992	NWTR	T	092	281	1	191		1942	10%	
1992	NWTR	T	093	1118	1	1116		4405	25%	
1992	NWTR	T	094	2072	2	2071	3	6033	34%	0.1%
1992	NWTR	T	101	1649	4	1863	4	9126	20%	0.2%
1992	SWTR	T	071			1		10	10%	
1992	SWTR	T	072			4		72	6%	
1992	SWTR	T	073			1		64	2%	
1992	SWTR	T	074			12		266	5%	
1992	SWTR	T	081			14		160	9%	
1992	SWTR	T	083			2		126	2%	
1992	SWTR	T	091			4		381	1%	
1992	SWTR	T	094			62		221	28%	
1992	SWTR	T	101			106		125	85%	
1992	GSTR	T	071	5						
1992	GSTR	T	082	3		3		39	8%	
1992	GSTR	T	091			8		117	7%	
1992	GSTR	T	094			177		2263	8%	
1992	GSTR	T	101			2671		14739	18%	
1992	NTR	T	071			34		124	27%	
1992	NTR	T	072			247		1942	13%	
1992	NTR	T	073	1		303	1	6965	4%	0.3%
1992	NTR	T	074			282		2487	11%	
1992	NTR	T	075			297		2484	12%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1992	NTR	T	081			107	1	1979	5%	0.9%
1992	NTR	T	082			730	2	6426	11%	0.3%
1992	NTR	T	083			430	1	5157	8%	0.2%
1992	NTR	T	084			2126	1	16259	13%	0.0%
1992	NTR	T	091	11		745	1	8592	9%	0.1%
1992	NTR	T	092	14		1637	10	2319	71%	0.6%
1992	NTR	T	093			694	1	7281	10%	0.1%
1992	NTR	T	094	23		23		1365	2%	
1992	NWTR & CTR	T	072	8		8		1405	1%	
1992	NWTR & CTR	T	073	5		5		6627	0%	
1992	NWTR & CTR	T	081	12		12		5348	0%	
1992	NCTR	T	072	2				59		
1992	NCTR	T	073	23		14		137	10%	
1992	NCTR	T	074	39		53		574	9%	
1992	NCTR	T	075	119	1	134		1154	12%	
1992	NCTR	T	081	249		249		898	28%	
1992	NCTR	T	082	41		93		290	32%	
1992	NCTR	T	083	7		9		369	2%	
1992	NCTR	T	084	13		14		45	31%	
1992	NCTR	T	091	2		2		358	1%	
1992	SCTR	T	071	2	1	1		33	3%	
1992	SCTR	T	072	44		36		171	21%	
1992	SCTR	T	073	48		21		93	23%	
1992	SCTR	T	074	9		83		885	9%	
1992	SCTR	T	075	120		120		1217	10%	
1992	SCTR	T	081	97	1	97		2069	5%	
1992	SCTR	T	082	187		215		976	22%	
1992	SCTR	T	083	19		19		338	6%	
1992	SCTR	T	084	1		1		343	0%	
1992	SCTR	T	101			4				
1993	NWTR	T	072			8		40	20%	
1993	NWTR	T	073			4		28	14%	
1993	NWTR	T	074			7		83	8%	
1993	NWTR	T	075			1		390	0%	
1993	NWTR	T	081			1		52	2%	
1993	NWTR	T	082			14		573	2%	
1993	NWTR	T	083			32		771	4%	
1993	NWTR	T	084			4		176	2%	
1993	NWTR	T	091			27		679	4%	
1993	NWTR	T	092			124	1	893	14%	0.8%
1993	NWTR	T	093			231		1619	14%	
1993	NWTR	T	094			104		981	11%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	NWTR	T	101			214		811	26%	
1993	SWTR	T	082			1		64	2%	
1993	SWTR	T	084			1		18	6%	
1993	SWTR	T	092			1		69	1%	
1993	SWTR	T	093			34		144	24%	
1993	SWTR	T	094			2		95	2%	
1993	SWTR	T	101			5		95	5%	
1993	GSTR	T	091			8		39	21%	
1993	GSTR	T	094			3		467	1%	
1993	GSTR	T	101			3266	3	8322	39%	0.1%
1993	NTR	T	071			23		284	8%	
1993	NTR	T	072			2132	2	7285	29%	0.1%
1993	NTR	T	073			3386	9	26741	13%	0.3%
1993	NTR	T	074			4572	3	57334	8%	0.1%
1993	NTR	T	075			931	4	28986	3%	0.4%
1993	NTR	T	081			5346	13	55568	10%	0.2%
1993	NTR	T	082			1915	5	14539	13%	0.3%
1993	NTR	T	083			5143	9	8581	60%	0.2%
1993	NTR	T	084			2529	4	8414	30%	0.2%
1993	NTR	T	091			3338	6	20665	16%	0.2%
1993	NTR	T	092			1996	3	19186	10%	0.2%
1993	NTR	T	093			2244	10	12560	18%	0.4%
1993	NTR & CTR	T	091			7		22293	0%	
1993	NCTR	T	073			2		17	12%	
1993	NCTR	T	074			14		53	26%	
1993	NCTR	T	075			18		74	24%	
1993	NCTR	T	081			16		39	41%	
1993	NCTR	T	082			8		14	57%	
1993	NCTR	T	083			48		5	960%	
1993	NCTR	T	084			8		37	22%	
1993	NCTR	T	091			15		128	12%	
1993	NCTR	T	092			5		118	4%	
1993	NCTR	T	093			14		61	23%	
1993	SCTR	T	071			1		3	33%	
1993	SCTR	T	072			4		12	33%	
1993	SCTR	T	073			1		24	4%	
1993	SCTR	T	074			2		72	3%	
1993	SCTR	T	082			18		950	2%	
1993	SCTR	T	083			27		242	11%	
1993	SCTR	T	084			6		66	9%	
1993	SCTR	T	091			29		1500	2%	
1993	SCTR	T	092			165		1917	9%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1993	SCTR	T	093			208	1	1134	18%	0.5%
1993	SCTR	T	094			118		863	14%	
1993	SCTR	T	101			42		230	18%	
1994	NWTR	T	072			26		749	3%	
1994	NWTR	T	073			27		283	10%	
1994	NWTR	T	074			25		177	14%	
1994	NWTR	T	075			114		709	16%	
1994	NWTR	T	081			363	2	2857	13%	0.6%
1994	NWTR	T	082			589	1	2977	20%	0.2%
1994	NWTR	T	083			39		302	13%	
1994	NWTR	T	084			86		312	28%	
1994	NWTR	T	091			54		87	62%	
1994	NWTR	T	092			7		83	8%	
1994	SWTR	T	071			5		8	63%	
1994	SWTR	T	072			59		298	20%	
1994	SWTR	T	073			6		148	4%	
1994	SWTR	T	074			7		48	15%	
1994	SWTR	T	075			5		76	7%	
1994	SWTR	T	081			60		228	26%	
1994	SWTR	T	082			103		566	18%	
1994	SWTR	T	083			11		62	18%	
1994	SWTR	T	084			16		68	24%	
1994	SWTR	T	091			4		22	18%	
1994	SWTR	T	092			3		131	2%	
1994	GSTR	T	075			2		7	29%	
1994	GSTR	T	082			11		39	28%	
1994	GSTR	T	083			1		6	17%	
1994	GSTR	T	084			4		21	19%	
1994	GSTR	T	091			13		269	5%	
1994	GSTR	T	092			19		57	33%	
1994	GSTR	T	093			43		290	15%	
1994	GSTR	T	101			283	1	1649	17%	0.4%
1994	GSTR	T	102			2342	6	17339	14%	0.3%
1994	NTR	T	071			5		259	2%	
1994	NTR	T	072			703	3	1554	45%	0.4%
1994	NTR	T	073			787	2	4086	19%	0.3%
1994	NTR	T	074			1694	4	8059	21%	0.2%
1994	NTR	T	075			1788	9	13804	13%	0.5%
1994	NTR	T	081			452		5542	8%	
1994	NTR	T	082			449		2260	20%	
1994	NTR	T	083			1047	1	4069	26%	0.1%
1994	NTR	T	084			1128	1	7020	16%	0.1%

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1994	NTR	T	091			812	3	6560	12%	0.4%
1994	NTR	T	092			211	1	2236	9%	0.5%
1994	NTR	T	093			510		1220	42%	
1994	NTR & CTR	T	075			5		15381	0%	
1994	NTR & CTR	T	084			12		9539	0%	
1994	NCTR	T	072			9		24	38%	
1994	NCTR	T	073			20		273	7%	
1994	NCTR	T	074			69		91	76%	
1994	NCTR	T	075			3		1491	0%	
1994	NCTR	T	081			65		359	18%	
1994	NCTR	T	082			11		97	11%	
1994	NCTR	T	083			143	1	377	38%	0.7%
1994	NCTR	T	084			8		140	6%	
1994	NCTR	T	091			6		140	4%	
1994	NCTR	T	092			7		46	15%	
1994	NCTR	T	093			4		41	10%	
1994	NCTR	T	094			10		11	91%	
1994	SCTR	T	072			34		123	28%	
1994	SCTR	T	073			53		428	12%	
1994	SCTR	T	074			157		315	50%	
1994	SCTR	T	075			24		86	28%	
1994	SCTR	T	081			26		30	87%	
1994	SCTR	T	082			79		91	87%	
1994	SCTR	T	083			293		2713	11%	
1994	SCTR	T	084			190		2379	8%	
1994	SCTR	T	091			69		784	9%	
1994	SCTR	T	092			13		20	65%	
1994	SCTR	T	093			13		14	93%	
1994	SCTR	T	094			3		30	10%	
1995	NWTR	T	064			10		21	48%	
1995	NWTR	T	071			580	1	1833	32%	0.2%
1995	NWTR	T	072			1051		10530	10%	
1995	NWTR	T	073			1254		2236	56%	
1995	NWTR	T	074			297		712	42%	
1995	NWTR	T	075			342		1016	34%	
1995	NWTR	T	081			1445	1	5581	26%	0.1%
1995	NWTR	T	082			115		279	41%	
1995	NWTR	T	083			340		1408	24%	
1995	NWTR	T	084			1050	1	3154	33%	0.1%
1995	NWTR	T	091			333		1840	18%	
1995	SWTR	T	071			10		53	19%	
1995	SWTR	T	072			13		191	7%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1995	SWTR	T	073			4		200	2%	
1995	SWTR	T	074			25		346	7%	
1995	SWTR	T	075			8		9	89%	
1995	SWTR	T	081			91		456	20%	
1995	SWTR	T	082			3		36	8%	
1995	SWTR	T	083			42		222	19%	
1995	SWTR	T	084			11		603	2%	
1995	SWTR	T	091			7		198	4%	
1995	GSTR	T	092			58		757	8%	
1995	GSTR	T	093			56		3390	2%	
1995	GSTR	T	094			719	2	3525	20%	0.3%
1995	GSTR	T	105			1035	1	12978	8%	0.1%
1995	CTR	T	071			1				
1995	CTR	T	073			5				
1995	NTR	T	071			1747	3	3457	51%	0.2%
1995	NTR	T	072			10892	31	43905	25%	0.3%
1995	NTR	T	073			7834	14	21719	36%	0.2%
1995	NTR	T	074			2746	5	7898	35%	0.2%
1995	NTR	T	075			3806	4	18461	21%	0.1%
1995	NTR	T	081			2494	4	7436	34%	0.2%
1995	NTR	T	082			4951	7	15169	33%	0.1%
1995	NTR	T	083			2925	3	11097	26%	0.1%
1995	NTR	T	084			3875	4	24866	16%	0.1%
1995	NTR	T	091			822	1	7496	11%	0.1%
1995	NTR	T	092			4013	2	11094	36%	0.0%
1995	NTR & CTR	T	083			8		12154	0%	
1995	NCTR	T	071			35		37	95%	
1995	NCTR	T	072			12		206	6%	
1995	NCTR	T	073			134		533	25%	
1995	NCTR	T	074			23		405	6%	
1995	NCTR	T	075			47		664	7%	
1995	NCTR	T	081			237		2444	10%	
1995	NCTR	T	083			14		293	5%	
1995	NCTR	T	084			14		608	2%	
1995	NCTR	T	091			296		557	53%	
1995	NCTR	T	092			3		226	1%	
1995	SCTR	T	071			126	1	298	42%	0.8%
1995	SCTR	T	072			117		752	16%	
1995	SCTR	T	073			506		537	94%	
1995	SCTR	T	074			34		161	21%	
1995	SCTR	T	075			115		383	30%	
1995	SCTR	T	081			247		775	32%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1995	SCTR	T	083			66		764	9%	
1995	SCTR	T	084			86		973	9%	
1995	SCTR	T	091			42		917	5%	
1995	SCTR	T	092			359		1546	23%	
1995	SCTR	T	093			488		2336	21%	
1995	SCTR	T	094			698		4603	15%	
1995	SCTR	T	101			2241	1	6933	32%	0.0%
1996	NWTR	T	073			1		14	7%	
1996	NWTR	T	074			3		14	21%	
1996	NWTR	T	075			15		55	27%	
1996	NWTR	T	081			4		183	2%	
1996	NWTR	T	082			20		233	9%	
1996	NWTR	T	083			37		145	26%	
1996	NWTR	T	084			43		119	36%	
1996	NWTR	T	091			44		148	30%	
1996	NWTR	T	092			31		211	15%	
1996	NWTR	T	093			14		114	12%	
1996	NWTR	T	094			30		178	17%	
1996	NWTR	T	101			49		283	17%	
1996	SWTR	T	073			1		10	10%	
1996	SWTR	T	081			1		6	17%	
1996	SWTR	T	083			5		13	38%	
1996	SWTR	T	084			3		11	27%	
1996	SWTR	T	091			33		27	122%	
1996	SWTR	T	092			21		50	42%	
1996	SWTR	T	093			41		121	34%	
1996	SWTR	T	094			139	1	361	39%	0.7%
1996	SWTR	T	101			228		620	37%	
1996	SWTR	T	102			9		1660	1%	
1996	NTR	T	072			247		407	61%	
1996	NTR	T	073			2910	5	5394	54%	0.2%
1996	NTR	T	074			1724	3	4865	35%	0.2%
1996	NTR	T	075			1826	2	4855	38%	0.1%
1996	NTR	T	081			1082	1	4557	24%	0.1%
1996	NTR	T	082			2132	6	5055	42%	0.3%
1996	NTR	T	083			1326	2	2585	51%	0.2%
1996	NTR	T	084			1030	3	3215	32%	0.3%
1996	NTR	T	091			893	5	3651	24%	0.6%
1996	NTR	T	092			415		2982	14%	
1996	NTR	T	093			628		1803	35%	
1996	NTR	T	094			120		914	13%	
1996	NTR & CTR	T	081			7		4873	0%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1996	NCTR	T	081			5		316	2%	
1996	NCTR	T	082			65		79	82%	
1996	NCTR	T	083			41		109	38%	
1996	NCTR	T	091			18		32	56%	
1997	NWTR	T	071			20		123	16%	
1997	NWTR	T	072			2		16	13%	
1997	NWTR	T	073			17		50	34%	
1997	NWTR	T	075			1		N/A	N/A	
1997	SWTR	T	071			5		11	45%	
1997	SWTR	T	074			1		N/A	N/A	
1997	GSTR	T	072			1		3	33%	
1997	GSTR	T	075			17		20	85%	
1997	GSTR	T	081			9		21	43%	
1997	GSTR	T	082			30		61	49%	
1997	GSTR	T	083			6		85	7%	
1997	GSTR	T	091			1		10	10%	
1997	GSTR	T	092			7		65	11%	
1997	GSTR	T	093			13		45	29%	
1997	GSTR	T	094			25		390	6%	
1997	GSTR	T	101			10		161	6%	
1997	NTR	T	071			68		N/A	N/A	
1997	NTR	T	072			743	1	1013	73%	0.1%
1997	NTR	T	073			2695	13	6621	41%	0.5%
1997	NTR	T	074			5887	12	17712	33%	0.2%
1997	NTR	T	075			549		3478	16%	
1997	NTR	T	081			1274		4067	31%	
1997	NTR	T	082			929		2333	40%	
1997	NTR	T	083			289		1297	22%	
1997	NTR	T	084			604		1123	54%	
1997	NTR	T	091			610		1761	35%	
1997	NTR	T	092			4		424	1%	
1997	NTR	T	093			57		139	41%	
1997	NTR	T	094			42		98	43%	
1997	NTR	T	101			191	2	339	56%	1.0%
1997	NTR	T	102			22		N/A	N/A	
1997	NTR	T	103			4		N/A	N/A	
1997	NCTR	T	072			1				
1997	NCTR	T	074			7		33	21%	
1997	NCTR	T	075			5		6	83%	
1997	NCTR	T	081			32		N/A	N/A	
1997	NCTR	T	082			2		29	7%	
1997	NCTR	T	083			18	1	83	22%	5.6%

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1997	NCTR	T	084			77		122	63%	
1997	NCTR	T	091			8		N/A	N/A	
1997	NCTR	T	092			4		N/A	N/A	
1997	NCTR	T	093			1		1	100%	
1997	SCTR	T	074			47		N/A	N/A	
1997	SCTR	T	075			6		30	20%	
1997	SCTR	T	081			44		196	22%	
1997	SCTR	T	082			122	2	N/A	N/A	1.6%
1997	SCTR	T	083			206		748	28%	
1997	SCTR	T	084			100		532	19%	
1997	SCTR	T	091			84		348	24%	
1997	SCTR	T	092			24		240	10%	
1997	SCTR	T	093			5		78	6%	
1997	SCTR	T	094			27		76	36%	
1997	SCTR	T	101			54		191	28%	
1998	NWTR	T	045			3				
1998	NWTR	T	053			1				
1998	SWTR	T	104			2		N/A	N/A	
1998	SWTR	T	105			6		N/A	N/A	
1998	SWTR	T	112			2		N/A	N/A	
1998	GSTR	T	102			13558	33	22516	60%	0.2%
1998	GSTR	T	103			10062	20	14778	68%	0.2%
1998	GSTR	T	104			8443	19	13258	64%	0.2%
1998	GSTR	T	105			5274	4	10203	52%	0.1%
1998	GSTR	T	111			2396	5	5003	48%	0.2%
1998	GSTR	T	112			855	1	1286	66%	0.1%
1998	GSTR	T	113			326	1	1503	22%	0.3%
1998	NTR	T	072			7				
1998	NTR	T	073			282		342	82%	
1998	NTR	T	074			100		192	52%	
1998	NTR	T	075			353	1	779	45%	0.3%
1998	NTR	T	081			1220		5714	21%	
1998	NTR	T	082			91		464	20%	
1998	NTR	T	083			199		434	46%	
1998	NTR	T	084			183		737	25%	
1998	NTR	T	092			7		N/A	N/A	
1998	NTR	T	093			36		94	38%	
1998	NTR	T	094			212		299	71%	
1998	NTR	T	101			43		528	8%	
1998	NTR	T	102			42		198	21%	
1998	NCTR	T	084			40		35	114%	
1998	SCTR	T	081			152		528	29%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
1998	SCTR	T	083			53		76	70%	
1998	SCTR	T	102			2034	2	7295	28%	0.1%
1998	SCTR	T	104			439		11955	4%	
1999	NWTR	T	102			11		343	3%	
1999	NWTR	T	103			62		91	68%	
1999	NWTR	T	104			117		158	74%	
1999	SWTR	T	102			55		58	95%	
1999	SWTR	T	103			17		80	21%	
1999	SWTR	T	104			99		137	72%	
1999	GSTR	T	081			4		19	21%	
1999	NTR	T	081			5		9	56%	
1999	NTR	T	082			24		83	29%	
1999	NTR	T	083			365		644	57%	
1999	NTR	T	091			67		181	37%	
1999	NCTR	T	083			1		1	100%	
1999	SCTR	T	081			2		41	5%	
2000	NWTR	T	081			8		1	800%	
2000	NWTR	T	102			5		78	6%	
2000	NWTR	T	103			49		72	68%	
2000	SWTR	T	103			4		19	21%	
2000	GSTR	T	083			27		96	28%	
2000	NTR	T	075			98		N/A	N/A	
2000	NTR	T	081			695	2	N/A	N/A	0.3%
2000	NTR	T	083			401		656	61%	
2000	NTR	T	084			156		278	56%	
2000	NTR	T	093			6		7	86%	
2000	NTR	T	094			14		18	78%	
2000	NTR	T	101			23		27	85%	
2000	SCTR	T	082			29		67	43%	
2000	SCTR	T	083			27		93	29%	
2001	GSTR	T	074			1				
2001	GSTR	T	102			1274	1	4806	27%	0.1%
2001	GSTR	T	104			24		125	19%	
2001	NTR	T	072			58		N/A	N/A	
2001	NTR	T	073			4		1	400%	
2001	NTR	T	074			23		380	6%	
2001	NTR	T	081			97	1	180	54%	1.0%
2001	NTR	T	082			74		270	27%	
2001	NTR	T	084			59		71	83%	
2001	NTR	T	091			27		273	10%	
2001	NTR	T	092			6		13	46%	
2001	NTR	T	093			6		N/A	N/A	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2001	NTR	T	094			17		28	61%	
2001	SCTR	T	075			3		14	21%	
2001	SCTR	T	081			4		13	31%	
2001	SCTR	T	102			986		322	306%	
2002	NWTR	T	075			260		173	150%	
2002	NWTR	T	094			124		155	80%	
2002	NWTR	T	101			3		46	7%	
2002	SWTR	T	081			2		85	2%	
2002	SWTR	T	094			5		N/A	N/A	
2002	SWTR	T	102			5		53	9%	
2002	GSTR	T	081			3		N/A	N/A	
2002	GSTR	T	084			14		18	78%	
2002	GSTR	T	102			8849	9	14998	59%	0.1%
2002	GSTR	T	103			3568	4	7836	46%	0.1%
2002	GSTR	T	104			2157	2	3912	55%	0.1%
2002	NTR	T	081			19		38	50%	
2002	NTR	T	082			68		152	45%	
2002	NTR	T	084			21		38	55%	
2002	NTR	T	091			11		49	22%	
2002	NTR	T	092			5		N/A	N/A	
2002	NTR	T	093			22		285	8%	
2002	NTR	T	094			46		48	96%	
2002	NCTR	T	082			16		N/A	N/A	
2002	NCTR	T	083			1		N/A	N/A	
2002	NCTR	T	084			3		18	17%	
2002	NCTR	T	091			29		N/A	N/A	
2002	SCTR	T	082			1		6	17%	
2003	GSTR	T	075			1				
2003	GSTR	T	081			8		22	36%	
2003	GSTR	T	082			38		39	97%	
2003	GSTR	T	102			6828	4	31984	21%	0.1%
2003	GSTR	T	103			1835	1	19250	10%	0.1%
2003	GSTR	T	104			294	2	15879	2%	0.7%
2003	NTR	T	045			3		N/A	N/A	
2003	NTR	T	051			11		N/A	N/A	
2003	NTR	T	052			21		62	34%	
2003	NTR	T	064			3		N/A	N/A	
2003	NTR	T	081			3		N/A	N/A	
2003	NTR	T	082			1		N/A	N/A	
2003	NTR	T	083			5		N/A	N/A	
2003	NTR	T	084			3		N/A	N/A	
2003	GSTR & CTR	T	081			12		146	8%	

Year	catch region	Gear	Week	Fin Sample Size	Fin Observed Count	CWT Sample Size	CWT Observed Count	Catch	Sample Rate	Mark Rate
2003	NCTR	T	083			4		N/A	N/A	
2003	SCTR	T	081			6		124	5%	
2003	SCTR	T	082			34		187	18%	
2004	NTR	T	063			4		2	200%	
2004	NTR	T	071			1		N/A	N/A	
2004	GSTR & CTR	T	102			4463	4	74255	6%	0.1%
2004	GSTR & CTR	T	103			5003	1	4974	100%	0.0%
2005	GSTR	T	102			1645	2	27410	6%	0.1%
2005	GSTR	T	103			2344	1	8373	28%	0.0%
2005	GSTR & CTR	T	102			3973	4	32611	12%	0.1%

Table 19 Enhanced Contribution to Catch by Stock and Area, Return Years 1980-1989

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Big Qualicum R	1980	12,13	24,674	722,195	3.4
Big Qualicum R	1980	14	73,066	85,906	85.1
Big Qualicum R	1980	20	1,043	61,305	1.7
Big Qualicum R	1981	14	46,206	52,702	87.7
Big Qualicum R	1982	12,13	73,927	1,163,716	6.4
Big Qualicum R	1982	14	131,861	197,325	66.8
Big Qualicum R	1982	17	1,726	36,028	4.8
Big Qualicum R	1983	14	100,422	123,456	81.3
Big Qualicum R	1984	14	149,880	164,134	91.3
Big Qualicum R	1985	12,13	84,161	566,206	14.9
Big Qualicum R	1985	14	324,785	526,381	61.7
Big Qualicum R	1986	12,13	155,637	1,230,386	12.6
Big Qualicum R	1986	14	177,701	370,010	48.0
Big Qualicum R	1987	12,13	10,716	98,759	10.9
Big Qualicum R	1987	14	129,385	352,417	36.7
Big Qualicum R	1987	18,19	2,411	5,440	44.3
Big Qualicum R	1988	12,13	99,699	1,098,792	9.1
Big Qualicum R	1988	14	14,317	38,679	37.0
Big Qualicum R	1988	17,18	208	78,571	0.3
Big Qualicum R	1988	21	4,818	1,821,644	0.3
Big Qualicum R	1989	12,13	41,780	477,803	8.7
Big Qualicum R	1989	14	48,581	98,482	49.3
Big Qualicum R	1989	20	239	20,713	1.2
Big Qualicum R	1989	21	854	294,692	0.3
Blaney Cr/LWFR	1980	12,13	713	722,195	0.1
Blaney Cr/LWFR	1980	20	40	61,305	0.1
Blaney Cr/LWFR	1980	29	261	76,985	0.3
Blaney Cr/LWFR	1981	12,13	232	98,561	0.2
Blaney Cr/LWFR	1981	20	28	8,267	0.3
Blaney Cr/LWFR	1981	29	17	8,654	0.2
Blaney Cr/LWFR	1982	12,13	527	1,163,716	0.0
Blaney Cr/LWFR	1982	20	20	14,524	0.1
Blaney Cr/LWFR	1982	29	122	63,187	0.2
Blaney Cr/LWFR	1983	12,13	56	131,527	0.0
Blaney Cr/LWFR	1983	29	5	7,913	0.1
Chehalis R	1985	12,13	1,357	566,206	0.2
Chehalis R	1985	14	61	526,381	0.0
Chehalis R	1985	21	21	1,609,365	0.0
Chehalis R	1985	29	301	52,026	0.6
Chehalis R	1986	12,13	5,349	1,230,386	0.4
Chehalis R	1986	14	167	370,010	0.0
Chehalis R	1986	25,26	51	144,093	0.0

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Chehalis R	1986	29	1,003	98,736	1.0
Chehalis R	1987	12,13	363	98,759	0.4
Chehalis R	1987	14	95	352,417	0.0
Chehalis R	1987	21	27	395,413	0.0
Chehalis R	1987	29	41	10,015	0.4
Chehalis R	1988	12,13	12,264	1,098,792	1.1
Chehalis R	1988	14	620	38,679	1.6
Chehalis R	1988	17,18	26	78,571	0.0
Chehalis R	1988	21	2,021	1,821,644	0.1
Chehalis R	1988	29	3,586	86,770	4.1
Chehalis R	1989	12,13	42,318	477,803	8.9
Chehalis R	1989	20	933	20,713	4.5
Chehalis R	1989	21	3,388	294,692	1.1
Chehalis R	1989	29	3,947	24,551	16.1
Harrison R	1985	12,13	4,674	566,206	0.8
Harrison R	1985	14	59	526,381	0.0
Harrison R	1985	21	203	1,609,365	0.0
Harrison R	1985	29	829	52,026	1.6
Harrison R	1986	12,13	28,488	1,230,386	2.3
Harrison R	1986	14	1,633	370,010	0.4
Harrison R	1986	25,26	498	144,093	0.3
Harrison R	1986	29	6,274	98,736	6.4
Harrison R	1987	12,13	95	98,759	0.1
Harrison R	1987	14	432	352,417	0.1
Harrison R	1987	21	875	395,413	0.2
Harrison R	1987	29	399	10,015	4.0
Harrison R	1988	12,13	29,796	1,098,792	2.7
Harrison R	1988	17,18	909	78,571	1.2
Harrison R	1988	21	1,630	1,821,644	0.1
Harrison R	1988	29	8,556	86,770	9.9
Harrison R	1989	12,13	2,771	477,803	0.6
Harrison R	1989	29	897	24,551	3.7
Squakum Cr	1985	12,13	683	566,206	0.1
Squakum Cr	1985	14	23	526,381	0.0
Squakum Cr	1985	21	97	1,609,365	0.0
Squakum Cr	1985	29	239	52,026	0.5
Squakum Cr	1986	12,13	7,169	1,230,386	0.6
Squakum Cr	1986	14	449	370,010	0.1
Squakum Cr	1986	25,26	237	144,093	0.2
Squakum Cr	1986	29	1,041	98,736	1.1
Squakum Cr	1987	14	239	352,417	0.1
Squakum Cr	1987	21	125	395,413	0.0
Squakum Cr	1987	29	190	10,015	1.9

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Squakum Cr	1988	12,13	17,517	1,098,792	1.6
Squakum Cr	1988	14	155	38,679	0.4
Squakum Cr	1988	17,18	497	78,571	0.6
Squakum Cr	1988	21	1,115	1,821,644	0.1
Squakum Cr	1988	29	2,739	86,770	3.2
Squakum Cr	1989	12,13	2,769	477,803	0.6
Squakum Cr	1989	20	129	20,713	0.6
Squakum Cr	1989	29	83	24,551	0.3
Weaver Sp Ch	1985	12,13	792	566,206	0.1
Weaver Sp Ch	1985	14	68	526,381	0.0
Weaver Sp Ch	1985	29	191	52,026	0.4
Weaver Sp Ch	1986	12,13	2,682	1,230,386	0.2
Weaver Sp Ch	1986	14	114	370,010	0.0
Weaver Sp Ch	1986	29	767	98,736	0.8
Weaver Sp Ch	1987	12,13	25	98,759	0.0
Weaver Sp Ch	1987	14	43	352,417	0.0
Weaver Sp Ch	1988	12,13	41	1,098,792	0.0
Chilliwack R	1984	12,13	28	64,055	0.0
Chilliwack R	1984	14	1,666	164,134	1.0
Chilliwack R	1985	12,13	9,315	566,206	1.6
Chilliwack R	1985	14	366	526,381	0.1
Chilliwack R	1985	29	2,753	52,026	5.3
Chilliwack R	1986	12,13	40,229	1,230,386	3.3
Chilliwack R	1986	14	3,841	370,010	1.0
Chilliwack R	1986	29	5,715	98,736	5.8
Chilliwack R	1987	12,13	1,761	98,759	1.8
Chilliwack R	1987	14	352	352,417	0.1
Chilliwack R	1987	29	391	10,015	3.9
Chilliwack R	1988	12,13	45,670	1,098,792	4.2
Chilliwack R	1988	14	38	38,679	0.1
Chilliwack R	1988	29	9,083	86,770	10.5
Chilliwack R	1989	12,13	9,661	477,803	2.0
Chilliwack R	1989	20	126	20,713	0.6
Chilliwack R	1989	29	819	24,551	3.3
Canton Cr	1982	25,26	74	482,497	0.0
Canton Cr	1984	25,26	1,289	145,897	0.9
Canton Cr	1985	25,26	4,909	252,460	1.9
Canton Cr	1986	25,26	6,766	144,093	4.7
Canton Cr	1987	25,26	164	13,581	1.2
Conuma R	1981	25,26	88	91,776	0.1
Conuma R	1982	25,26	7,225	482,497	1.5
Conuma R	1984	25,26	22,965	145,897	15.7
Conuma R	1985	25,26	24,644	252,460	9.8

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Conuma R	1986	25,26	20,640	144,093	14.3
Conuma R	1987	25,26	1,375	13,581	10.1
Conuma R	1988	21	67	1,821,644	0.0
Deserted R/NWVI	1982	25,26	2,946	482,497	0.6
Deserted R/NWVI	1984	25,26	12,702	145,897	8.7
Deserted R/NWVI	1985	25,26	23,042	252,460	9.1
Deserted R/NWVI	1986	25,26	15,654	144,093	10.9
Deserted R/NWVI	1987	25,26	2,539	13,581	18.7
Sucwoa R	1981	25,26	31	91,776	0.0
Sucwoa R	1982	25,26	3,607	482,497	0.7
Sucwoa R	1983	25,26	318	8,104	3.9
Sucwoa R	1984	25,26	11,423	145,897	7.8
Sucwoa R	1985	25,26	26,738	252,460	10.6
Sucwoa R	1986	25,26	22,390	144,093	15.5
Sucwoa R	1987	25,26	982	13,581	7.2
Tlupana R	1982	25,26	39	482,497	0.0
Tlupana R	1983	25,26	8	8,104	0.1
Tlupana R	1984	25,26	2,052	145,897	1.4
Tlupana R	1985	25,26	7,420	252,460	2.9
Tlupana R	1986	25,26	10,537	144,093	7.3
Tlupana R	1987	25,26	559	13,581	4.1
Neekas R	1985	7,8,9	1,322	781,237	0.2
Neekas R	1986	7,8,9	22,391	1,990,386	1.1
Neekas R	1987	7,8,9	4,044	767,785	0.5
Blaney Cr/LWFR	1985	12,13	946	566,206	0.2
Blaney Cr/LWFR	1985	29	193	52,026	0.4
Blaney Cr/LWFR	1986	12,13	2,576	1,230,386	0.2
Blaney Cr/LWFR	1986	29	287	98,736	0.3
Blaney Cr/LWFR	1987	12,13	57	98,759	0.1
Blaney Cr/LWFR	1987	29	75	10,015	0.7
Blaney Cr/LWFR	1988	12,13	9,742	1,098,792	0.9
Blaney Cr/LWFR	1988	29	2,533	86,770	2.9
Blaney Cr/LWFR	1989	12,13	1,488	477,803	0.3
Blaney Cr/LWFR	1989	29	82	24,551	0.3
Inch Cr	1980	12,13	2,702	722,195	0.4
Inch Cr	1980	20	151	61,305	0.2
Inch Cr	1980	29	992	76,985	1.3
Inch Cr	1981	29	33	8,654	0.4
Inch Cr	1982	12,13	480	1,163,716	0.0
Inch Cr	1982	14	8	197,325	0.0
Inch Cr	1982	29	1,068	63,187	1.7
Inch Cr	1984	12,13	37	64,055	0.1
Inch Cr	1984	14	1,962	164,134	1.2

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Inch Cr	1985	12,13	1,654	566,206	0.3
Inch Cr	1985	14	66	526,381	0.0
Inch Cr	1985	29	489	52,026	0.9
Inch Cr	1986	12,13	1,873	1,230,386	0.2
Inch Cr	1986	14	45	370,010	0.0
Inch Cr	1986	29	194	98,736	0.2
Inch Cr	1987	12,13	368	98,759	0.4
Inch Cr	1987	14	1,292	352,417	0.4
Inch Cr	1987	29	42	10,015	0.4
Inch Cr	1988	12,13	7,665	1,098,792	0.7
Inch Cr	1988	14	355	38,679	0.9
Inch Cr	1988	29	329	86,770	0.4
Inch Cr	1989	12,13	2,211	477,803	0.5
Inch Cr	1989	14	212	98,482	0.2
Inch Cr	1989	20	130	20,713	0.6
Inch Cr	1989	29	32	24,551	0.1
Stave R	1985	12,13	1,674	566,206	0.3
Stave R	1985	29	722	52,026	1.4
Stave R	1986	12,13	11,930	1,230,386	1.0
Stave R	1986	14	582	370,010	0.2
Stave R	1986	25,26	219	144,093	0.2
Stave R	1986	29	1,590	98,736	1.6
Stave R	1987	12,13	539	98,759	0.5
Stave R	1987	29	75	10,015	0.7
Stave R	1988	12,13	44,599	1,098,792	4.1
Stave R	1988	29	6,772	86,770	7.8
Stave R	1989	12,13	17,233	477,803	3.6
Stave R	1989	29	1,338	24,551	5.4
Bish Cr	1988	6	1,103	711,068	0.2
Bish Cr	1989	6	178	14,875	1.2
Dala R	1987	6	1,801	116,378	1.5
Dala R	1988	6	6,569	711,068	0.9
Dala R	1989	6	175	14,875	1.2
Hirsch Cr	1987	6	1,806	116,378	1.6
Hirsch Cr	1988	6	4,671	711,068	0.7
Hirsch Cr	1989	6	305	14,875	2.1
Humphreys Cr	1987	6	1,940	116,378	1.7
Humphreys Cr	1988	6	4,531	711,068	0.6
Humphreys Cr	1989	6	96	14,875	0.6
Kildala R	1987	6	1,266	116,378	1.1
Kildala R	1988	6	5,190	711,068	0.7
Kildala R	1989	6	253	14,875	1.7
Kildala+Dala	1989	6	9	14,875	0.1

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Kitimat R	1987	6	2,917	116,378	2.5
Kitimat R	1988	6	9,528	711,068	1.3
Kitimat R	1989	6	277	14,875	1.9
L Qualicum R	1982	12,13	1,616	1,163,716	0.1
L Qualicum R	1982	14	1,051	197,325	0.5
L Qualicum R	1982	17	156	36,028	0.4
L Qualicum R	1983	12,13	30	131,527	0.0
L Qualicum R	1983	14	3,875	123,456	3.1
L Qualicum R	1984	14	10,642	164,134	6.5
L Qualicum R	1985	12,13	15,401	566,206	2.7
L Qualicum R	1985	14	104,635	526,381	19.9
L Qualicum R	1986	12,13	81,343	1,230,386	6.6
L Qualicum R	1986	14	82,689	370,010	22.3
L Qualicum R	1987	12,13	2,932	98,759	3.0
L Qualicum R	1987	14	56,927	352,417	16.2
L Qualicum R	1988	12,13	46,293	1,098,792	4.2
L Qualicum R	1988	14	9,734	38,679	25.2
L Qualicum R	1988	17,18	263	78,571	0.3
L Qualicum R	1988	21	3,531	1,821,644	0.2
L Qualicum R	1989	12,13	20,590	477,803	4.3
L Qualicum R	1989	14	19,220	98,482	19.5
L Qualicum R	1989	20	59	20,713	0.3
L Qualicum R	1989	21	1,458	294,692	0.5
Mathers Cr	1984	2W,2E	2,861	378,367	0.8
Mathers Cr	1985	2W,2E	5,956	703,807	0.8
Mathers Cr	1986	2W,2E	1,500	237,761	0.6
Mathers Cr	1987	2W,2E	699	191,226	0.4
Nitinat R	1984	21	113,570	186,663	60.8
Nitinat R	1985	21	1,053,889	1,609,365	65.5
Nitinat R	1986	21	270,866	387,462	69.9
Nitinat R	1987	20	1,411	21,147	6.7
Nitinat R	1987	21	257,896	395,413	65.2
Nitinat R	1988	21	1,235,781	1,821,644	67.8
Nitinat R	1989	21	166,187	294,692	56.4
Mathers Cr	1986	2W,2E	264	237,761	0.1
Mathers Cr	1987	2W,2E	2,653	191,226	1.4
Mathers Cr	1988	2W,2E	1,377	396,356	0.3
Mathers Cr	1989	2W,2E	3,359	135,565	2.5
Pallant Cr	1981	2W,2E	145	42,872	0.3
Pallant Cr	1982	2W,2E	456	79,041	0.6
Pallant Cr	1984	2W,2E	33,527	378,367	8.9
Pallant Cr	1985	2W,2E	49,805	703,807	7.1
Pallant Cr	1986	2W,2E	20,251	237,761	8.5

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Pallant Cr	1987	2W,2E	43,882	191,226	22.9
Pallant Cr	1988	2W,2E	78,087	396,356	19.7
Pallant Cr	1989	2W,2E	13,078	135,565	9.6
Puntledge R	1982	12,13	2,206	1,163,716	0.2
Puntledge R	1982	14	2,393	197,325	1.2
Puntledge R	1982	17	151	36,028	0.4
Puntledge R	1983	12,13	28	131,527	0.0
Puntledge R	1983	14	7,231	123,456	5.9
Puntledge R	1984	14	16,767	164,134	10.2
Puntledge R	1985	12,13	9,643	566,206	1.7
Puntledge R	1985	14	46,618	526,381	8.9
Puntledge R	1986	12,13	37,704	1,230,386	3.1
Puntledge R	1986	14	49,836	370,010	13.5
Puntledge R	1987	12,13	295	98,759	0.3
Puntledge R	1987	14	73,245	352,417	20.8
Puntledge R	1988	12,13	14,165	1,098,792	1.3
Puntledge R	1988	14	3,067	38,679	7.9
Puntledge R	1989	12,13	4,100	477,803	0.9
Puntledge R	1989	14	6,476	98,482	6.6
Puntledge R	1989	20	428	20,713	2.1
Fish Cr	1982	7,8,9	679	448,479	0.2
Fish Cr	1983	7,8,9	5,219	356,771	1.5
Fish Cr	1984	7,8,9	172	298,775	0.1
Fish Cr+Airport Ch	1983	7,8,9	948	356,771	0.3
Fish Cr+Airport Ch	1984	7,8,9	2,609	298,775	0.9
Fish Cr+Airport Ch	1985	7,8,9	5,622	781,237	0.7
Fish Cr+Airport Ch	1986	7,8,9	6,755	1,990,386	0.3
Fish Cr+Airport Ch	1987	6	837	116,378	0.7
Fish Cr+Airport Ch	1987	7,8,9	42,841	767,785	5.6
Fish Cr+Airport Ch	1988	7,8,9	130,169	1,198,490	10.9
Fish Cr+Airport Ch	1989	3,4,5	177	260,088	0.1
Fish Cr+Airport Ch	1989	7,8,9	39,141	345,184	11.3
Necleetsconnay R	1984	7,8,9	1,597	298,775	0.5
Necleetsconnay R	1985	7,8,9	6,961	781,237	0.9
Necleetsconnay R	1986	7,8,9	31,114	1,990,386	1.6
Necleetsconnay R	1987	6	1,306	116,378	1.1
Necleetsconnay R	1987	7,8,9	39,837	767,785	5.2
Necleetsconnay R	1988	7,8,9	30,605	1,198,490	2.6
Necleetsconnay R	1989	3,4,5	1,477	260,088	0.6
Necleetsconnay R	1989	7,8,9	19,342	345,184	5.6
Noohalk Cr	1983	7,8,9	1,362	356,771	0.4
Noohalk Cr	1984	7,8,9	1,153	298,775	0.4
Noohalk Cr	1985	7,8,9	230	781,237	0.0

Stock	Year	Statistical Area(s)	Enhanced Catch	Total Catch By Area	% Enhanced Contribution
Saloompt R	1982	7,8,9	1,228	448,479	0.3
Saloompt R	1983	7,8,9	6,994	356,771	2.0
Saloompt R	1984	7,8,9	3,992	298,775	1.3
Saloompt R	1985	7,8,9	10,468	781,237	1.3
Saloompt R	1986	7,8,9	60,702	1,990,386	3.0
Saloompt R	1987	6	2,622	116,378	2.3
Saloompt R	1987	7,8,9	48,019	767,785	6.3
Saloompt R	1988	7,8,9	117,545	1,198,490	9.8
Saloompt R	1989	3,4,5	411	260,088	0.2
Saloompt R	1989	7,8,9	28,434	345,184	8.2
Snootli Cr	1981	7,8,9	196	513,611	0.0
Snootli Cr	1982	7,8,9	1,202	448,479	0.3
Snootli Cr	1983	7,8,9	7,668	356,771	2.1
Snootli Cr	1984	7,8,9	3,712	298,775	1.2
Snootli Cr	1985	7,8,9	9,136	781,237	1.2
Snootli Cr	1986	7,8,9	23,577	1,990,386	1.2
Snootli Cr	1987	6	422	116,378	0.4
Snootli Cr	1987	7,8,9	35,439	767,785	4.6
Snootli Cr	1988	7,8,9	81,431	1,198,490	6.8
Snootli Cr	1989	3,4,5	1,365	260,088	0.5
Snootli Cr	1989	7,8,9	26,801	345,184	7.8
Thorsen Cr/CCST	1987	7,8,9	4,186	767,785	0.5
Thorsen Cr/CCST	1988	7,8,9	55,789	1,198,490	4.7
Thorsen Cr/CCST	1989	3,4,5	275	260,088	0.1
Thorsen Cr/CCST	1989	7,8,9	17,142	345,184	5.0
Thorsen+Noohalk Cr	1985	7,8,9	2,330	781,237	0.3
Thorsen+Noohalk Cr	1986	7,8,9	30,217	1,990,386	1.5
Thorsen+Noohalk Cr	1987	6	1,233	116,378	1.1
Thorsen+Noohalk Cr	1987	7,8,9	27,372	767,785	3.6
Thorsen+Noohalk Cr	1988	7,8,9	7,630	1,198,490	0.6

Table 20 Enhanced Contribution to Catch by Stock and Area, Return Years 1990 - 2018

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Big Qualicum R	1990	12,13	173,840.13	1,185,359	14.7
Big Qualicum R	1990	14	37,350.75	145,566	25.7
Big Qualicum R	1990	18,19	2,915.64	107,437	2.7
Big Qualicum R	1990	29	5,114.33	113,510	4.5
Big Qualicum R	1991	12,13	14,321.79	230,149	6.2
Big Qualicum R	1991	14	119,636.01	269,140	44.5
Big Qualicum R	1991	17	653.58	16,578	3.9
Big Qualicum R	1991	18,19	2,164.65	154,262	1.4
Big Qualicum R	1991	29	3,425.42	61,007	5.6
Big Qualicum R	1992	12,13	245,947.81	1,346,917	18.3
Big Qualicum R	1992	14	148,450.29	429,110	34.6
Big Qualicum R	1992	17	5,557.85	21,096	26.3
Big Qualicum R	1992	18,19	12,751.77	84,732	15.0
Big Qualicum R	1992	29	3,404.68	50,996	6.7
Big Qualicum R	1993	12,13	169,554.72	1,261,372	13.4
Big Qualicum R	1993	14	116,977.17	381,261	30.7
Big Qualicum R	1993	15,16	12,999.34	119,031	10.9
Big Qualicum R	1993	17	678.11	18,021	3.8
Big Qualicum R	1993	18,19	2,459.79	80,202	3.1
Big Qualicum R	1993	29	5,687.88	80,007	7.1
Big Qualicum R	1993	7,8,9	852.75	288,982	0.3
Big Qualicum R	1994	12,13	65,503.70	1,267,961	5.2
Big Qualicum R	1994	14	83,753.93	368,839	22.7
Big Qualicum R	1994	7,8,9	2,096.76	694,489	0.3
Big Qualicum R	1995	12,13	14,107.30	259,087	5.4
Big Qualicum R	1995	14	333.25	18,297	1.8
Big Qualicum R	1996	12,13	1,622.36	82,167	2.0
Big Qualicum R	1997	12,13	2,945.94	97,880	3.0
Big Qualicum R	1998	12,13	102,696.88	1,433,772	7.2
Big Qualicum R	1998	14	130,140.55	562,617	23.1
Big Qualicum R	1999	12,13	1,473.67	40,321	3.7
Big Qualicum R	1999	29	767.91	43,591	1.8
Big Qualicum R	2000	12,13	530.59	179,650	0.3
Big Qualicum R	2001	12,13	1,765.94	183,351	1.0
Big Qualicum R	2001	14	2,531.97	49,865	5.1
Big Qualicum R	2001	21	62.55	168,451	0.0
Big Qualicum R	2002	12,13	32,786.61	568,444	5.8
Big Qualicum R	2002	14	15,416.26	191,621	8.0
Big Qualicum R	2002	29	144.74	46,636	0.3
Big Qualicum R	2003	12,13	7,704.91	829,340	0.9
Big Qualicum R	2004	12,13	3,687.04	919,381	0.4
Big Qualicum R	2004	14	2,940.63	98,404	3.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Big Qualicum R	2005	12,13	10,982.32	809,474	1.4
Big Qualicum R	2005	14	2,050.50	30,062	6.8
Big Qualicum R	2006	12,13	8,097.84	817,017	1.0
Big Qualicum R	2006	29	1,016.46	181,453	0.6
Big Qualicum R	2007	12,13	3,101.28	441,799	0.7
Big Qualicum R	2007	14	374.15	25,412	1.5
Big Qualicum R	2008	12,13	747.80	278,654	0.3
Big Qualicum R	2009	12,13	2,634.62	446,001	0.6
Big Qualicum R	2010	12,13	2,460.23	61,310	4.0
Big Qualicum R	2011	12,13	2,711.50	646,517	0.4
Big Qualicum R	2011	14	18,473.75	452,128	4.1
Big Qualicum R	2012	12,13	7,398.52	365,088	2.0
Big Qualicum R	2012	14	251.15	14,070	1.8
Big Qualicum R	2013	12,13	3013.38	593,531	0.5
Big Qualicum R	2013	14	1,003.60	30,873	3.3
Big Qualicum R	2014	12,13	3,292.76	345,178	1.0
Big Qualicum R	2016	12,13	84,313.64	1,309,466	6.4
Bish Cr	1990	6	1,404.78	153,292	0.9
Bish Cr	1991	6	288.24	50,747	0.6
Bish Cr	1992	3,4,5	20.89	240,412	0.0
Bish Cr	1992	6	133.52	42,227	0.3
Bish Cr	1993	6	126.17	11,601	1.1
Bish Cr	1993	7,8,9	137.79	288,982	0.0
Bish Cr	1994	6	713.74	75,143	0.9
Bish Cr	1994	7,8,9	145.19	694,489	0.0
Bish Cr	1994	8,9,10	164.49		
Bish Cr	1995	6	266.64	27,811	1.0
Bish Cr	1996	6	259.06	29,748	0.9
Blaney Cr/LWFR	1990	12,13	1,050.47	1,185,359	0.1
Blaney Cr/LWFR	1990	29	440.02	113,510	0.4
Blaney Cr/LWFR	1991	12,13	96.31	230,149	0.0
Blaney Cr/LWFR	1991	17	9.82	16,578	0.1
Blaney Cr/LWFR	1991	29	125.92	61,007	0.2
Canton Cr	1992	25,26	1,855.00	152,130	1.2
Canton Cr	1993	25,26	1,751.81	117,096	1.5
Canton Cr	1994	1	10.41	13,962	0.1
Canton Cr	1994	12,13	18.47	1,267,961	0.0
Canton Cr	1994	25,26	1,678.40	197,947	0.8
Canton Cr	1995	25,26	186.68	27,784	0.7
Canton Cr	1997	25,26	4,026.66	89,072	4.5
Canton Cr	1998	25,26	1,947.99	101,722	1.9
Canton Cr	1999	21	14.53	96,879	0.0
Canton Cr	1999	25,26	1,419.44	104,245	1.4
Canton Cr	2000	25,26	829.60	27,226	3.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Canton Cr	2001	25,26	5,300.54	69,311	7.6
Canton Cr	2003	25,26	3,036.88	109,042	2.8
Cheakamus R	1997	12,13	2.94	97,880	0.0
Cheakamus R	1997	29	7.01	20,770	0.0
Cheakamus R	1998	12,13	3,301.45	1,433,772	0.2
Cheakamus R	1998	14	2,391.76	562,617	0.4
Cheakamus R	1998	29	144.83	18,951	0.8
Cheakamus R	1999	12,13	384.98	40,321	1.0
Cheakamus R	1999	29	72.74	43,591	0.2
Cheakamus R	2000	12,13	78.26	179,650	0.0
Chehalis R	1990	12,13	51,119.87	1,185,359	4.3
Chehalis R	1990	14	3,078.02	145,566	2.1
Chehalis R	1990	29	9,625.60	113,510	8.5
Chehalis R	1991	12,13	846.15	230,149	0.4
Chehalis R	1991	14	612.34	269,140	0.2
Chehalis R	1991	29	2,137.33	61,007	3.5
Chehalis R	1992	12,13	33,612.13	1,346,917	2.5
Chehalis R	1992	17	498.64	21,096	2.4
Chehalis R	1992	21	4,799.07	1,075,724	0.4
Chehalis R	1992	29	9,368.23	50,996	18.4
Chehalis R	1993	12,13	37,699.71	1,261,372	3.0
Chehalis R	1993	14	1,101.15	381,261	0.3
Chehalis R	1993	21	687.68	763,500	0.1
Chehalis R	1993	29	10,897.52	80,007	13.6
Chehalis R	1993	2W,2E	680.60	125,247	0.5
Chehalis R	1994	12,13	39,646.66	1,267,961	3.1
Chehalis R	1994	14	1,025.65	368,839	0.3
Chehalis R	1994	21	1,296.57	826,210	0.2
Chehalis R	1994	29	13,015.33	130,782	10.0
Chehalis R	1995	12,13	5,828.73	259,087	2.2
Chehalis R	1995	14	639.20	18,297	3.5
Chehalis R	1995	21	221.84	209,202	0.1
Chehalis R	1995	29	9,837.38	52,964	18.6
Chehalis R	1997	12,13	437.79	97,880	0.4
Chehalis R	1997	29	1,289.16	20,770	6.2
Chehalis R	1998	12,13	22,610.60	1,433,772	1.6
Chehalis R	1998	14	209.23	562,617	0.0
Chehalis R	1998	29	1,468.27	18,951	7.7
Chehalis R	1999	29	4,134.92	43,591	9.5
Chehalis R	2000	12,13	5,135.77	179,650	2.9
Chehalis R	2000	29	1,967.16	21,693	9.1
Chehalis R	2001	12,13	1,963.47	183,351	1.1
Chehalis R	2002	12,13	2,185.50	568,444	0.4
Chehalis R	2002	14	2,202.17	191,621	1.1

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Chehalis R	2002	29	723.32	46,636	1.6
Chehalis+Squakum	1990	12,13	1,702.97	1,185,359	0.1
Chehalis+Squakum	1991	12,13	1,275.32	230,149	0.6
Chehalis+Squakum	1991	14	1,101.13	269,140	0.4
Chehalis+Squakum	1991	17	1,338.66	16,578	8.1
Chehalis+Squakum	1991	21	542.12	494,722	0.1
Chehalis+Squakum	1991	29	2,631.44	61,007	4.3
Chehalis+Squakum	1992	12,13	3,635.04	1,346,917	0.3
Chehalis+Squakum	1992	21	426.67	1,075,724	0.0
Chilliwack R	1990	12,13	26,512.12	1,185,359	2.2
Chilliwack R	1990	18,19	324.77	107,437	0.3
Chilliwack R	1990	29	4,650.86	113,510	4.1
Chilliwack R	1991	12,13	2,319.39	230,149	1.0
Chilliwack R	1991	14	1,559.61	269,140	0.6
Chilliwack R	1991	18,19	373.87	154,262	0.2
Chilliwack R	1991	29	1,719.14	61,007	2.8
Chilliwack R	1992	12,13	18,965.69	1,346,917	1.4
Chilliwack R	1992	14	1,880.04	429,110	0.4
Chilliwack R	1992	15,16	69.05	21,783	0.3
Chilliwack R	1992	17	253.13	21,096	1.2
Chilliwack R	1992	18,19	1,227.93	84,732	1.4
Chilliwack R	1992	29	1,319.75	50,996	2.6
Chilliwack R	1993	12,13	20,346.48	1,261,372	1.6
Chilliwack R	1993	14	3,617.53	381,261	0.9
Chilliwack R	1993	15,16	533.16	119,031	0.4
Chilliwack R	1993	17	133.00	18,021	0.7
Chilliwack R	1993	18,19	630.87	80,202	0.8
Chilliwack R	1993	29	2,224.72	80,007	2.8
Chilliwack R	1994	12,13	25,281.83	1,267,961	2.0
Chilliwack R	1994	14	2,754.36	368,839	0.7
Chilliwack R	1994	29	3,891.34	130,782	3.0
Chilliwack R	1995	12,13	3,021.40	259,087	1.2
Chilliwack R	1995	14	311.61	18,297	1.7
Chilliwack R	1995	29	1,618.98	52,964	3.1
Chilliwack R	1996	12,13	1,605.75	82,167	2.0
Chilliwack R	1997	12,13	2,809.97	97,880	2.9
Chilliwack R	1997	29	652.40	20,770	3.1
Chilliwack R	1998	12,13	79,878.13	1,433,772	5.6
Chilliwack R	1998	14	51,736.70	562,617	9.2
Chilliwack R	1998	29	2,603.99	18,951	13.7
Chilliwack R	1999	12,13	3,446.62	40,321	8.5
Chilliwack R	1999	29	1,825.41	43,591	4.2
Chilliwack R	2000	12,13	4,931.97	179,650	2.7
Chilliwack R	2001	12,13	11,015.63	183,351	6.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Chilliwack R	2001	14	5,561.09	49,865	11.2
Chilliwack R	2001	18,19	1,872.51	14,297	13.1
Chilliwack R	2001	29	2,612.96	47,548	5.5
Chilliwack R	2002	12,13	3,540.42	568,444	0.6
Chilliwack R	2002	14	2,521.29	191,621	1.3
Chilliwack R	2002	29	553.21	46,636	1.2
Chilliwack R	1993	12,13	103.85	1,261,372	0.0
Chilliwack R	1993	14	55.00	381,261	0.0
Chilliwack R	1994	12,13	3,373.42	1,267,961	0.3
Chilliwack R	1994	14	373.10	368,839	0.1
Chilliwack R	1994	29	489.14	130,782	0.4
Chilliwack R	1995	12,13	359.09	259,087	0.1
Chilliwack R	1995	14	26.39	18,297	0.1
Chilliwack R	1995	29	159.37	52,964	0.3
Chilliwack R	1996	12,13	258.96	82,167	0.3
Chilliwack R	1997	12,13	43.01	97,880	0.0
Chilliwack R	1993	12,13	3.13	1,261,372	0.0
Chilliwack R	1993	14	1.66	381,261	0.0
Chilliwack R	1994	12,13	99.08	1,267,961	0.0
Chilliwack R	1994	14	10.58	368,839	0.0
Chilliwack R	1994	29	14.74	130,782	0.0
Chilliwack R	1995	12,13	6.46	259,087	0.0
Chilliwack R	1995	14	0.61	18,297	0.0
Chilliwack R	1995	29	3.82	52,964	0.0
Chilliwack R	1996	12,13	0.15	82,167	0.0
Conuma R	1992	25,26	18,237.29	152,130	12.0
Conuma R	1993	25,26	13,727.89	117,096	11.7
Conuma R	1994	1	3.44	13,962	0.0
Conuma R	1994	12,13	6.11	1,267,961	0.0
Conuma R	1994	25,26	53,858.87	197,947	27.2
Conuma R	1995	25,26	3,676.29	27,784	13.2
Conuma R	1997	21	414.54	1,048,721	0.0
Conuma R	1997	25,26	15,918.86	89,072	17.9
Conuma R	1998	21	302.75	695,439	0.0
Conuma R	1998	25,26	8,469.40	101,722	8.3
Conuma R	1999	21	41.58	96,879	0.0
Conuma R	1999	25,26	7,107.51	104,245	6.8
Conuma R	2000	25,26	4,025.16	27,226	14.8
Conuma R	2001	25,26	18,485.26	69,311	26.7
Conuma R	2003	25,26	10,639.66	109,042	9.8
Dala R	1990	3,4,5	7.62	103,942	0.0
Dala R	1990	6	628.31	153,292	0.4
Dala R	1991	6	376.01	50,747	0.7
Dala R	1992	3,4,5	16.22	240,412	0.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Dala R	1992	6	194.57	42,227	0.5
Dala R	1993	6	109.62	11,601	0.9
Dala R	1993	7,8,9	136.82	288,982	0.0
Dala R	1994	6	368.50	75,143	0.5
Dala R	1994	7,8,9	81.62	694,489	0.0
Dala R	1994	8,9,10	79.56		
Dala R	1995	6	159.17	27,811	0.6
Dala R	1996	6	209.40	29,748	0.7
Deserted R/NWVI	1992	12,13	235.98	1,346,917	0.0
Deserted R/NWVI	1992	21	607.27	1,075,724	0.1
Deserted R/NWVI	1992	25,26	11,729.17	152,130	7.7
Deserted R/NWVI	1993	1	274.73	23,891	1.1
Deserted R/NWVI	1993	21	3,103.70	763,500	0.4
Deserted R/NWVI	1993	25,26	12,814.31	117,096	10.9
Deserted R/NWVI	1993	3,4,5	218.54	647,783	0.0
Deserted R/NWVI	1994	1	84.06	13,962	0.6
Deserted R/NWVI	1994	12,13	149.16	1,267,961	0.0
Deserted R/NWVI	1994	25,26	11,336.15	197,947	5.7
Deserted R/NWVI	1995	25,26	1,141.31	27,784	4.1
Deserted R/NWVI	1997	25,26	4,704.28	89,072	5.3
Deserted R/NWVI	1998	25,26	6,664.49	101,722	6.6
Deserted R/NWVI	1999	25,26	1,165.54	104,245	1.1
Deserted R/NWVI	2000	25,26	38.81	27,226	0.1
Deserted R/NWVI	2001	25,26	1,432.12	69,311	2.1
Deserted R/NWVI	2003	25,26	2,819.30	109,042	2.6
Fish Cr+Airport Ch	1990	11	71.79	6,534	1.1
Fish Cr+Airport Ch	1990	3,4,5	15.28	103,942	0.0
Fish Cr+Airport Ch	1990	6	88.78	153,292	0.1
Fish Cr+Airport Ch	1990	7,8,9	25,752.76	917,567	2.8
Fish Cr+Airport Ch	1991	6	116.73	50,747	0.2
Fish Cr+Airport Ch	1991	7,8,9	8,253.64	379,521	2.2
Fish Cr+Airport Ch	1991	8,9,10	133.59		
Fish Cr+Airport Ch	1992	3,4,5	475.29	240,412	0.2
Fish Cr+Airport Ch	1992	7,8,9	6,162.32	225,489	2.7
Fish Cr+Airport Ch	1992	9,10	638.22		
Fish Cr+Airport Ch	1993	7,8,9	7,577.96	288,982	2.6
Fish Cr+Airport Ch	1994	10	59.43	19,178	0.3
Fish Cr+Airport Ch	1994	6	137.39	75,143	0.2
Fish Cr+Airport Ch	1994	7,8,9	15,303.95	694,489	2.2
Fish Cr+Airport Ch	1994	8,9,10	1,469.74		
Fish Cr+Airport Ch	1995	6	20.24	27,811	0.1
Fish Cr+Airport Ch	1995	7,8,9	37,827.66	928,283	4.1
Fish Cr+Airport Ch	1996	2W,2E	63.91	122,945	0.1
Fish Cr+Airport Ch	1996	6	56.25	29,748	0.2

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Fish Cr+Airport Ch	1996	7,8,9	9,509.65	340,698	2.8
Fish Cr+Airport Ch	1997	7,8,9	11,083.76	290,439	3.8
Fish Cr+Airport Ch	1998	1	4.75	1,413	0.3
Fish Cr+Airport Ch	1998	2W,2E	39.08	104,988	0.0
Fish Cr+Airport Ch	1998	6	1,400.73	438,019	0.3
Fish Cr+Airport Ch	1998	7,8,9	19,800.08	741,267	2.7
Fish Cr+Airport Ch	1999	3,4,5	62.74	144,676	0.0
Fish Cr+Airport Ch	1999	6	37.30	37,124	0.1
Fish Cr+Airport Ch	1999	7,8,9	9,698.51	264,709	3.7
Fish Cr+Airport Ch	2000	6	90.10	15,477	0.6
Fish Cr+Airport Ch	2000	7,8,9	3,409.51	82,058	4.2
Fish Cr+Airport Ch	2001	6	44.61	56,419	0.1
Fish Cr+Airport Ch	2001	7,8,9	20,712.92	454,000	4.6
Fish Cr+Airport Ch	2002	2W,2E	355.40	95,909	0.4
Fish Cr+Airport Ch	2002	7,8,9	24,843.31	574,650	4.3
Fish Cr+Airport Ch	2003	2W,2E	29.40	5,941	0.5
Fish Cr+Airport Ch	2003	7,8,9	50,894.48	956,368	5.3
Fish Cr+Airport Ch	2004	7,8,9	145,925.06	1,235,642	11.8
Fish Cr+Airport Ch	2005	7,8,9	11,483.32	341,954	3.4
Fish Cr+Airport Ch	2006	7,8,9	25,815.85	380,476	6.8
Fish Cr+Airport Ch	2007	7,8,9	11,482.89	258,080	4.4
Fish Cr+Airport Ch	2008	7,8,9	182.35	9,764	1.9
Fish Cr+Airport Ch	2009	7,8,9	1,479.39	44,177	3.3
Fish Cr+Airport Ch	2011	7,8,9	2,690.93	334,737	0.8
Fish Cr+Airport Ch	2012	7,8,9	18,069.79	326,239	5.5
Fish Cr+Airport Ch	2013	7,8,9	46,837.17	547,620	8.6
Fish Cr+Airport Ch	2014	7,8,9	5,985.88	229,560	2.6
Fish Cr+Airport Ch	2015	7,8,9	39,993.01	874,823	4.6
Fish Cr+Airport Ch	2016	7,8,9	35,310.96	475,253	7.4
Fish Cr+Airport Ch	2017	7,8,9	37,008.32	316,501	11.7
Fish Cr+Airport Ch	2018	7,8,9	39,298.16	452,439	8.7
Hirsch Cr	1990	6	465.14	153,292	0.3
Hirsch Cr	1991	6	405.71	50,747	0.8
Hirsch Cr	1992	3,4,5	280.21	240,412	0.1
Hirsch Cr	1992	6	557.59	42,227	1.3
Hirsch Cr	1993	6	250.44	11,601	2.2
Hirsch Cr	1993	7,8,9	84.58	288,982	0.0
Hirsch Cr	1994	6	906.05	75,143	1.2
Hirsch Cr	1994	7,8,9	291.40	694,489	0.0
Hirsch Cr	1994	8,9,10	160.14		
Hirsch Cr	1995	6	359.00	27,811	1.3
Hirsch Cr	1996	6	1,195.38	29,748	4.0
Hirsch Cr	1996	7,8,9	50.86	340,698	0.0
Hirsch Cr	1997	6	206.63	11,919	1.7

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Hirsch Cr	1997	7,8,9	407.10	290,439	0.1
Hirsch Cr	1998	6	5,336.37	438,019	1.2
Hirsch Cr	1998	7,8,9	521.73	741,267	0.1
Hirsch Cr	1999	3,4,5	265.51	144,676	0.2
Hirsch Cr	1999	6	1,051.01	37,124	2.8
Hirsch Cr	1999	7,8,9	191.69	264,709	0.1
Hirsch Cr	2000	6	839.52	15,477	5.4
Hirsch Cr	2001	2W,2E	5.23	37,733	0.0
Hirsch Cr	2001	6	2,014.76	56,419	3.6
Hirsch Cr	2002	11	18.70	1,489	1.3
Hirsch Cr	2002	2W,2E	530.16	95,909	0.6
Hirsch Cr	2002	6	3,770.49	202,840	1.9
Hirsch Cr	2003	2W,2E	15.35	5,941	0.3
Hirsch Cr	2003	6	5,119.47	389,026	1.3
Humphreys Cr	1990	6	243.48	153,292	0.2
Humphreys Cr	1991	6	61.31	50,747	0.1
Humphreys Cr	1992	3,4,5	27.86	240,412	0.0
Humphreys Cr	1992	6	48.51	42,227	0.1
Humphreys Cr	1993	6	76.52	11,601	0.7
Humphreys Cr	1994	6	20.90	75,143	0.0
Humphreys Cr	1994	7,8,9	74.71	694,489	0.0
Inch Cr	1990	12,13	1,479.31	1,185,359	0.1
Inch Cr	1990	29	760.70	113,510	0.7
Inch Cr	1991	12,13	135.84	230,149	0.1
Inch Cr	1991	17	34.09	16,578	0.2
Inch Cr	1991	29	619.06	61,007	1.0
Inch Cr	1992	12,13	3,161.23	1,346,917	0.2
Inch Cr	1992	17	29.25	21,096	0.1
Inch Cr	1992	21	102.72	1,075,724	0.0
Inch Cr	1992	29	249.52	50,996	0.5
Inch Cr	1993	12,13	4,180.53	1,261,372	0.3
Inch Cr	1993	14	176.91	381,261	0.0
Inch Cr	1993	21	68.69	763,500	0.0
Inch Cr	1993	29	944.53	80,007	1.2
Inch Cr	1993	2W,2E	67.98	125,247	0.1
Inch Cr	1994	12,13	2,930.87	1,267,961	0.2
Inch Cr	1994	29	1,052.48	130,782	0.8
Inch Cr	1995	12,13	1,055.95	259,087	0.4
Inch Cr	1995	29	582.74	52,964	1.1
Inch Cr	1997	29	269.66	20,770	1.3
Inch Cr	1998	12,13	3,462.50	1,433,772	0.2
Inch Cr	1998	14	28.31	562,617	0.0
Inch Cr	1998	29	680.53	18,951	3.6
Inch Cr	1999	12,13	222.00	40,321	0.6

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Inch Cr	1999	29	578.14	43,591	1.3
Inch Cr	2000	12,13	739.55	179,650	0.4
Inch Cr	2001	29	216.33	47,548	0.5
Inch Cr	2002	12,13	167.86	568,444	0.0
Inch Cr	2002	29	180.61	46,636	0.4
Inch Cr	2003	12,13	231.70	829,340	0.0
Inch Cr	2004	12,13	1,289.73	919,381	0.1
Inch Cr	2004	29	506.99	72,309	0.7
Inch Cr	2005	12,13	1,562.68	809,474	0.2
Inch Cr	2005	29	2,366.63	70,271	3.4
Jones Sp Ch	1998	12,13	83.87	1,433,772	0.0
Jones Sp Ch	1998	14	17.18	562,617	0.0
Jones Sp Ch	1998	29	6.29	18,951	0.0
Jones Sp Ch	1999	12,13	15.48	40,321	0.0
Jones Sp Ch	1999	29	11.29	43,591	0.0
Jones Sp Ch	2000	12,13	5.68	179,650	0.0
Kildala R	1990	6	421.42	153,292	0.3
Kildala R	1991	6	498.50	50,747	1.0
Kildala R	1992	6	921.97	42,227	2.2
Kildala R	1993	2W,2E	65.41	125,247	0.1
Kildala R	1993	6	96.13	11,601	0.8
Kildala R	1993	7,8,9	123.16	288,982	0.0
Kildala R	1994	6	587.88	75,143	0.8
Kildala R	1994	7,8,9	63.29	694,489	0.0
Kildala R	1994	8,9,10	57.98		
Kildala R	1995	6	156.17	27,811	0.6
Kildala R	1996	6	662.31	29,748	2.2
Kildala R	1996	7,8,9	24.03	340,698	0.0
Kildala R	1997	6	109.76	11,919	0.9
Kildala R	1997	7,8,9	212.37	290,439	0.1
Kildala R	1998	6	3,101.97	438,019	0.7
Kildala R	1998	7,8,9	305.99	741,267	0.0
Kildala R	1999	3,4,5	151.78	144,676	0.1
Kildala R	1999	6	586.96	37,124	1.6
Kildala R	1999	7,8,9	112.42	264,709	0.0
Kildala R	2000	6	458.51	15,477	3.0
Kildala R	2001	2W,2E	2.93	37,733	0.0
Kildala R	2001	6	1,178.78	56,419	2.1
Kildala R	2002	11	10.48	1,489	0.7
Kildala R	2002	2W,2E	297.18	95,909	0.3
Kildala R	2002	6	1,580.46	202,840	0.8
Kildala+Dala	1990	6	413.23	153,292	0.3
Kildala+Dala	1991	6	25.95	50,747	0.1
Kildala+Dala	1992	6	2.87	42,227	0.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Kimsquit R	1991	7,8,9	252.56	379,521	0.1
Kimsquit R	1992	7,8,9	878.46	225,489	0.4
Kimsquit R	1992	9,10	61.12		
Kimsquit R	1993	2W,2E	32.66	125,247	0.0
Kimsquit R	1993	7,8,9	130.98	288,982	0.0
Kimsquit R	1994	7,8,9	12.71	694,489	0.0
Kitasoo Cr	1992	7,8,9	61.55	225,489	0.0
Kitasoo Cr	1993	7,8,9	6,398.00	288,982	2.2
Kitasoo Cr	1994	6	54.60	75,143	0.1
Kitasoo Cr	1994	7,8,9	1,352.32	694,489	0.2
Kitasoo Cr	1994	8,9,10	56.44		
Kitasoo Cr	1995	6	17.26	27,811	0.1
Kitasoo Cr	1995	7,8,9	437.90	928,283	0.0
Kitasoo Cr	1996	6	53.70	29,748	0.2
Kitasoo Cr	1996	7,8,9	39.15	340,698	0.0
Kitasoo Cr	1997	6	13.01	11,919	0.1
Kitasoo Cr	1997	6,7	3.55		
Kitasoo Cr	1997	7,8,9	521.80	290,439	0.2
Kitasoo Cr	1998	1	0.45	1,413	0.0
Kitasoo Cr	1998	6	114.78	438,019	0.0
Kitasoo Cr	1998	7,8,9	3,384.55	741,267	0.5
Kitasoo Cr	1999	3,4,5	67.30	144,676	0.0
Kitasoo Cr	1999	6	8.34	37,124	0.0
Kitasoo Cr	1999	7,8,9	999.76	264,709	0.4
Kitasoo Cr	2000	6	13.58	15,477	0.1
Kitasoo Cr	2000	7,8,9	107.55	82,058	0.1
Kitasoo Cr	2001	2W,2E	3.42	37,733	0.0
Kitasoo Cr	2001	7,8,9	733.43	454,000	0.2
Kitasoo Cr	2002	11	7.51	1,489	0.5
Kitasoo Cr	2002	2W,2E	258.78	95,909	0.3
Kitasoo Cr	2002	7,8,9	920.78	574,650	0.2
Kitasoo Cr	2003	2W,2E	13.09	5,941	0.2
Kitasoo Cr	2003	7,8,9	13,421.24	956,368	1.4
Kitimat Low+Hirsch	1990	11	17.13	6,534	0.3
Kitimat Low+Hirsch	1990	3,4,5	18.13	103,942	0.0
Kitimat Low+Hirsch	1990	6	3,090.36	153,292	2.0
Kitimat Low+Hirsch	1991	6	1,254.09	50,747	2.5
Kitimat R	1990	3,4,5	66.73	103,942	0.1
Kitimat R	1990	6	1,658.40	153,292	1.1
Kitimat R	1991	6	1,870.77	50,747	3.7
Kitimat R	1992	3,4,5	101.15	240,412	0.0
Kitimat R	1992	6	264.96	42,227	0.6
Kitimat R	1993	6	629.92	11,601	5.4
Kitimat R	1994	6	5,530.39	75,143	7.4

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Kitimat R	1994	7,8,9	615.00	694,489	0.1
Kitimat R	1995	6	608.81	27,811	2.2
Kitimat R	1996	6	2,270.15	29,748	7.6
Kitimat R	1997	6	2,238.63	11,919	18.8
Kitimat R	1998	6	29,121.57	438,019	6.6
Kitimat R	1999	3,4,5	1,447.99	144,676	1.0
Kitimat R	1999	6	2,279.51	37,124	6.1
Kitimat R	2000	6	391.56	15,477	2.5
Kitimat R	2001	2W,2E	46.02	37,733	0.1
Kitimat R	2001	6	5,388.83	56,419	9.6
Kitimat R	2002	2W,2E	840.44	95,909	0.9
Kitimat R	2002	6	11,248.90	202,840	5.5
Kitimat R	2003	2W,2E	238.76	5,941	4.0
Kitimat R	2003	6	26,418.77	389,026	6.8
Kumealon Cr	2012	7,8,9	44.70	326,239	0.0
Kumealon Cr	2013	7,8,9	7.45	547,620	0.0
Kwakusdis R	1994	10	4.85	19,178	0.0
Kwakusdis R	1994	7,8,9	83.36	694,489	0.0
Kwakusdis R	1994	8,9,10	5.11		
Kwakusdis R	1995	7,8,9	188.97	928,283	0.0
Kwakusdis R	1996	7,8,9	383.19	340,698	0.1
Kwakusdis R	1997	6,7	17.49		
Kwakusdis R	1997	7,8,9	2,302.06	290,439	0.8
Kwakusdis R	1998	7,8,9	638.35	741,267	0.1
Kwakusdis R	1999	3,4,5	4.41	144,676	0.0
Kwakusdis R	1999	7,8,9	1,002.94	264,709	0.4
Kwakusdis R	2000	7,8,9	64.00	82,058	0.1
Kwakusdis R	2001	7,8,9	8.70	454,000	0.0
L Qualicum R	1990	12,13	58,488.43	1,185,359	4.9
L Qualicum R	1990	14	33,894.88	145,566	23.3
L Qualicum R	1991	12,13	6,018.33	230,149	2.6
L Qualicum R	1991	14	14,401.68	269,140	5.4
L Qualicum R	1991	17	541.04	16,578	3.3
L Qualicum R	1992	12,13	69,861.50	1,346,917	5.2
L Qualicum R	1992	14	56,419.79	429,110	13.1
L Qualicum R	1992	17	862.66	21,096	4.1
L Qualicum R	1992	29	415.55	50,996	0.8
L Qualicum R	1993	12,13	53,236.78	1,261,372	4.2
L Qualicum R	1993	14	44,935.24	381,261	11.8
L Qualicum R	1993	18,19	153.06	80,202	0.2
L Qualicum R	1993	29	2,344.21	80,007	2.9
L Qualicum R	1994	12,13	62,544.67	1,267,961	4.9
L Qualicum R	1994	14	45,247.63	368,839	12.3
L Qualicum R	1995	12,13	5,407.05	259,087	2.1

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
L Qualicum R	1995	14	1,490.81	18,297	8.1
L Qualicum R	1996	12,13	493.01	82,167	0.6
L Qualicum R	1997	12,13	895.23	97,880	0.9
L Qualicum R	1998	12,13	43,723.13	1,433,772	3.0
L Qualicum R	1998	14	55,758.01	562,617	9.9
L Qualicum R	1999	12,13	634.04	40,321	1.6
L Qualicum R	1999	29	312.86	43,591	0.7
L Qualicum R	2000	12,13	340.64	179,650	0.2
L Qualicum R	2001	12,13	376.90	183,351	0.2
L Qualicum R	2001	14	524.10	49,865	1.1
L Qualicum R	2002	12,13	7,232.68	568,444	1.3
L Qualicum R	2002	14	3,182.82	191,621	1.7
L Qualicum R	2003	12,13	8,728.03	829,340	1.1
L Qualicum R	2003	14	1,324.33	42,057	3.1
L Qualicum R	2004	12,13	3,030.98	919,381	0.3
L Qualicum R	2004	14	760.22	98,404	0.8
L Qualicum R	2005	12,13	7,072.51	809,474	0.9
L Qualicum R	2005	29	358.89	70,271	0.5
L Qualicum R	2006	12,13	2,730.90	817,017	0.3
L Qualicum R	2006	14	488.97	83,920	0.6
L Qualicum R	2006	29	150.70	181,453	0.1
L Qualicum R	2007	12,13	1,963.49	441,799	0.4
L Qualicum R	2007	14	191.48	25,412	0.8
L Qualicum R	2008	12,13	494.45	278,654	0.2
L Qualicum R	2009	12,13	1,469.41	446,011	0.3
L Qualicum R	2010	12,13	1738.37	61,310	2.8
L Qualicum R	2011	12,13	3,837.96	646,517	0.6
L Qualicum R	2011	14	25,171.20	452,128	5.6
L Qualicum R	2012	12,13	10,506.57	365,088	2.9
L Qualicum R	2012	14	423.98	14,070	3.0
L Qualicum R	2013	12,13	3,534.79	593,531	0.6
L Qualicum R	2013	14	1,212.38	30,873	3.9
L Qualicum R	2014	12,13	3,531.47	345,178	1.0
L Qualicum R	2016	12,13	93,161.82	1,309,466	7.1
Lang Cr	2000	12,13	238.55	179,650	0.1
Lang Cr	2001	12,13	94.54	183,351	0.1
Lang Cr	1998	12,13	658.95	1,433,772	0.0
Lang Cr	1998	14	44.50	562,617	0.0
Lang Cr	2000	12,13	1,309.37	179,650	0.7
Lang Cr	2001	12,13	538.32	183,351	0.3
Mathers Cr	1990	2W,2E	6,888.17	335,736	2.1
Mathers Cr	1991	2W,2E	5,196.05	308,170	1.7
Mathers Cr	1992	2W,2E	1,498.72	139,964	1.1
Mathers Cr	1993	2W,2E	16,372.26	125,247	13.1

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Mathers Cr	1994	2W,2E	6,784.88	139,288	4.9
Mathers Cr	1995	2W,2E	3,069.56	23,752	12.9
Mathers Cr	1996	2W,2E	8,734.42	122,945	7.1
Mathers Cr	1997	2W,2E	7,189.46	51,155	14.1
Mathers Cr	1998	2W,2E	15,610.40	104,988	14.9
Mathers Cr	1999	2W,2E	7,888.12	224,417	3.5
Mathers Cr	2000	2W,2E	9,907.69	113,117	8.8
Mathers Cr	2001	2W,2E	1,350.09	37,733	3.6
Mathers Cr	2002	2W,2E	3,947.68	95,909	4.1
McLoughlin Bay Cr	1990	7,8,9	2,972.15	917,567	0.3
McLoughlin Bay Cr	1991	7,8,9	9,026.04	379,521	2.4
McLoughlin Bay Cr	1992	3,4,5	41.42	240,412	0.0
McLoughlin Bay Cr	1992	7,8,9	5,297.13	225,489	2.3
McLoughlin Bay Cr	1992	9,10	40.08		
McLoughlin Bay Cr	1993	2W,2E	57.38	125,247	0.0
McLoughlin Bay Cr	1993	3,4,5	214.82	647,783	0.0
McLoughlin Bay Cr	1993	7,8,9	9,463.22	288,982	3.3
McLoughlin Bay Cr	1994	1	93.31	13,962	0.7
McLoughlin Bay Cr	1994	1,2W	33.74		
McLoughlin Bay Cr	1994	11	65.08	6,153	1.1
McLoughlin Bay Cr	1994	12,13	63.86	1,267,961	0.0
McLoughlin Bay Cr	1994	2W,2E	50.72	139,288	0.0
McLoughlin Bay Cr	1994	3,4,5	642.65	473,697	0.1
McLoughlin Bay Cr	1994	6	49.81	75,143	0.1
McLoughlin Bay Cr	1994	7,8,9	16,114.37	694,489	2.3
McLoughlin Bay Cr	1994	8,9,10	43.44		
McLoughlin Bay Cr	1995	1	130.35	23,919	0.5
McLoughlin Bay Cr	1995	12,13	64.54	259,087	0.0
McLoughlin Bay Cr	1995	3,4,5	419.09	622,941	0.1
McLoughlin Bay Cr	1995	7,8,9	6,109.99	928,283	0.7
McLoughlin Bay Cr	1996	3,4,5	31.36	398,788	0.0
McLoughlin Bay Cr	1996	7,8,9	10.53	340,698	0.0
McLoughlin Bay Cr	1999	7,8,9	3,232.19	264,709	1.2
McLoughlin Bay Cr	2000	3,4,5	69.95	107,863	0.1
McLoughlin Bay Cr	2000	7,8,9	5,068.88	82,058	6.2
McLoughlin Bay Cr	2001	3,4,5	11.33	63,375	0.0
McLoughlin Bay Cr	2001	7,8,9	10,143.86	454,000	2.2
McLoughlin Bay Cr	2002	7,8,9	864.38	574,650	0.2
McLoughlin Bay Cr	2015	7,8,9	51,979.26	874,823	5.9
McLoughlin Bay Cr	2016	7,8,9	5,166.19	475,253	1.1
Necleetsconnay R	1990	3,4,5	30.61	103,942	0.0
Necleetsconnay R	1990	7,8,9	16,884.08	917,567	1.8
Necleetsconnay R	1991	7,8,9	6,364.59	379,521	1.7
Necleetsconnay R	1992	6	50.62	42,227	0.1

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Necleetsconnay R	1992	7,8,9	3,260.07	225,489	1.4
Necleetsconnay R	1992	9,10	267.93		
Necleetsconnay R	1993	7,8,9	1,939.69	288,982	0.7
Necleetsconnay R	1994	7,8,9	4,580.99	694,489	0.7
Necleetsconnay R	1994	8,9,10	575.69		
Necleetsconnay R	1995	7,8,9	10,948.23	928,283	1.2
Necleetsconnay R	1996	7,8,9	186.60	340,698	0.1
Nimpkish R Low	1992	12,13	94.10	1,346,917	0.0
Nimpkish R Low	1993	12,13	714.83	1,261,372	0.1
Nimpkish R Low	1994	12,13	48.20	1,267,961	0.0
Nimpkish R Low	1994	14	30.88	368,839	0.0
Nitinat R	1990	21	10,946.19	24,530	44.6
Nitinat R	1991	21	145,060.88	494,722	29.3
Nitinat R	1992	21	209,073.54	1,075,724	19.4
Nitinat R	1992	25,26	1,371.44	152,130	0.9
Nitinat R	1993	21	255,431.50	763,500	33.5
Nitinat R	1993	25,26	1,035.43	117,096	0.9
Nitinat R	1993	3,4,5	126.67	647,783	0.0
Nitinat R	1994	21	268,788.73	826,210	32.5
Nitinat R	1994	25,26	7,596.81	197,947	3.8
Nitinat R	1995	21	69,145.43	209,202	33.1
Nitinat R	1995	25,26	182.92	27,784	0.7
Nitinat R	1996	21	116,745.42	342,147	34.1
Nitinat R	1997	21	604,019.20	1,048,721	57.6
Nitinat R	1997	25,26	1,412.35	89,072	1.6
Nitinat R	1998	21	423,086.20	695,439	60.8
Nitinat R	1998	25,26	1,314.82	101,722	1.3
Nitinat R	1999	21	65,044.42	96,879	67.1
Nitinat R	1999	25,26	2,030.83	104,245	1.9
Nitinat R	2000	21	3,121.72	7,094	44.0
Nitinat R	2001	21	131,277.46	168,451	77.9
Orford R	1995	12,13	65.49	259,087	0.0
Orford R	1996	12,13	136.63	82,167	0.2
Orford R	1996	3,4,5	3.16	398,788	0.0
Orford R	1997	1	176.45	47,218	0.4
Orford R	1997	12,13	5,063.52	97,880	5.2
Orford R	1997	3,4,5	134.47	187,179	0.1
Orford R	1997	7,8,9	1.17	290,439	0.0
Orford R	1998	12,13	128.77	1,433,772	0.0
Orford R	1999	12,13	44.85	40,321	0.1
Pallant Cr	1990	1	114.01	8,457	1.3
Pallant Cr	1990	2W,2E	35,878.30	335,736	10.7
Pallant Cr	1991	2W,2E	41,841.98	308,170	13.6
Pallant Cr	1991	3,4,5	1,158.02	240,170	0.5

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Pallant Cr	1992	1	191.89	9,102	2.1
Pallant Cr	1992	2W,2E	112,008.09	139,964	80.0
Pallant Cr	1992	3,4,5	659.68	240,412	0.3
Pallant Cr	1992	7,8,9	134.71	225,489	0.1
Pallant Cr	1993	2W,2E	22,100.83	125,247	17.6
Pallant Cr	1993	3,4,5	1,708.16	647,783	0.3
Pallant Cr	1994	2W,2E	36,085.05	139,288	25.9
Pallant Cr	1994	3,4,5	399.83	473,697	0.1
Pallant Cr	1995	2W,2E	4,548.46	23,752	19.1
Pallant Cr	1995	3,4,5	123.01	622,941	0.0
Pallant Cr	1996	2W,2E	44,757.37	122,945	36.4
Pallant Cr	1997	2W,2E	24,794.79	51,155	48.5
Pallant Cr	1998	1	27.15	1,413	1.9
Pallant Cr	1998	2W,2E	49,599.33	104,988	47.2
Pallant Cr	1999	2W,2E	54,893.51	224,417	24.5
Pallant Cr	2000	2W,2E	35,423.77	113,117	31.3
Pallant Cr	2001	2W,2E	2,899.63	37,733	7.7
Pallant Cr	2002	2W,2E	8,698.50	95,909	9.1
Puntledge R	1990	12,13	15,589.07	1,185,359	1.3
Puntledge R	1990	14	8,988.93	145,566	6.2
Puntledge R	1990	18,19	4.42	107,437	0.0
Puntledge R	1990	29	7.70	113,510	0.0
Puntledge R	1991	12,13	22.63	230,149	0.0
Puntledge R	1991	14	45,169.88	269,140	16.8
Puntledge R	1991	17	67.68	16,578	0.4
Puntledge R	1991	18,19	3.21	154,262	0.0
Puntledge R	1991	29	5.14	61,007	0.0
Puntledge R	1992	12,13	8,899.12	1,346,917	0.7
Puntledge R	1992	14	9,763.12	429,110	2.3
Puntledge R	1992	17	57.25	21,096	0.3
Puntledge R	1992	18,19	1.40	84,732	0.0
Puntledge R	1992	21	202.67	1,075,724	0.0
Puntledge R	1992	29	0.59	50,996	0.0
Puntledge R	1993	12,13	20,420.00	1,261,372	1.6
Puntledge R	1993	14	17,328.83	381,261	4.5
Puntledge R	1993	15,16	679.29	119,031	0.6
Puntledge R	1993	17	103.96	18,021	0.6
Puntledge R	1993	18,19	720.13	80,202	0.9
Puntledge R	1993	29	1,176.18	80,007	1.5
Puntledge R	1994	12,13	16,803.31	1,267,961	1.3
Puntledge R	1994	14	10,685.71	368,839	2.9
Puntledge R	1994	29	75.56	130,782	0.1
Puntledge R	1995	12,13	2,078.61	259,087	0.8
Puntledge R	1995	14	963.53	18,297	5.3

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Puntledge R	1995	21	169.64	209,202	0.1
Puntledge R	1997	12,13	680.20	97,880	0.7
Puntledge R	1998	12,13	26,030.26	1,433,772	1.8
Puntledge R	1998	14	12,361.76	562,617	2.2
Puntledge R	1998	21	652.61	695,439	0.1
Puntledge R	1999	12,13	544.34	40,321	1.4
Puntledge R	2000	12,13	2,947.80	179,650	1.6
Puntledge R	2001	12,13	990.44	183,351	0.5
Puntledge R	2001	14	1,437.52	49,865	2.9
Puntledge R	2002	12,13	377.33	568,444	0.1
Puntledge R	2002	14	1,332.28	191,621	0.7
Saloompt R	1990	11	44.58	6,534	0.7
Saloompt R	1990	3,4,5	13.42	103,942	0.0
Saloompt R	1990	6	83.82	153,292	0.1
Saloompt R	1990	7,8,9	25,026.44	917,567	2.7
Saloompt R	1991	6	110.21	50,747	0.2
Saloompt R	1991	7,8,9	7,984.37	379,521	2.1
Saloompt R	1991	8,9,10	170.75		
Saloompt R	1992	3,4,5	496.37	240,412	0.2
Saloompt R	1992	7,8,9	6,387.47	225,489	2.8
Saloompt R	1992	9,10	663.97		
Saloompt R	1993	7,8,9	7,534.16	288,982	2.6
Saloompt R	1994	10	28.08	19,178	0.1
Saloompt R	1994	6	113.21	75,143	0.2
Saloompt R	1994	7,8,9	13,498.90	694,489	1.9
Saloompt R	1994	8,9,10	1,487.81		
Saloompt R	1995	6	12.27	27,811	0.0
Saloompt R	1995	7,8,9	37,914.18	928,283	4.1
Saloompt R	1996	6	55.60	29,748	0.2
Saloompt R	1996	7,8,9	11,277.46	340,698	3.3
Saloompt R	1997	6	48.26	11,919	0.4
Saloompt R	1997	7,8,9	15,086.72	290,439	5.2
Saloompt R	1998	1	9.19	1,413	0.7
Saloompt R	1998	6	1,974.76	438,019	0.5
Saloompt R	1998	7,8,9	23,262.03	741,267	3.1
Saloompt R	1999	3,4,5	249.63	144,676	0.2
Saloompt R	1999	7,8,9	4,497.88	264,709	1.7
Saloompt R	2000	6	82.33	15,477	0.5
Saloompt R	2000	7,8,9	3,986.98	82,058	4.9
Saloompt R	2001	2W,2E	16.12	37,733	0.0
Saloompt R	2001	6	178.34	56,419	0.3
Saloompt R	2001	7,8,9	28,089.33	454,000	6.2
Saloompt R	2002	11	21.81	1,489	1.5
Saloompt R	2002	2W,2E	619.72	95,909	0.6

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Saloompt R	2002	6	199.73	202,840	0.1
Saloompt R	2002	7,8,9	26,271.61	574,650	4.6
Saloompt R	2003	2W,2E	28.19	5,941	0.5
Saloompt R	2003	7,8,9	48,513.75	956,368	5.1
Saloompt R	2004	7,8,9	78,193.41	1,235,642	6.3
Saloompt R	2005	7,8,9	11,848.39	341,954	3.5
Saloompt R	2006	7,8,9	26,559.62	380,476	7.0
Saloompt R	2007	7,8,9	12,253.04	258,080	4.7
Saloompt R	2008	7,8,9	273.89	9,764	2.8
Saloompt R	2009	7,8,9	1,577.11	44,177	3.6
Saloompt R	2011	7,8,9	2,855.15	334,737	0.9
Saloompt R	2012	7,8,9	10,860.35	326,239	3.3
Saloompt R	2013	7,8,9	23,594.47	547,620	4.3
Saloompt R	2014	7,8,9	5,618.39	229,560	2.4
Saloompt R	2015	7,8,9	35,316.72	874,823	4.0
Saloompt R	2016	7,8,9	12,888.44	475,253	2.7
Saloompt R	2017	7,8,9	12,329.26	316,501	3.9
Saloompt R	2018	7,8,9	23,428.65	452,439	5.2
Sliammon R	1990	12,13	353.15	1,185,359	0.0
Sliammon R	1996	12,13	77.37	82,167	0.1
Sliammon R	1997	12,13	1,367.84	97,880	1.4
Sliammon R	1997	29	273.99	20,770	1.3
Sliammon R	1998	12,13	2,409.50	1,433,772	0.2
Sliammon R	1998	14	659.52	562,617	0.1
Sliammon R	1998	21	61.93	695,439	0.0
Sliammon R	1998	29	92.77	18,951	0.5
Sliammon R	1999	12,13	22.71	40,321	0.1
Sliammon R	2000	12,13	287.06	179,650	0.2
Sliammon R	2001	12,13	763.60	183,351	0.4
Sliammon R	2002	12,13	495.86	568,444	0.1
Sliammon R	2003	12,13	1,821.64	829,340	0.2
Sliammon R	2004	12,13	1,642.09	919,381	0.2
Sliammon R	2005	12,13	648.22	809,474	0.1
Sliammon R	2006	12,13	1,398.49	817,017	0.2
Sliammon R	2006	14	138.50	83,920	0.2
Sliammon R	2006	29	967.33	181,453	0.5
Sliammon R	2007	12,13	265.75	441,799	0.1
Sliammon R	2007	14	20.69	25,412	0.1
Sliammon R	2007	29	107.10	37,573	0.3
Snootli Cr	1990	11	59.06	6,534	0.9
Snootli Cr	1990	6	82.40	153,292	0.1
Snootli Cr	1990	7,8,9	21,119.16	917,567	2.3
Snootli Cr	1991	6	108.34	50,747	0.2
Snootli Cr	1991	7,8,9	7,401.80	379,521	2.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Snootli Cr	1991	8,9,10	123.99		
Snootli Cr	1992	3,4,5	522.11	240,412	0.2
Snootli Cr	1992	7,8,9	6,609.23	225,489	2.9
Snootli Cr	1992	9,10	692.27		
Snootli Cr	1993	7,8,9	7,763.79	288,982	2.7
Snootli Cr	1994	10	53.93	19,178	0.3
Snootli Cr	1994	6	119.57	75,143	0.2
Snootli Cr	1994	7,8,9	14,846.40	694,489	2.1
Snootli Cr	1994	8,9,10	1,506.50		
Snootli Cr	1995	6	16.60	27,811	0.1
Snootli Cr	1995	7,8,9	37,386.90	928,283	4.0
Snootli Cr	1996	2W,2E	125.64	122,945	0.1
Snootli Cr	1996	6	45.93	29,748	0.2
Snootli Cr	1996	7,8,9	9,817.31	340,698	2.9
Snootli Cr	1997	7,8,9	9,496.33	290,439	3.3
Snootli Cr	1998	2W,2E	76.82	104,988	0.1
Snootli Cr	1998	6	454.31	438,019	0.1
Snootli Cr	1998	7,8,9	13,697.93	741,267	1.8
Snootli Cr	1999	3,4,5	66.34	144,676	0.0
Snootli Cr	1999	7,8,9	4,561.43	264,709	1.7
Snootli Cr	2000	6	86.06	15,477	0.6
Snootli Cr	2000	7,8,9	3,310.47	82,058	4.0
Snootli Cr	2001	2W,2E	5.92	37,733	0.0
Snootli Cr	2001	6	42.62	56,419	0.1
Snootli Cr	2001	7,8,9	15,823.54	454,000	3.5
Snootli Cr	2002	11	21.20	1,489	1.4
Snootli Cr	2002	2W,2E	602.31	95,909	0.6
Snootli Cr	2002	7,8,9	20,861.08	574,650	3.6
Snootli Cr	2003	2W,2E	109.66	5,941	1.8
Snootli Cr	2003	7,8,9	39,320.33	956,368	4.1
Snootli Cr	2004	7,8,9	70,102.89	1,235,642	5.7
Snootli Cr	2005	7,8,9	10,349.88	341,954	3.0
Snootli Cr	2006	7,8,9	25,517.20	380,476	6.7
Snootli Cr	2007	7,8,9	9,749.02	258,080	3.8
Snootli Cr	2008	7,8,9	72.73	9,764	0.7
Snootli Cr	2009	7,8,9	1,536.45	44,177	3.5
Snootli Cr	2011	7,8,9	2,861.98	334,737	0.9
Snootli Cr	2012	7,8,9	18,105.48	326,239	5.5
Snootli Cr	2013	7,8,9	48,657.35	547,620	8.9
Snootli Cr	2014	7,8,9	9,044.16	229,560	3.9
Snootli Cr	2015	7,8,9	40,168.95	874,823	4.6
Snootli Cr	2016	7,8,9	28,834.70	475,253	6.1
Snootli Cr	2017	7,8,9	25,513.06	316,501	8.1
Snootli Cr	2018	7,8,9	30,327.23	452,439	6.7

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Squakum Cr	1990	12,13	48.66	1,185,359	0.0
Stave R	1990	12,13	23,719.33	1,185,359	2.0
Stave R	1990	14	1,196.46	145,566	0.8
Stave R	1990	29	8,797.46	113,510	7.8
Stave R	1991	12,13	935.68	230,149	0.4
Stave R	1991	14	1,039.86	269,140	0.4
Stave R	1991	18,19	150.10	154,262	0.1
Stave R	1991	21	205.33	494,722	0.0
Stave R	1991	29	1,723.13	61,007	2.8
Stave R	1992	12,13	20,855.91	1,346,917	1.5
Stave R	1992	14	541.92	429,110	0.1
Stave R	1992	17	345.28	21,096	1.6
Stave R	1992	21	1,290.80	1,075,724	0.1
Stave R	1992	29	6,108.61	50,996	12.0
Stave R	1993	12,13	20,469.33	1,261,372	1.6
Stave R	1993	14	857.35	381,261	0.2
Stave R	1993	18,19	25.69	80,202	0.0
Stave R	1993	21	473.91	763,500	0.1
Stave R	1993	29	8,563.66	80,007	10.7
Stave R	1993	3,4,5	218.03	647,783	0.0
Stave R	1994	12,13	14,199.41	1,267,961	1.1
Stave R	1994	14	88.58	368,839	0.0
Stave R	1994	21	487.34	826,210	0.1
Stave R	1994	29	6,928.84	130,782	5.3
Stave R	1994	3,4,5	66.20	473,697	0.0
Stave R	1995	12,13	2,532.96	259,087	1.0
Stave R	1995	14	61.17	18,297	0.3
Stave R	1995	21	152.40	209,202	0.1
Stave R	1995	29	2,545.30	52,964	4.8
Stave R	1996	12,13	149.81	82,167	0.2
Stave R	1997	12,13	642.62	97,880	0.7
Stave R	1997	29	541.86	20,770	2.6
Stave R	1998	12,13	12,416.58	1,433,772	0.9
Stave R	1998	14	253.77	562,617	0.0
Stave R	1998	21	178.91	695,439	0.0
Stave R	1998	29	548.45	18,951	2.9
Stave R	1999	12,13	293.37	40,321	0.7
Stave R	1999	29	1,767.33	43,591	4.1
Stave R	2000	12,13	6,146.94	179,650	3.4
Stave R	2000	29	588.04	21,693	2.7
Stave R	2001	12,13	334.89	183,351	0.2
Stave R	2002	12,13	371.07	568,444	0.1
Sucwoa R	1992	25,26	1,566.17	152,130	1.0
Sucwoa R	1993	25,26	921.70	117,096	0.8

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Sucwoa R	1994	25,26	13,270.02	197,947	6.7
Sucwoa R	1995	25,26	2,529.99	27,784	9.1
Sucwoa R	1997	25,26	6,821.92	89,072	7.7
Sucwoa R	1998	25,26	12,543.02	101,722	12.3
Sucwoa R	1999	25,26	3,506.36	104,245	3.4
Sucwoa R	2000	25,26	888.54	27,226	3.3
Sucwoa R	2001	25,26	6,165.54	69,311	8.9
Sucwoa R	2003	25,26	2,378.62	109,042	2.2
Theodosia Cr	2005	12,13	22.87	809,474	0.0
Theodosia Cr	2006	12,13	239.55	817,017	0.0
Theodosia Cr	2006	14	23.72	83,920	0.0
Theodosia Cr	2006	29	165.70	181,453	0.1
Theodosia Cr	2007	12,13	45.52	441,799	0.0
Theodosia Cr	2007	14	3.54	25,412	0.0
Theodosia Cr	2007	29	18.34	37,573	0.0
Thorsen Cr/CCST	1990	6	43.92	153,292	0.0
Thorsen Cr/CCST	1990	7,8,9	15,275.52	917,567	1.7
Thorsen Cr/CCST	1991	6	57.75	50,747	0.1
Thorsen Cr/CCST	1991	7,8,9	3,090.36	379,521	0.8
Thorsen Cr/CCST	1991	8,9,10	66.10		
Thorsen Cr/CCST	1992	3,4,5	264.88	240,412	0.1
Thorsen Cr/CCST	1992	7,8,9	3,978.81	225,489	1.8
Thorsen Cr/CCST	1992	9,10	389.15		
Thorsen Cr/CCST	1993	7,8,9	5,528.14	288,982	1.9
Thorsen Cr/CCST	1994	10	25.46	19,178	0.1
Thorsen Cr/CCST	1994	6	106.11	75,143	0.1
Thorsen Cr/CCST	1994	7,8,9	8,044.93	694,489	1.2
Thorsen Cr/CCST	1994	8,9,10	805.17		
Thorsen Cr/CCST	1995	6	11.46	27,811	0.0
Thorsen Cr/CCST	1995	7,8,9	24,831.63	928,283	2.7
Thorsen Cr/CCST	1996	2W,2E	62.41	122,945	0.1
Thorsen Cr/CCST	1996	6	28.82	29,748	0.1
Thorsen Cr/CCST	1996	7,8,9	9,499.76	340,698	2.8
Thorsen Cr/CCST	1997	7,8,9	10,838.79	290,439	3.7
Thorsen Cr/CCST	1998	1	4.64	1,413	0.3
Thorsen Cr/CCST	1998	2W,2E	38.16	104,988	0.0
Thorsen Cr/CCST	1998	6	1,368.27	438,019	0.3
Thorsen Cr/CCST	1998	7,8,9	19,282.76	741,267	2.6
Thorsen Cr/CCST	1999	3,4,5	250.21	144,676	0.2
Thorsen Cr/CCST	1999	6	35.79	37,124	0.1
Thorsen Cr/CCST	1999	7,8,9	8,405.87	264,709	3.2
Thorsen Cr/CCST	2000	6	81.56	15,477	0.5
Thorsen Cr/CCST	2000	7,8,9	4,031.88	82,058	4.9
Thorsen Cr/CCST	2001	2W,2E	16.02	37,733	0.0

Stock	Year	Statistical Area(s)	Expanded Catch	Total Catch By Area	Enhanced % Catch
Thorsen Cr/CCST	2001	6	177.28	56,419	0.3
Thorsen Cr/CCST	2001	7,8,9	28,007.70	454,000	6.2
Thorsen Cr/CCST	2002	11	21.92	1,489	1.5
Thorsen Cr/CCST	2002	2W,2E	622.97	95,909	0.6
Thorsen Cr/CCST	2002	6	198.55	202,840	0.1
Thorsen Cr/CCST	2002	7,8,9	22,957.43	574,650	4.0
Thorsen Cr/CCST	2003	2W,2E	106.29	5,941	1.8
Thorsen Cr/CCST	2003	7,8,9	38,568.83	956,368	4.0
Thorsen Cr/CCST	2004	7,8,9	69,368.79	1,235,642	5.6
Thorsen Cr/CCST	2005	7,8,9	10,920.40	341,954	3.2
Thorsen Cr/CCST	2006	7,8,9	24,967.52	380,476	6.6
Thorsen Cr/CCST	2007	7,8,9	11,201.20	258,080	4.3
Thorsen Cr/CCST	2008	7,8,9	178.07	9,764	1.8
Thorsen Cr/CCST	2009	7,8,9	1,529.38	44,177	3.5
Thorsen Cr/CCST	2011	7,8,9	2,843.94	334,737	0.8
Thorsen Cr/CCST	2012	7,8,9	18,530.80	326,239	5.7
Thorsen Cr/CCST	2013	7,8,9	47,816.15	547,620	8.7
Thorsen Cr/CCST	2014	7,8,9	5,979.70	229,560	2.6
Thorsen Cr/CCST	2015	7,8,9	39,349.57	874,823	4.5
Thorsen Cr/CCST	2016	7,8,9	27,672.38	475,253	5.8
Thorsen Cr/CCST	2017	7,8,9	25,284.25	316,501	8.0
Thorsen Cr/CCST	2018	7,8,9	30,173.69	452,439	6.7
Tlupana R	1992	25,26	2,456.79	152,130	1.6
Tlupana R	1993	25,26	3,022.55	117,096	2.6
Tlupana R	1994	25,26	6,346.81	197,947	3.2
Tlupana R	1995	25,26	858.34	27,784	3.1
Tlupana R	1997	25,26	2,535.62	89,072	2.8
Tlupana R	1998	25,26	4,473.45	101,722	4.4
Tlupana R	1999	25,26	7,358.30	104,245	7.1
Tlupana R	2000	25,26	1,231.28	27,226	4.5
Tlupana R	2001	25,26	1,941.64	69,311	2.8
Tlupana R	2003	25,26	4,468.26	109,042	4.1

Table 21 Estimated Catch, Escapement, Exploitation Rate and Enhanced Contribution to Escapement for Return Years 1980-1989

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Bella Coola River	1981	197	197	0	15	15	212	92.9	2,761,684	0.1
Bella Coola River	1982	3,129	3,129	0	1,555	1,555	4,684	66.8	3,174,251	0.4
Bella Coola River	1983	22,280	22,280	0	14,057	14,057	36,337	61.3	2,390,576	1.2
Bella Coola River	1984	13,480	13,480	0	29,133	29,133	42,613	31.6	3,020,031	0.4
Bella Coola River	1985	35,634	35,634	0	13,205	13,205	48,839	73.0	5,036,077	0.3
Bella Coola River	1986	154,053	154,053	0	15,297	15,297	169,350	91.0	4,488,719	0.3
Bella Coola River	1987	204,786	204,786	0	12,889	12,889	217,675	94.1	2,654,596	0.8
Bella Coola River	1988	423,499	423,499	0	20,079	20,079	443,578	95.5	3,751,046	0.7
Bella Coola River	1989	135,205	135,205	0	25,674	25,674	160,879	84.0	2,400,175	0.6
Bella Coola River	Mean	110,251	110,251	0	14,656	14,656	124,907	76.7	3,297,462	0.5
Bella Coola River	Total	992,263	992,263	0	131,904	131,904	1,124,167	88.3	29,677,155	0.4
Big Qualicum R	1980	98,973	98,973	0	97,575	97,575	196,548	50.4	93,170	104.7
Big Qualicum R	1981	46,316	46,316	0	88,831	88,831	135,147	34.3	124,852	71.1
Big Qualicum R	1982	207,753	207,753	0	139,344	139,344	347,097	59.9	83,741	166.4
Big Qualicum R	1983	100,604	100,604	0	145,648	145,648	246,252	40.9	138,232	105.4
Big Qualicum R	1984	149,901	149,901	0	100,220	100,220	250,121	59.9	128,692	77.9
Big Qualicum R	1985	409,670	409,670	0	188,583	188,583	598,253	68.5	207,062	91.1
Big Qualicum R	1986	334,121	334,121	0	167,302	167,302	501,423	66.6	193,364	86.5
Big Qualicum R	1987	143,910	143,910	0	76,422	76,422	220,332	65.3	95,943	79.7
Big Qualicum R	1988	120,822	120,822	0	86,615	86,615	207,437	58.2	111,944	77.4
Big Qualicum R	1989	93,494	93,494	1,104	61,243	62,347	155,841	60.0	80,713	77.2
Big Qualicum R	Mean	170,556	170,556	110	115,178	115,289	285,845	56.4	125,771	93.7
Big Qualicum R	Total	1,705,564	1,705,564	1,104	1,151,783	1,152,887	2,858,451	59.7	1,257,713	91.7
Bish Cr	1988	1,114	1,114	0	681	681	1,795	62.1	10,150	6.7
Bish Cr	1989	181	181	0	6,726	6,726	6,907	2.6	15,000	44.8
Bish Cr	Mean	648	648	0	3,704	3,704	4,351	32.3	12,575	25.8
Bish Cr	Total	1,295	1,295	0	7,407	7,407	8,702	14.9	25,150	29.5
Blaney Cr	1980	1,018	1,018	0	918	918	1,936	35.0	1,100	83.5
Blaney Cr	1981	281	281	0	3,519	3,519	3,800	7.4	3,200	110.0

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Blaney Cr	1982	671	671	0	696	696	1,367	49.1	1,000	69.6
Blaney Cr	1983	63	63	0	448	448	511	12.3	1,000	44.8
Blaney Cr	1984	0	0	0	2,933	2,933	2,933	0.0	4,500	65.2
Blaney Cr	1985	1,147	1,147	0	9,936	9,936	11,083	10.3	7,000	141.9
Blaney Cr	1986	2,870	2,870	0	5,593	5,593	8,463	33.9	2,200	254.2
Blaney Cr	1987	133	133	0	179	179	312	42.6	350	51.1
Blaney Cr	1988	12,454	12,454	0	3,575	3,575	16,029	77.7	1,650	216.7
Blaney Cr	1989	1,618	1,618	0	4,676	4,676	6,294	25.7	1,560	299.7
Blaney Cr	Mean	2,026	2,026	0	3,247	3,247	5,273	29.4	2,356	133.7
Blaney Cr	Total	20,255	20,255	0	32,473	32,473	52,728	38.4	23,560	137.8
Canton Cr	1982	76	76	0	151	151	227	33.5	8,000	1.9
Canton Cr	1983	0	0	0	519	519	519	0.0	5,000	10.4
Canton Cr	1984	1,301	1,301	0	1,900	1,900	3,201	40.6	4,500	42.2
Canton Cr	1985	5,583	5,583	0	6,339	6,339	11,922	46.8	5,500	115.3
Canton Cr	1986	8,881	8,881	0	5,376	5,376	14,257	62.3	4,900	109.7
Canton Cr	1987	174	174	0	3,407	3,407	3,581	4.9	300	1135.7
Canton Cr	1988	0	0	0	4,488	4,488	4,488	0.0	2,500	179.5
Canton Cr	1989	0	0	0	9,263	9,263	9,263	0.0	5,500	168.4
Canton Cr	Mean	2,002	2,002	0	3,930	3,930	5,932	23.5	4,525	220.4
Canton Cr	Total	16,015	16,015	0	31,443	31,443	47,458	33.7	36,200	86.9
Chehalis R	1985	1,752	1,752	0	4,471	4,471	6,223	28.2	117,519	3.8
Chehalis R	1986	6,601	6,601	0	10,351	10,351	16,952	38.9	93,398	11.1
Chehalis R	1987	528	528	0	2,350	2,350	2,878	18.3	56,812	4.1
Chehalis R	1988	18,749	18,749	0	14,210	14,210	32,959	56.9	106,033	13.4
Chehalis R	1989	51,980	51,980	0	113,235	113,235	165,215	31.5	121,727	93.0
Chehalis R	Mean	15,922	15,922	0	28,923	28,923	44,845	34.8	99,098	25.1
Chehalis R	Total	79,610	79,610	0	144,617	144,617	224,227	35.5	495,489	29.2
Chilliwack R	1983	0	0	0	174	174	174	0.0	27,000	0.6
Chilliwack R	1984	1,694	1,694	0	4,322	4,322	6,016	28.2	82,000	5.3
Chilliwack R	1985	12,525	12,525	0	44,076	44,076	56,601	22.1	448,202	9.8
Chilliwack R	1986	49,903	49,903	0	35,635	35,635	85,538	58.3	311,413	11.4
Chilliwack R	1987	2,519	2,519	0	23,848	23,848	26,367	9.6	91,850	26.0

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Chilliwack R	1988	55,616	55,616	0	22,201	22,201	77,817	71.5	165,437	13.4
Chilliwack R	1989	10,922	10,922	0	21,033	21,033	31,955	34.2	192,267	10.9
Chilliwack R	Mean	19,026	19,026	0	21,613	21,613	40,638	32.0	188,310	11.1
Chilliwack R	Total	133,179	133,179	0	151,289	151,289	284,468	46.8	1,318,169	11.5
Conuma R	1981	89	89	0	155	155	244	36.5	30,000	0.5
Conuma R	1982	7,423	7,423	0	6,793	6,793	14,216	52.2	40,000	17.0
Conuma R	1983	0	0	0	20,644	20,644	20,644	0.0	36,000	57.3
Conuma R	1984	23,182	23,182	0	17,159	17,159	40,341	57.5	24,000	71.5
Conuma R	1985	28,026	28,026	0	19,352	19,352	47,378	59.2	21,000	92.2
Conuma R	1986	27,092	27,092	0	10,814	10,814	37,906	71.5	29,900	36.2
Conuma R	1987	1,459	1,459	0	9,793	9,793	11,252	13.0	22,000	44.5
Conuma R	1988	67	67	0	9,475	9,475	9,542	0.7	30,500	31.1
Conuma R	1989	0	0	0	15,607	15,607	15,607	0.0	30,000	52.0
Conuma R	Mean	9,704	9,704	0	12,199	12,199	21,903	32.3	29,267	44.7
Conuma R	Total	87,338	87,338	0	109,792	109,792	197,130	44.3	263,400	41.7
Dala R	1987	1,805	1,805	0	4,051	4,051	5,856	30.8	5,000	81.0
Dala R	1988	6,632	6,632	0	9,151	9,151	15,783	42.0	35,000	26.1
Dala R	1989	178	178	0	6,935	6,935	7,113	2.5	20,000	34.7
Dala R	Mean	2,872	2,872	0	6,712	6,712	9,584	25.1	20,000	47.3
Dala R	Total	8,615	8,615	0	20,137	20,137	28,752	30.0	60,000	33.6
Deserted R	1982	3,027	3,027	0	16,142	16,142	19,169	15.8	10,000	161.4
Deserted R	1983	0	0	0	16,696	16,696	16,696	0.0	7,000	238.5
Deserted R	1984	12,822	12,822	0	8,829	8,829	21,651	59.2	15,000	58.9
Deserted R	1985	26,204	26,204	0	18,790	18,790	44,994	58.2	25,000	75.2
Deserted R	1986	20,547	20,547	0	8,859	8,859	29,406	69.9	20,000	44.3
Deserted R	1987	2,694	2,694	0	8,948	8,948	11,642	23.1	25,000	35.8
Deserted R	1988	0	0	0	5,633	5,633	5,633	0.0	38,500	14.6
Deserted R	1989	0	0	0	5,780	5,780	5,780	0.0	25,000	23.1
Deserted R	Mean	8,162	8,162	0	11,210	11,210	19,371	28.3	20,688	81.5
Deserted R	Total	65,294	65,294	0	89,677	89,677	154,971	42.1	165,500	54.2
Harrison R	1985	5,806	5,806	0	29,048	29,048	34,854	16.7	295,000	9.8
Harrison R	1986	37,135	37,135	0	83,220	83,220	120,355	30.9	165,000	50.4

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Harrison R	1987	1,807	1,807	0	30,665	30,665	32,472	5.6	21,847	140.4
Harrison R	1988	41,515	41,515	0	41,602	41,602	83,117	49.9	44,900	92.7
Harrison R	1989	3,766	3,766	0	5,847	5,847	9,613	39.2	40,000	14.6
Harrison R	Mean	18,006	18,006	0	38,076	38,076	56,082	28.4	113,349	61.6
Harrison R	Total	90,029	90,029	0	190,382	190,382	280,411	32.1	566,747	33.6
Hirsch Cr	1987	1,810	1,810	0	3,890	3,890	5,700	31.8	1,500	259.3
Hirsch Cr	1988	4,716	4,716	0	5,047	5,047	9,763	48.3	4,500	112.2
Hirsch Cr	1989	311	311	0	7,442	7,442	7,753	4.0	4,500	165.4
Hirsch Cr	Mean	2,279	2,279	0	5,460	5,460	7,739	28.0	3,500	179.0
Hirsch Cr	Total	6,837	6,837	0	16,379	16,379	23,216	29.4	10,500	156.0
Humphreys Cr	1987	1,944	1,944	0	4,373	4,373	6,317	30.8		
Humphreys Cr	1988	4,574	4,574	0	7,721	7,721	12,295	37.2		
Humphreys Cr	1989	98	98	0	3,812	3,812	3,910	2.5		
Humphreys Cr	Mean	2,205	2,205	0	5,302	5,302	7,507	23.5		
Humphreys Cr	Total	6,616	6,616	0	15,906	15,906	22,522	29.4	-	
Inch Cr	1980	3,859	3,859	0	3,479	3,479	7,338	52.6	5,300	65.6
Inch Cr	1981	34	34	0	1,753	1,753	1,787	1.9	3,500	50.1
Inch Cr	1982	1,559	1,559	0	6,158	6,158	7,717	20.2	5,602	109.9
Inch Cr	1983	0	0	0	5,262	5,262	5,262	0.0	4,157	126.6
Inch Cr	1984	1,999	1,999	0	2,374	2,374	4,373	45.7	4,255	55.8
Inch Cr	1985	2,225	2,225	0	14,459	14,459	16,684	13.3	7,009	206.3
Inch Cr	1986	2,116	2,116	0	10,288	10,288	12,404	17.1	12,693	81.1
Inch Cr	1987	1,704	1,704	94	11,664	11,758	13,462	12.7	10,983	107.1
Inch Cr	1988	8,483	8,483	0	9,161	9,161	17,644	48.1	7,030	130.3
Inch Cr	1989	2,658	2,658	0	1,403	1,403	4,061	65.5	1,676	83.7
Inch Cr	Mean	2,464	2,464	9	6,600	6,610	9,073	27.7	6,221	101.6
Inch Cr	Total	24,637	24,637	94	66,001	66,095	90,732	27.2	62,205	106.3
Kildala R	1987	1,269	1,269	0	2,845	2,845	4,114	30.8	10,000	28.5
Kildala R	1988	5,240	5,240	0	7,472	7,472	12,712	41.2	25,000	29.9
Kildala R	1989	258	258	0	10,838	10,838	11,096	2.3	15,000	72.3
Kildala R	Mean	2,256	2,256	0	7,052	7,052	9,307	24.8	16,667	43.5
Kildala R	Total	6,767	6,767	0	21,155	21,155	27,922	24.2	50,000	42.3

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Kitimat R	1987	2,923	2,923	0	5,528	5,528	8,451	34.6	8,000	69.1
Kitimat R	1988	9,619	9,619	0	8,415	8,415	18,034	53.3	86,000	9.8
Kitimat R	1989	282	282	0	9,346	9,346	9,628	2.9	25,100	37.2
Kitimat R	Mean	4,275	4,275	0	7,763	7,763	12,038	30.3	39,700	38.7
Kitimat R	Total	12,824	12,824	0	23,289	23,289	36,113	35.5	119,100	19.6
L Qualicum R	1982	2,828	2,828	0	12,272	12,272	15,100	18.7	38,000	32.3
L Qualicum R	1983	3,913	3,913	0	24,121	24,121	28,034	14.0	23,973	100.6
L Qualicum R	1984	10,643	10,643	0	25,558	25,558	36,201	29.4	70,000	36.5
L Qualicum R	1985	120,190	120,190	0	60,907	60,907	181,097	66.4	85,000	71.7
L Qualicum R	1986	164,416	164,416	0	78,940	78,940	243,356	67.6	75,000	105.3
L Qualicum R	1987	59,968	59,968	0	28,901	28,901	88,869	67.5	45,000	64.2
L Qualicum R	1988	60,674	60,674	0	39,411	39,411	100,085	60.6	42,018	93.8
L Qualicum R	1989	42,263	42,263	38,003	10,180	48,183	90,446	46.7	49,110	98.1
L Qualicum R	Mean	58,112	58,112	4,750	35,036	39,787	97,899	46.4	49,374	75.3
L Qualicum R	Total	464,895	464,895	38,003	280,290	318,293	783,188	59.4	394,991	74.3
Mathers Cr	1983	0	0	0	965	965	965	0.0	3,000	32.2
Mathers Cr	1984	2,881	2,881	0	4,028	4,028	6,909	41.7	1,000	402.8
Mathers Cr	1985	6,118	6,118	0	3,359	3,359	9,477	64.6	2,800	120.0
Mathers Cr	1986	1,546	1,546	0	2,074	2,074	3,620	42.7	2,500	83.0
Mathers Cr	1987	2,692	2,692	0	1,112	1,112	3,804	70.8	1,350	82.4
Mathers Cr	1988	1,384	1,384	0	272	272	1,656	83.6	2,968	9.2
Mathers Cr	1989	3,426	3,426	0	7,890	7,890	11,316	30.3	13,600	58.0
Mathers Cr	Mean	2,578	2,578	0	2,814	2,814	5,392	47.7	3,888	112.5
Mathers Cr	Total	18,047	18,047	0	19,700	19,700	37,747	47.8	27,218	72.4
Necleetsconnay R	1984	1,627	1,627	0	495	495	2,122	76.7	2,500	19.8
Necleetsconnay R	1985	7,123	7,123	0	2,509	2,509	9,632	74.0	8,000	31.4
Necleetsconnay R	1986	31,457	31,457	0	2,611	2,611	34,068	92.3	2,450	106.6
Necleetsconnay R	1987	41,267	41,267	0	2,610	2,610	43,877	94.1	4,100	63.7
Necleetsconnay R	1988	30,632	30,632	0	832	832	31,464	97.4	6,000	13.9
Necleetsconnay R	1989	20,947	20,947	0	1,343	1,343	22,290	94.0	4,000	33.6
Necleetsconnay R	Mean	22,176	22,176	0	1,733	1,733	23,909	88.1	4,508	44.8
Necleetsconnay R	Total	133,053	133,053	0	10,400	10,400	143,453	92.8	27,050	38.4

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Neekas R	1985	1,359	1,359	0	0	0	1,359	100.0	31,000	0.0
Neekas R	1986	22,704	22,704	0	0	0	22,704	100.0	35,600	0.0
Neekas R	1987	4,057	4,057	0	0	0	4,057	100.0	35,000	0.0
Neekas R	Mean	9,373	9,373	0	0	0	9,373	100.0	33,867	0.0
Neekas R	Total	28,120	28,120	0	0	0	28,120	100.0	101,600	0.0
Nitinat R	1983	0	0	0	4,705	4,705	4,705	0.0	7,960	59.1
Nitinat R	1984	113,748	113,748	0	56,288	56,288	170,036	66.9	76,000	74.1
Nitinat R	1985	1,059,198	1,059,198	0	558,106	558,106	1,617,304	65.5	210,000	265.8
Nitinat R	1986	271,206	271,206	0	104,097	104,097	375,303	72.3	140,000	74.4
Nitinat R	1987	259,314	259,314	0	42,679	42,679	301,993	85.9	50,000	85.4
Nitinat R	1988	1,235,894	1,235,894	0	172,532	172,532	1,408,426	87.8	188,728	91.4
Nitinat R	1989	166,220	166,220	0	153,057	153,057	319,277	52.1	115,000	133.1
Nitinat R	Mean	443,654	443,654	0	155,923	155,923	599,578	61.5	112,527	111.9
Nitinat R	Total	3,105,580	3,105,580	0	1,091,464	1,091,464	4,197,044	74.0	787,688	138.6
Pallant Cr	1981	148	148	0	816	816	964	15.4	28,600	2.9
Pallant Cr	1982	467	467	0	2,492	2,492	2,959	15.8	2,300	108.3
Pallant Cr	1983	0	0	0	16,305	16,305	16,305	0.0	25,000	65.2
Pallant Cr	1984	33,641	33,641	0	47,994	47,994	81,635	41.2	26,464	181.4
Pallant Cr	1985	50,223	50,223	0	30,190	30,190	80,413	62.5	32,000	94.3
Pallant Cr	1986	20,876	20,876	0	34,156	34,156	55,032	37.9	31,200	109.5
Pallant Cr	1987	44,535	44,535	0	24,655	24,655	69,190	64.4	32,000	77.0
Pallant Cr	1988	78,493	78,493	0	24,326	24,326	102,819	76.3	36,159	67.3
Pallant Cr	1989	13,339	13,339	0	26,392	26,392	39,731	33.6	47,000	56.2
Pallant Cr	Mean	26,858	26,858	0	23,036	23,036	49,894	38.6	28,969	84.7
Pallant Cr	Total	241,722	241,722	0	207,326	207,326	449,048	53.8	260,723	79.5
Puntledge R	1982	4,757	4,757	0	3,189	3,189	7,946	59.9	65,000	4.9
Puntledge R	1983	7,273	7,273	0	10,566	10,566	17,839	40.8	75,000	14.1
Puntledge R	1984	16,769	16,769	0	17,706	17,706	34,475	48.6	40,000	44.3
Puntledge R	1985	56,348	56,348	0	24,529	24,529	80,877	69.7	85,000	28.9
Puntledge R	1986	87,744	87,744	0	43,019	43,019	130,763	67.1	60,000	71.7
Puntledge R	1987	73,661	73,661	0	37,431	37,431	111,092	66.3	50,761	73.7
Puntledge R	1988	17,487	17,487	0	10,488	10,488	27,975	62.5	47,000	22.3

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Puntledge R	1989	11,230	11,230	0	9,541	9,541	20,771	54.1	35,000	27.3
Puntledge R	Mean	34,409	34,409	0	19,559	19,559	53,967	58.6	57,220	35.9
Puntledge R	Total	275,269	275,269	0	156,469	156,469	431,738	63.8	457,761	34.2
Squakum Cr	1985	1,050	1,050	0	4,557	4,557	5,607	18.7	23,000	19.8
Squakum Cr	1986	8,990	8,990	0	18,633	18,633	27,623	32.5	8,500	219.2
Squakum Cr	1987	557	557	57	2,707	2,764	3,321	16.8	5,000	55.3
Squakum Cr	1988	22,375	22,375	0	18,078	18,078	40,453	55.3	5,000	361.6
Squakum Cr	1989	3,071	3,071	0	9,162	9,162	12,233	25.1	6,560	139.7
Squakum Cr	Mean	7,209	7,209	11	10,627	10,639	17,847	29.7	9,612	159
Squakum Cr	Total	36,043	36,043	57	53,137	53,194	89,237	40.4	48,060	110.7
Stave R	1985	2,415	2,415	1,959	12,789	14,748	17,163	14.1	113,000	13.1
Stave R	1986	14,422	14,422	3,697	12,843	16,540	30,962	46.6	95,000	17.4
Stave R	1987	618	618	95	3,962	4,057	4,675	13.2	40,000	10.1
Stave R	1988	52,168	52,168	5,331	43,009	48,340	100,508	51.9	70,000	69.1
Stave R	1989	19,136	19,136	5,712	63,961	69,673	88,809	21.5	118,703	58.7
Stave R	Mean	17,752	17,752	3,359	27,313	30,672	48,423	29.5	87,341	34
Stave R	Total	88,759	88,759	16,794	136,564	153,358	242,117	36.7	436,703	35.1
Sucwoa R	1981	31	31	0	61	61	92	33.7	10,000	0.6
Sucwoa R	1982	3,706	3,706	0	9,382	9,382	13,088	28.3	9,000	104.2
Sucwoa R	1983	383	383	0	10,313	10,313	10,696	3.6	12,000	85.9
Sucwoa R	1984	11,530	11,530	0	11,334	11,334	22,864	50.4	11,300	100.3
Sucwoa R	1985	30,407	30,407	0	25,869	25,869	56,276	54.0	13,000	199.0
Sucwoa R	1986	29,389	29,389	0	17,003	17,003	46,392	63.3	9,000	188.9
Sucwoa R	1987	1,042	1,042	0	5,826	5,826	6,868	15.2	1,450	401.8
Sucwoa R	1988	0	0	0	8,569	8,569	8,569	0.0	4,500	190.4
Sucwoa R	1989	0	0	0	7,451	7,451	7,451	0.0	4,500	165.6
Sucwoa R	Mean	8,499	8,499	0	10,645	10,645	19,144	27.6	8,306	160
Sucwoa R	Total	76,488	76,488	0	95,808	95,808	172,296	44.4	74,750	128.2
Tlupana R	1982	40	40	0	0	0	40	100.0	7,000	0.0
Tlupana R	1983	10	10	0	532	532	542	1.8	10,000	5.3
Tlupana R	1984	2,071	2,071	0	1,540	1,540	3,611	57.4	4,500	34.2

Stock	Ret Year	Marine Catch	Total Enh Catch	Hatchery Removals	Natural Escape	Total Escape	Catch + Escape	% Marine Expl	System Escape	% Syst Enh
Tlupana R	1985	8,438	8,438	0	6,369	6,369	14,807	57.0	10,000	63.7
Tlupana R	1986	13,831	13,831	0	9,196	9,196	23,027	60.1	16,525	55.6
Tlupana R	1987	593	593	0	7,027	7,027	7,620	7.8	7,000	100.4
Tlupana R	1988	0	0	0	6,587	6,587	6,587	0.0	3,000	219.6
Tlupana R	1989	0	0	0	7,317	7,317	7,317	0.0	7,500	97.6
Tlupana R	Mean	3,123	3,123	0	4,821	4,821	7,944	35.5	8,191	72
Tlupana R	Total	24,983	24,983	0	38,568	38,568	63,551	39.3	65,525	58.9
Weaver Sp Ch	1985	1,058	1,058	0	4,380	4,380	5,438	19.5	75,000	5.8
Weaver Sp Ch	1986	3,572	3,572	0	6,911	6,911	10,483	34.1	28,000	24.7
Weaver Sp Ch	1987	68	68	0	846	846	914	7.4	40,600	2.1
Weaver Sp Ch	1988	42	42	0	23	23	65	64.6	31,250	0.1
Weaver Sp Ch	Mean	1,185	1,185	0	3,040	3,040	4,225	31.4	43,713	8
Weaver Sp Ch	Total	4,740	4,740	0	12,160	12,160	16,900	28.0	174,850	7.0

Table 22 Enhanced Contribution to Escapement by Stock and Return Years, 1990-2018

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Big Qualicum R	1990	85,894.2	65,425	131.3
Big Qualicum R	1991	67,852.5	83,113	81.6
Big Qualicum R	1992	48,810.1	93,971	51.9
Big Qualicum R	1993	95,374.2	161,204	59.2
Big Qualicum R	1994	47,552.5	118,950	40.0
Big Qualicum R	1995	19,067.6	46,069	41.4
Big Qualicum R	1996	48,805.2	45,424	107.4
Big Qualicum R	1997	88,698.6	85,810	103.4
Big Qualicum R	1998	99,830.0	242,325	41.2
Big Qualicum R	1999	32,278.5	63,920	50.5
Big Qualicum R	2000	7,212.1	15,577	46.3
Big Qualicum R	2001	70,947.2	169,196	41.9
Big Qualicum R	2002	58,453.8	200,512	29.2
Big Qualicum R	2003	18,289.1	59,391	30.8
Big Qualicum R	2004	24,471.7	81,654	30.0
Big Qualicum R	2005	28,244.2	42,820	66.0
Big Qualicum R	2006	35,636.1	101,354	35.2
Big Qualicum R	2007	11,315.8	39,995	28.3
Big Qualicum R	2008	9,958.6	26,134	38.1
Big Qualicum R	2009	17,449.0	35,236	49.5
Big Qualicum R	2010	13,549.2	26,520	51.1
Big Qualicum R	2011	21,031.9	128,363	16.4
Big Qualicum R	2012	23,061.4	121,083	19.0
Big Qualicum R	2013	7,518.0	86,764	8.7
Big Qualicum R	2014	6,318.3	33,954	18.6
Big Qualicum R	2015	113,167.8	86,775	130.4
Big Qualicum R	2016	70,483.3	248,224	28.4
Big Qualicum R	2017	24,625.5	21,963	112.1
Bish Cr	1991	1,633.8	-	0.0
Bish Cr	1995	25,469.1	-	0.0
Blaney Cr/LWFR	1990	1,000.5	4,770	21.0
Canton Cr	1990	3,407.4	4,275	79.7
Canton Cr	1991	6,693.5	5,509	121.5
Canton Cr	1992	4,134.3	7,399	55.9
Canton Cr	1993	6,636.2	31,530	21.0
Canton Cr	1994	12,943.9	16,251	79.6
Canton Cr	1995	4,426.4	8,671	51.0
Canton Cr	1996	4,407.0	9,104	48.4
Canton Cr	1997	13,947.5	16,697	83.5
Canton Cr	1998	12,015.0	41,390	29.0
Canton Cr	1999	6,562.7	12,996	50.5
Canton Cr	2000	1,793.9	1,896	94.6

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Canton Cr	2001	7,277.9	2,422	300.5
Chehalis R	1990	127,834.1	204,930	62.4
Chehalis R	1991	71,561.4	581,559	12.3
Chehalis R	1992	72,193.8	162,210	44.5
Chehalis R	1993	43,812.4	107,705	40.7
Chehalis R	1994	49,210.0	128,410	38.3
Chehalis R	1995	55,511.2	123,083	45.1
Chehalis R	1996	43,596.2	131,776	33.1
Chehalis R	1997	48,632.2	125,502	38.8
Chehalis R	1998	94,068.0	275,857	34.1
Chehalis R	1999	117,136.6	276,409	42.4
Chehalis R	2000	18,160.2	44,833	40.5
Chehalis R	2001	31,389.3	150,419	20.9
Chehalis R	2002	27,129.0	61,266	44.3
Chehalis R	2003	387.9	43,326	0.9
Chilliwack R	1990	15,804.7	153,343	10.3
Chilliwack R	1991	20,280.5	176,967	11.5
Chilliwack R	1992	19,803.4	238,385	8.3
Chilliwack R	1993	69,511.3	258,705	26.9
Chilliwack R	1994	75,492.0	276,429	27.3
Chilliwack R	1995	24,935.5	202,250	12.3
Chilliwack R	1996	20,795.5	167,863	12.4
Chilliwack R	1997	24,454.7	215,513	11.3
Chilliwack R	1998	67,360.8	401,920	16.8
Chilliwack R	1999	78,582.2	426,672	18.4
Chilliwack R	2000	9,240.0	105,419	8.8
Chilliwack R	2001	21,128.5	269,564	7.8
Conuma R	1990	7,909.5	29,540	26.8
Conuma R	1991	11,563.7	18,462	62.6
Conuma R	1992	22,771.6	41,041	55.5
Conuma R	1993	22,584.9	40,154	56.2
Conuma R	1994	23,413.9	60,288	38.8
Conuma R	1995	17,973.7	29,773	60.4
Conuma R	1996	33,930.6	44,703	75.9
Conuma R	1997	62,401.1	80,053	77.9
Conuma R	1998	271,091.4	268,577	100.9
Conuma R	1999	23,956.5	33,672	71.1
Conuma R	2000	6,429.2	11,937	53.9
Conuma R	2001	23,913.5	75,216	31.8
Dala R	1990	1,201.4	8,625	13.9
Dala R	1991	1,933.8	8,449	22.9
Dala R	1992	7,958.1	6,915	115.1
Dala R	1995	17,532.1	-	0.0
Deserted Lk	2000	25.5	2,696	0.9

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Deserted Lk	2001	406.7	2,972	13.7
Deserted R/NWVI	1990	3,294.4	14,797	22.3
Deserted R/NWVI	1991	8,542.7	22,822	37.4
Deserted R/NWVI	1992	10,229.8	25,246	40.5
Deserted R/NWVI	1993	24,453.0	36,374	67.2
Deserted R/NWVI	1994	8,593.6	11,523	74.6
Deserted R/NWVI	1995	10,494.1	2,983	351.8
Deserted R/NWVI	1996	2,784.6	-	0.0
Deserted R/NWVI	1997	4,953.3	-	0.0
Deserted R/NWVI	1998	15,591.3	32,072	48.6
Deserted R/NWVI	1999	646.5	-	0.0
Fish Cr	1992	123.8	2,546	4.9
Fish Cr+Airport Ch	1990	2,216.8	3,021	73.4
Fish Cr+Airport Ch	1991	1,546.3	1,796	86.1
Fish Cr+Airport Ch	1992	5,822.2	2,262	257.4
Fish Cr+Airport Ch	1993	3,735.7	8,089	46.2
Fish Cr+Airport Ch	1994	3,809.4	4,575	83.3
Fish Cr+Airport Ch	1995	4,427.8	4,021	110.1
Fish Cr+Airport Ch	1996	4,322.1	2,965	145.8
Fish Cr+Airport Ch	1997	4,204.8	4,157	101.2
Fish Cr+Airport Ch	1998	7,787.1	5,404	144.1
Fish Cr+Airport Ch	1999	5,108.9	3,080	165.9
Fish Cr+Airport Ch	2000	3,499.6	4,580	76.4
Fish Cr+Airport Ch	2001	2,727.1	4,014	67.9
Fish Cr+Airport Ch	2002	1,252.4	3,080	40.7
Fish Cr+Airport Ch	2003	2,461.4	8,406	29.3
Fish Cr+Airport Ch	2004	4,673.1	6,643	70.3
Fish Cr+Airport Ch	2005	1,674.8	2,431	68.9
Fish Cr+Airport Ch	2006	2,249.5	2,480	90.7
Fish Cr+Airport Ch	2007	1,847.3	2,285	80.8
Fish Cr+Airport Ch	2008	1,373.3	2,964	46.3
Fish Cr+Airport Ch	2009	2,118.1	2,846	74.4
Fish Cr+Airport Ch	2010	1,028.5	965	106.6
Fish Cr+Airport Ch	2011	5,752.9	2,650	217.1
Fish Cr+Airport Ch	2012	6,490.5	2,126	305.3
Fish Cr+Airport Ch	2013	11,256.3	2,727	412.8
Fish Cr+Airport Ch	2014	4,108.5	4,035	101.8
Fish Cr+Airport Ch	2015	6,738.6	1,807	372.9
Hirsch Cr	1991	364.8	7,854	4.6
Hirsch Cr	1992	10,326.4	20,786	49.7
Hirsch Cr	1993	8,041.3	26,413	30.4
Hirsch Cr	1994	16,164.3	25,921	62.4
Hirsch Cr	1995	6,469.2	15,000	43.1
Hirsch Cr	1996	12,423.3	26,099	47.6

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Hirsch Cr	1997	458.2	1,014	45.2
Hirsch Cr	1998	13,391.0	31,232	42.9
Hirsch Cr	1999	1,177.3	20,813	5.7
Hirsch Cr	2000	345.5	15,709	2.2
Hirsch Cr	2001	307.4	5,990	5.1
Hirsch Cr	2002	1,294.1	7,094	18.2
Hirsch Cr	2003	297.0	1,523	19.5
Humphreys Cr	1991	174.4	-	0.0
Inch Cr	1990	2,461.6	9,089	27.1
Inch Cr	1991	3,977.9	10,728	37.1
Inch Cr	1992	6,640.0	13,491	49.2
Inch Cr	1993	5,510.0	13,522	40.7
Inch Cr	1994	14,023.4	19,141	73.3
Inch Cr	1995	4,765.5	8,566	55.6
Inch Cr	1996	4,170.3	16,743	24.9
Inch Cr	1997	11,408.3	20,120	56.7
Inch Cr	1998	24,470.8	42,399	57.7
Inch Cr	1999	16,935.1	23,182	73.1
Inch Cr	2000	5,958.4	9,602	62.1
Inch Cr	2001	14,240.8	24,794	57.4
Inch Cr	2002	11,903.5	26,017	45.8
Inch Cr	2003	11,540.7	24,945	46.3
Kildala R	1990	2,125.8	4,622	46.0
Kildala R	1991	3,368.2	8,830	38.1
Kildala R	1992	6,924.9	15,890	43.6
Kildala R	1993	5,385.4	15,873	33.9
Kildala R	1994	6,886.3	25,652	26.8
Kildala R	1995	18,530.6	15,000	123.5
Kildala R	1996	17,988.0	-	0.0
Kildala R	1997	6,920.9	25,568	27.1
Kildala R	1998	27,065.8	-	0.0
Kitasoo Cr	1995	961.1	5,663	17.0
Kitasoo Cr	1996	1,452.8	8,035	18.1
Kitasoo Cr	1997	2,946.2	8,127	36.3
Kitasoo Cr	1998	1,474.4	7,960	18.5
Kitasoo Cr	1999	2,051.1	9,075	22.6
Kitimat R	1990	13,139.6	26,845	48.9
Kitimat R	1991	12,411.1	31,263	39.7
Kitimat R	1992	59,394.2	102,267	58.1
Kitimat R	1993	34,011.0	104,563	32.5
Kitimat R	1994	121,144.7	253,177	47.8
Kitimat R	1995	107,129.3	225,000	47.6
Kitimat R	1996	61,120.9	84,395	72.4
Kitimat R	1997	125,832.6	167,963	74.9

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Kitimat R	1998	256,393.2	503,311	50.9
Kitimat R	1999	55,374.8	102,763	53.9
Kitimat R	2000	41,174.7	77,716	53.0
Kitimat R	2001	40,145.3	102,710	39.1
Kitimat R	2002	82,992.9	164,361	50.5
Kitimat R	2003	872.3	3,839	22.7
L Qualicum R	1989	39,931.9	49,110	81.3
L Qualicum R	1990	64,688.5	119,013	54.4
L Qualicum R	1991	47,244.7	115,018	41.1
L Qualicum R	1992	39,195.2	116,706	33.6
L Qualicum R	1993	72,239.1	202,737	35.6
L Qualicum R	1994	92,233.6	167,200	55.2
L Qualicum R	1995	30,730.8	47,400	64.8
L Qualicum R	1996	14,494.0	41,605	34.8
L Qualicum R	1997	32,527.9	64,497	50.4
L Qualicum R	1998	41,832.7	53,962	77.5
L Qualicum R	1999	13,969.8	38,386	36.4
L Qualicum R	2000	4,173.9	11,227	37.2
L Qualicum R	2001	13,790.0	27,608	49.9
L Qualicum R	2002	12,240.0	33,354	36.7
L Qualicum R	2003	9,737.4	44,279	22.0
L Qualicum R	2004	121.3	-	0.0
L Qualicum R	2005	10,252.0	18,446	55.6
L Qualicum R	2006	2,775.2	33,313	8.3
L Qualicum R	2007	5,337.6	-	0.0
L Qualicum R	2008	6,540.4	-	0.0
L Qualicum R	2009	12,636.2	-	0.0
L Qualicum R	2010	10,990.2	-	0.0
L Qualicum R	2011	29,143.1	-	0.0
L Qualicum R	2012	33,567.6	-	0.0
L Qualicum R	2013	8,970.9	-	0.0
L Qualicum R	2014	6,350.5	-	0.0
L Qualicum R	2015	126,004.5	-	0.0
L Qualicum R	2016	78,254.1	-	0.0
L Qualicum R	2017	27,154.9	-	0.0
Lang Cr	1997	263.9	2,120	12.4
Mathers Cr	1990	5,600.0	9,583	58.4
Mathers Cr	1991	2,020.4	2,306	87.6
Mathers Cr	1992	3,361.2	5,592	60.1
Mathers Cr	1993	7,614.7	19,133	39.8
Mathers Cr	1994	4,931.3	11,523	42.8
Mathers Cr	1995	3,058.7	9,364	32.7
Mathers Cr	1996	2,775.9	7,297	38.0
Mathers Cr	1997	3,830.9	7,842	48.9

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
McLoughlin Bay Cr	1995	568.3	3,385	16.8
McLoughlin Bay Cr	1996	29.6	1,616	1.8
McLoughlin Bay Cr	2015	2,189.6	6,559	33.4
Necleetsconnay R	1990	1,386.3	8,070	17.2
Necleetsconnay R	1992	290.6	6,000	4.8
Necleetsconnay R	1993	722.3	17,304	4.2
Necleetsconnay R	1995	1,432.5	-	0.0
Nitinat R	1990	219,704.4	300,000	73.2
Nitinat R	1991	158,491.6	457,193	34.7
Nitinat R	1992	44,815.0	219,939	20.4
Nitinat R	1993	241,385.4	424,792	56.8
Nitinat R	1994	121,847.1	319,822	38.1
Nitinat R	1995	32,605.5	155,000	21.0
Nitinat R	1996	189,419.2	534,170	35.5
Nitinat R	1997	403,163.7	671,333	60.1
Nitinat R	1998	236,069.3	490,925	48.1
Nitinat R	1999	137,654.1	203,626	67.6
Nitinat R	2000	18,412.2	30,726	59.9
Nitinat R	2001	290,266.9	420,443	69.0
Noohalk Cr	1990	307.4	618	49.7
Noohalk Cr	1992	31.3	905	3.5
Nooklikonnik Cr	1992	284.9	4,629	6.2
Pallant Cr	1990	36,046.1	37,897	95.1
Pallant Cr	1991	25,538.0	37,604	67.9
Pallant Cr	1992	37,812.6	37,347	101.2
Pallant Cr	1993	21,687.4	38,159	56.8
Pallant Cr	1994	27,493.7	39,967	68.8
Pallant Cr	1995	33,692.0	55,050	61.2
Pallant Cr	1996	25,681.0	45,716	56.2
Pallant Cr	1997	26,477.2	35,073	75.5
Puntledge R	1990	22,719.9	75,752	30.0
Puntledge R	1991	4,712.1	65,812	7.2
Puntledge R	1992	15,666.0	76,393	20.5
Puntledge R	1993	5,941.5	83,390	7.1
Puntledge R	1994	21,243.7	105,079	20.2
Puntledge R	1995	12,457.8	58,514	21.3
Puntledge R	1996	4,746.2	42,358	11.2
Puntledge R	1997	18,764.7	109,077	17.2
Puntledge R	1998	23,718.8	166,514	14.2
Puntledge R	1999	14,704.8	74,514	19.7
Puntledge R	2000	4,816.9	48,400	10.0
Puntledge R	2001	2,727.1	65,341	4.2
Saloompt R	1990	1,714.7	5,021	34.2
Saloompt R	1991	1,044.9	2,448	42.7

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Saloompt R	1992	5,808.7	5,852	99.3
Saloompt R	1993	3,670.5	5,641	65.1
Saloompt R	1994	3,669.4	7,461	49.2
Saloompt R	1995	4,545.3	3,913	116.2
Saloompt R	1996	3,920.6	6,690	58.6
Saloompt R	1997	3,412.7	6,361	53.6
Saloompt R	1998	4,783.2	8,040	59.5
Saloompt R	1999	2,548.2	3,511	72.6
Saloompt R	2000	3,222.9	2,897	111.2
Saloompt R	2001	3,302.9	4,247	77.8
Saloompt R	2002	1,650.9	2,688	61.4
Saloompt R	2003	4,354.1	7,921	55.0
Saloompt R	2004	9,148.0	5,747	159.2
Saloompt R	2005	1,113.5	2,597	42.9
Saloompt R	2006	1,269.6	1,922	66.1
Saloompt R	2007	1,213.0	2,262	53.6
Saloompt R	2008	1,186.1	1,553	76.4
Saloompt R	2009	1,970.1	-	0.0
Saloompt R	2010	990.3	-	0.0
Saloompt R	2011	5,671.5	5,689	99.7
Saloompt R	2012	5,076.1	1,115	455.3
Saloompt R	2013	5,154.1	-	0.0
Saloompt R	2014	2,445.2	1,328	184.1
Saloompt R	2015	5,613.7	1,983	283.1
Sliammon R	1996	718.7	7,745	9.3
Sliammon R	1997	3,530.5	8,503	41.5
Sliammon R	1998	3,599.3	29,732	12.1
Sliammon R	2004	4,244.1	40,401	10.5
Snootli Cr	1990	1,666.1	3,305	50.4
Snootli Cr	1991	1,221.4	2,695	45.3
Snootli Cr	1992	5,531.6	11,578	47.8
Snootli Cr	1993	2,872.6	8,062	35.6
Snootli Cr	1994	3,557.0	12,015	29.6
Snootli Cr	1995	3,332.0	7,614	43.8
Snootli Cr	1996	3,691.5	13,720	26.9
Snootli Cr	1997	3,629.4	10,009	36.3
Snootli Cr	1998	9,021.9	28,230	32.0
Snootli Cr	1999	2,193.3	6,284	34.9
Snootli Cr	2000	2,200.2	9,397	23.4
Snootli Cr	2001	1,827.3	7,694	23.7
Snootli Cr	2002	1,545.1	9,919	15.6
Snootli Cr	2003	10,270.5	36,432	28.2
Snootli Cr	2004	9,879.0	13,042	75.7
Snootli Cr	2005	1,652.9	6,308	26.2

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Snootli Cr	2006	1,904.2	4,273	44.6
Snootli Cr	2007	1,396.3	7,399	18.9
Snootli Cr	2008	793.1	3,498	22.7
Snootli Cr	2009	1,544.0	3,227	47.8
Snootli Cr	2010	746.1	1,732	43.1
Snootli Cr	2011	4,499.3	16,384	27.5
Snootli Cr	2012	5,296.1	7,994	66.3
Snootli Cr	2013	9,367.4	12,177	76.9
Snootli Cr	2014	1,546.4	1,891	81.8
Snootli Cr	2015	6,623.5	17,939	36.9
Stave R	1985	14,758.4	113,000	13.1
Stave R	1986	16,101.6	95,000	16.9
Stave R	1987	969.8	40,000	2.4
Stave R	1988	28,878.6	70,000	41.3
Stave R	1989	68,043.4	118,703	57.3
Stave R	1990	44,022.4	249,150	17.7
Stave R	1991	35,944.7	234,860	15.3
Stave R	1992	57,832.0	380,796	15.2
Stave R	1993	86,109.8	355,993	24.2
Stave R	1994	28,280.0	404,475	7.0
Stave R	1995	15,558.7	179,978	8.6
Stave R	1996	27,668.2	152,957	18.1
Stave R	1997	18,736.4	201,663	9.3
Stave R	1998	23,106.7	500,000	4.6
Stave R	1999	13,988.0	320,000	4.4
Stave R	2000	7,698.3	105,000	7.3
Stave R	2001	6,574.5	625,000	1.1
Stave R	2002	432.6	475,000	0.1
Sucwoa R	1990	5,978.1	13,832	43.2
Sucwoa R	1991	3,893.6	10,898	35.7
Sucwoa R	1992	3,271.5	15,796	20.7
Sucwoa R	1993	12,676.3	19,891	63.7
Sucwoa R	1994	7,482.7	22,337	33.5
Sucwoa R	1995	1,166.1	4,563	25.6
Sucwoa R	1996	3,154.6	13,288	23.7
Sucwoa R	1997	8,806.8	17,641	49.9
Sucwoa R	1998	14,730.6	47,027	31.3
Sucwoa R	1999	1,664.1	8,752	19.0
Thorsen Cr/CCST	1990	1,753.4	5,242	33.4
Thorsen Cr/CCST	1991	857.1	2,297	37.3
Thorsen Cr/CCST	1992	3,800.0	4,964	76.6
Thorsen Cr/CCST	1993	3,658.2	9,737	37.6
Thorsen Cr/CCST	1994	2,123.3	6,632	32.0
Thorsen Cr/CCST	1995	3,356.4	4,901	68.5

Stock	Year	Expanded Escapement	Total River Estimate	Enhanced % Escapement
Thorsen Cr/CCST	1996	4,636.2	5,180	89.5
Thorsen Cr/CCST	1997	3,875.6	5,154	75.2
Thorsen Cr/CCST	1998	7,668.4	8,194	93.6
Thorsen Cr/CCST	1999	4,234.0	5,467	77.4
Thorsen Cr/CCST	2000	2,686.8	7,531	35.7
Thorsen Cr/CCST	2001	3,204.8	7,256	44.2
Thorsen Cr/CCST	2002	2,547.4	7,330	34.8
Thorsen Cr/CCST	2003	9,788.0	10,590	92.4
Thorsen Cr/CCST	2004	10,154.9	11,533	88.1
Thorsen Cr/CCST	2005	1,927.8	6,408	30.1
Thorsen Cr/CCST	2006	2,308.1	7,327	31.5
Thorsen Cr/CCST	2007	1,920.7	5,490	35.0
Thorsen Cr/CCST	2008	1,415.8	2,933	48.3
Thorsen Cr/CCST	2009	2,007.9	2,599	77.3
Thorsen Cr/CCST	2010	1,173.5	1,471	79.8
Thorsen Cr/CCST	2011	5,851.6	7,371	79.4
Thorsen Cr/CCST	2012	6,466.4	4,197	154.1
Thorsen Cr/CCST	2013	10,800.3	8,926	121.0
Thorsen Cr/CCST	2014	2,835.3	2,536	111.8
Thorsen Cr/CCST	2015	6,654.1	1,804	368.9
Tlupana R	1990	3,508.0	5,950	59.0
Tlupana R	1991	7,091.5	11,184	63.4
Tlupana R	1992	4,836.5	11,311	42.8
Tlupana R	1993	10,041.9	13,345	75.2
Tlupana R	1994	15,868.4	21,574	73.6
Tlupana R	1995	5,182.4	4,331	119.7
Tlupana R	1996	1,386.5	22,202	6.2
Tlupana R	1997	7,445.0	31,249	23.8
Tlupana R	1998	4,994.7	83,231	6.0
Tlupana R	1999	7,503.9	20,980	35.8
Tlupana R	2000	7,227.2	9,739	74.2
Tlupana R	2001	10.5	3,771	0.3

Table 23 Survival Rate and Exploitation Rate for Brood Years 1978 - 2014

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Summer	Fed Fry	1981	7,887	2,932	10,819	2.2%	73%
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Summer	Fed Fry	1985	28,663	4,987	33,650	2.1%	85%
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Summer	Fed Fry	1998	26,485	1,807	28,292	1.8%	94%
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Summer	Fed Fry	1999	51,416	3,481	54,897	3.7%	94%
CCST	BELLA COOLA RIVER-LATE	Fish Cr+Airport Ch	Summer	Fed Fry	2000	149,468	8,897	158,365	9.1%	94%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1982	14,616	5,236	19,852	4.0%	74%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1983	34,171	3,285	37,456	3.8%	91%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1984	60,280	3,799	64,079	6.2%	94%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1988	5,881	4,581	10,462	0.9%	56%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1989	6,127	3,903	10,031	0.5%	61%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1990	15,467	3,424	18,891	1.0%	82%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1991	31,284	3,946	35,231	1.9%	89%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1992	16,298	4,219	20,516	1.1%	79%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1993	7,534	3,694	11,227	0.6%	67%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1994	17,891	9,847	27,738	1.7%	65%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1995	4,922	2,544	7,467	0.4%	66%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1996	5,580	2,622	8,202	0.5%	68%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1997	8,977	2,016	10,994	0.7%	82%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1998	21,134	1,399	22,533	1.4%	94%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	1999	38,844	9,491	48,335	2.9%	80%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2000	70,773	9,133	79,906	5.1%	89%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2001	16,367	1,498	17,865	1.0%	92%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2002	20,636	2,367	23,003	1.2%	90%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2003	15,228	2,671	17,899	1.1%	85%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2005	1,420	2,682	4,102	0.2%	35%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2006	118	882	1,000	0.1%	12%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2007	5,530	6,863	12,393	0.7%	45%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2008	3,376	3,278	6,654	0.4%	51%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2009	57,587	12,322	69,909	4.1%	82%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2010	11,183	2,536	13,719	0.8%	82%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2013	32,242	-	32,242	1.9%	100%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Fed Fry	2014	20,427	-	20,427	1.2%	100%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Unfed	1983	3,744	102	3,846	0.9%	97%
CCST	BELLA COOLA RIVER-LATE	Snootli Cr	Summer	Unfed	1984	16,217	499	16,716	1.9%	97%
CCST	BELLA COOLA-DEAN RIVERS	Kimsquit R	Summer	Fed Fry	1988	1,377	685	2,062	0.6%	67%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Fed Fry	1981	6,710	2,334	9,044	2.0%	74%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Seapen	1983	14,611	655	15,266	5.1%	96%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Seapen	1984	21,680	453	22,133	2.1%	98%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Seapen	1986	30,866	923	31,789	3.6%	97%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Seapen	1987	3,746	206	3,952	0.4%	95%
CCST	BELLA COOLA-DEAN RIVERS	Necleetsconnay R	Summer	Seapen	1988	4,805	555	5,360	1.1%	90%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1981	7,144	1,255	8,399	1.4%	85%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1982	75,774	7,929	83,703	5.4%	91%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1983	37,948	1,312	39,260	1.9%	97%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1984	115,352	8,761	124,113	6.5%	93%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1985	23,002	2,997	25,999	1.6%	88%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1986	27,978	2,474	30,452	2.3%	92%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1987	3,836	628	4,464	0.5%	86%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1993	11,570	3,790	15,361	0.9%	75%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	1994	32,839	6,103	38,942	2.4%	84%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	2001	16,529	1,275	17,804	1.0%	93%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	2002	26,018	1,146	27,164	1.5%	96%
CCST	BELLA COOLA-DEAN RIVERS	Saloompt R	Summer	Fed Fry	2003	14,941	1,860	16,800	1.0%	89%
CCST	BELLA COOLA-DEAN RIVERS	Thorsen Cr/CCST	Summer	Fed Fry	1986	14,611	2,045	16,656	2.6%	88%
CCST	BELLA COOLA-DEAN RIVERS	Thorsen Cr/CCST	Summer	Fed Fry	1995	10,721	4,534	15,255	0.9%	70%
CCST	BELLA COOLA-DEAN RIVERS	Thorsen Cr/CCST	Summer	Fed Fry	1996	5,474	3,288	8,762	0.5%	62%
CCST	BELLA COOLA-DEAN RIVERS	Thorsen Cr/CCST	Summer	Fed Fry	1997	23,344	3,304	26,648	1.6%	88%
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Fed Fry	1991	1,148	696	1,845	0.5%	62%
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Fed Fry	1992	80	376	456	0.4%	18%
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Seapen	1989	6,706	-	6,706	1.4%	100%
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Seapen	1990	579	40	618	0.2%	94%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Seapen	1993	566	3,679	4,245	0.9%	13%
CCST	HECATE LOWLANDS	Kitasoo Cr	Fall	Seapen	1994	3,922	1,125	5,047	1.3%	78%
CCST	SPILLER-FITZ HUGH-BURKE	Kwakusdis R	Fall	Seapen	1991	288	-	288	0.5%	100%
CCST	SPILLER-FITZ HUGH-BURKE	McLoughlin Bay Cr	Fall	Seapen	1987	1,606	-	1,606	1.1%	100%
CCST	SPILLER-FITZ HUGH-BURKE	McLoughlin Bay Cr	Fall	Seapen	1988	6,952	-	6,952	0.5%	100%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	1994	774	1,423	2,197	0.4%	35%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	1995	630	1,804	2,434	0.4%	26%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	1996	215	-	215	0.0%	100%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	1997	451	-	451	0.1%	100%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	1999	2,159	1,073	3,232	0.5%	67%
GSMN	GEORGIA STRAIT	Sliammon R	Fall	Fed Fry	2000	1,271	2,403	3,674	0.6%	35%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1981	311,203	118,765	429,968	1.0%	72%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1982	384,900	271,174	656,074	1.1%	59%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1983	201,232	74,671	275,903	0.5%	73%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1984	108,350	90,341	198,691	0.8%	55%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1985	63,366	33,962	97,328	0.4%	65%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1986	294,380	115,979	410,360	0.9%	72%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1987	101,150	33,568	134,718	0.2%	75%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1988	540,117	98,960	639,077	1.0%	85%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1989	193,859	63,347	257,206	0.5%	75%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1990	123,926	45,862	169,788	0.4%	73%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1991	20,048	10,268	30,316	0.1%	66%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1992	1,451	24,241	25,691	0.0%	6%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1993	21,512	117,949	139,461	0.2%	15%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1994	209,105	107,140	316,245	0.7%	66%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1995	16,195	23,570	39,765	0.2%	41%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1996	829	6,613	7,442	0.1%	11%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1997	6,953	36,702	43,655	0.1%	16%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1998	48,404	90,577	138,981	0.3%	35%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	1999	11,467	25,274	36,741	0.1%	31%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2001	3,662	9,757	13,420	0.1%	27%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2002	3,014	10,984	13,998	0.1%	22%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2003	2,125	9,129	11,254	0.1%	19%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2004	771	3,083	3,854	0.0%	20%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2005	1,514	9,701	11,215	0.1%	13%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2006	2,654	9,908	12,562	0.1%	21%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2007	17,221	25,338	42,559	0.4%	40%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2008	2,055	6,214	8,269	0.1%	25%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2009	5,917	9,801	15,718	0.1%	38%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2010	1,164	3,879	5,043	0.1%	23%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2011	5,142	40,221	45,363	0.4%	11%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Chan Fry	2012	27,161	37,394	64,555	0.6%	42%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Fed Fry	1981	32,723	7,608	40,331	1.9%	81%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Fed Fry	1982	60,366	22,805	83,171	3.2%	73%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Fed Fry	1996	47	633	680	0.0%	7%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Fed Fry	1997	1,107	3,233	4,340	0.3%	26%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Fed Fry	2010	59	633	692	0.1%	9%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2001	12,920	33,155	46,075	0.1%	28%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2002	5,890	21,095	26,985	0.1%	22%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2003	2,304	9,645	11,949	0.1%	19%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2004	650	2,381	3,031	0.0%	21%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2005	1,815	7,581	9,396	0.1%	19%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2006	984	3,660	4,644	0.1%	21%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2007	7,163	10,539	17,702	0.4%	41%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2008	184	556	740	0.1%	25%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2009	804	1,317	2,121	0.1%	38%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2010	283	1,524	1,807	0.1%	16%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2011	8,236	64,445	72,681	0.4%	11%
GSVI	GEORGIA STRAIT	Big Qualicum R	Fall	Nat Emerg	2012	45,372	62,465	107,837	0.6%	42%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1979	7,079	34,389	41,468	0.7%	17%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1981	1,776	4,736	6,512	0.5%	27%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1982	188,494	104,647	293,141	1.3%	64%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1983	38,780	23,672	62,451	0.3%	62%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1984	39,373	28,941	68,314	0.3%	58%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1985	14,335	14,087	28,421	0.4%	50%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1986	98,132	73,989	172,121	0.4%	57%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1987	20,717	29,639	50,357	0.1%	41%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1988	146,662	70,504	217,166	0.6%	68%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1989	93,253	67,160	160,413	0.6%	58%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1990	88,997	83,347	172,344	0.4%	52%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1991	11,148	30,576	41,724	0.1%	27%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1992	-	5,908	5,908	0.0%	0%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	1999	13,760	10,518	24,278	0.2%	57%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	2001	8,990	9,919	18,909	0.1%	48%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Chan Fry	2002	3,750	2,714	6,464	0.1%	58%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Fed Fry	1980	332	3,286	3,618	0.2%	9%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Fed Fry	1981	34,622	29,647	64,269	2.3%	54%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Fed Fry	1982	66,514	23,215	89,729	3.3%	74%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Fed Fry	1983	24,382	9,385	33,767	1.3%	72%
GSVI	GEORGIA STRAIT	L Qualicum R	Fall	Fed Fry	1984	19,312	8,924	28,236	0.9%	68%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1980	3,383	3,516	6,899	0.2%	49%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1981	42,980	32,893	75,873	3.3%	57%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1982	94,957	41,161	136,118	2.6%	70%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1983	50,438	25,558	75,997	1.6%	66%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1984	9,608	5,623	15,231	0.2%	63%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1985	11,910	11,068	22,979	0.5%	52%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1986	42,363	22,665	65,028	1.3%	65%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1987	27,876	4,554	32,430	0.8%	86%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1988	24,187	17,388	41,575	1.3%	58%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1989	35,082	3,556	38,638	1.4%	91%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1990	26,457	23,952	50,409	1.0%	52%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1991	2,942	5,430	8,372	0.3%	35%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1992	738	5,236	5,974	0.1%	12%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1993	2,890	18,736	21,626	0.6%	13%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1994	19,387	14,920	34,308	1.1%	57%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Fed Fry	1995	3,011	5,123	8,134	0.3%	37%
GSVI	GEORGIA STRAIT	Puntledge R	Fall	Seapen	1994	13,090	10,157	23,247	1.1%	56%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1983	945	939	1,884	0.1%	50%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1984	8,322	9,576	17,897	0.8%	46%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1985	56,002	100,854	156,856	1.7%	36%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1986	73,544	165,317	238,861	1.8%	31%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1988	46,143	66,787	112,931	0.9%	41%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1989	52,598	47,749	100,347	0.9%	52%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1990	55,654	58,536	114,190	0.9%	49%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1991	19,025	46,408	65,432	0.5%	29%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1992	2,597	20,138	22,735	0.2%	11%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1993	2,688	71,311	73,998	0.7%	4%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1994	19,029	65,596	84,625	0.9%	22%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1995	14,413	141,664	156,078	1.4%	9%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1996	6,166	20,109	26,276	0.3%	23%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1997	2,766	29,093	31,858	0.4%	9%
LWFR	LOWER FRASER	Chehalis R	Fall	Fed Fry	1998	4,342	28,293	32,635	0.8%	13%
LWFR	LOWER FRASER	Chehalis+Squakum	Fall	Fed Fry	1987	13,819	41,714	55,533	0.5%	25%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1980	412	1,182	1,594	0.2%	26%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1981	12,258	36,912	49,170	1.2%	25%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1982	52,677	56,277	108,954	2.6%	48%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1983	3,556	11,436	14,992	1.3%	24%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1984	52,615	24,736	77,351	2.3%	68%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1985	12,276	19,956	32,232	0.8%	38%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1986	22,900	18,512	41,413	1.4%	55%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1987	6,371	11,662	18,033	0.7%	35%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1988	24,613	19,059	43,672	1.7%	56%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1989	23,498	63,399	86,897	2.8%	27%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1990	18,885	43,324	62,208	2.1%	30%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1991	4,012	12,778	16,790	0.6%	24%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1992	1,541	11,506	13,048	0.4%	12%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1993	5,618	23,157	28,776	1.2%	20%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1994	97,599	46,427	144,026	4.7%	68%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1995	13,889	67,964	81,852	2.7%	17%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1996	5,061	11,018	16,079	0.7%	31%
LWFR	LOWER FRASER	Chilliwack R	Fall	Fed Fry	1997	25,397	19,133	44,530	1.5%	57%
LWFR	LOWER FRASER	Harrison R	Fall	Fed Fry	1983	439	10,956	11,395	0.4%	4%
LWFR	LOWER FRASER	Harrison R	Fall	Fed Fry	1984	15,541	7,281	22,822	1.1%	68%
LWFR	LOWER FRASER	Harrison R	Fall	Fed Fry	1985	311	9,459	9,770	0.2%	3%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1978	189	815	1,004	1.0%	19%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1979	542	5,323	5,865	0.5%	9%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1980	1,452	4,057	5,509	0.6%	26%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1982	582	10,238	10,820	0.4%	5%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1983	608	320	928	0.3%	66%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1984	7,274	11,407	18,681	0.8%	39%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1985	3,891	1,436	5,327	0.3%	73%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1986	2,187	2,160	4,347	0.4%	50%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1987	617	2,505	3,121	0.3%	20%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1988	3,763	7,493	11,256	1.1%	33%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1990	3,141	10,840	13,980	1.9%	22%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1991	2,457	7,317	9,775	1.1%	25%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1992	93	2,178	2,270	0.2%	4%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1993	417	13,081	13,498	1.2%	3%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1994	1,482	16,934	18,416	1.7%	8%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1995	3,317	17,786	21,103	1.8%	16%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1996	1,313	12,661	13,974	1.2%	9%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1997	82	10,519	10,601	1.0%	1%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1998	241	9,044	9,285	0.8%	3%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	1999	510	16,165	16,674	1.7%	3%
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	2000	1,563	2,040	3,603	0.4%	43%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
LWFR	LOWER FRASER	Inch Cr	Fall	Fed Fry	2001	5,230	-	5,230	0.4%	100%
LWFR	LOWER FRASER	Squakum Cr	Fall	Fed Fry	1982	10,281	22,889	33,170	2.5%	31%
LWFR	LOWER FRASER	Squakum Cr	Fall	Fed Fry	1983	316	1,759	2,075	0.3%	15%
LWFR	LOWER FRASER	Squakum Cr	Fall	Fed Fry	1984	21,346	20,563	41,910	1.1%	51%
LWFR	LOWER FRASER	Weaver Sp Ch	Fall	Fed Fry	1982	4,499	11,375	15,874	2.9%	28%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1988	1,253	29,399	30,652	3.6%	4%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1990	1,215	34,174	35,389	3.8%	3%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1991	373	19,648	20,020	2.2%	2%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1992	397	27,618	28,015	3.1%	1%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1993	1,404	24,881	26,285	1.8%	5%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1994	5,692	48,353	54,045	5.3%	11%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1998	3,975	5,110	9,085	0.6%	44%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	1999	4,935	2,419	7,355	0.9%	67%
NCST	DOUGLAS-GARDNER	Hirsch Cr	Summer	Fed Fry	2000	1,171	50	1,221	0.1%	96%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1985	1,994	12,700	14,694	1.8%	14%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1987	477	2,849	3,327	0.8%	14%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1988	1,015	9,160	10,175	1.4%	10%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1989	708	5,776	6,485	1.0%	11%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1995	961	-	961	0.1%	100%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1996	591	594	1,185	0.2%	50%
NCST	DOUGLAS-GARDNER	Kildala R	Summer	Fed Fry	1997	852	-	852	0.1%	100%
NCST	DOUGLAS-GARDNER	Kildala+Dala	Summer	Fed Fry	1986	454	1,471	1,925	1.8%	24%
NCST	DOUGLAS-GARDNER	Kitimat Low+Hirsch	Summer	Fed Fry	1986	3,140	7,428	10,568	1.5%	30%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1984	10,933	14,101	25,034	4.3%	44%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1985	1,131	5,208	6,339	1.2%	18%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1987	2,753	15,343	18,096	0.8%	15%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1988	462	45,181	45,643	1.5%	1%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1989	1,553	30,684	32,237	1.2%	5%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1990	4,218	93,120	97,338	2.5%	4%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1991	1,673	68,199	69,872	1.6%	2%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1993	4,278	130,948	135,226	3.6%	3%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1994	27,343	231,620	258,963	6.9%	11%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1995	4,029	46,324	50,353	1.4%	8%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1996	2,018	56,209	58,228	1.9%	3%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1997	5,247	27,764	33,011	0.9%	16%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1998	6,323	28,158	34,481	0.8%	18%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	1999	28,198	62,334	90,533	2.6%	31%
NCST	DOUGLAS-GARDNER	Kitimat R	Summer	Fed Fry	2000	4,468	74	4,542	0.1%	98%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1983	3,344	1,734	5,078	0.8%	66%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1985	2,058	4,600	6,658	0.9%	31%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1986	5,845	4,205	10,050	1.0%	58%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1987	4,626	1,970	6,596	0.7%	70%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1988	2,449	2,946	5,395	0.4%	45%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1989	17,468	10,100	27,568	0.5%	63%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1990	5,012	3,454	8,466	0.4%	59%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1991	1,084	989	2,072	0.2%	52%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1992	6,979	3,254	10,233	0.5%	68%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1993	11,367	6,735	18,102	0.6%	63%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1994	5,907	-	5,907	0.3%	100%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1995	9,584	-	9,584	0.4%	100%
QCI	EAST HG	Mathers Cr	Fall	Fed Fry	1996	10,400	-	10,400	0.4%	100%
QCI	EAST HG	Pallant Cr	Fall	Fed Fry	1994	34,971	5,604	40,575	0.5%	86%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1980	3,385	7,008	10,393	1.3%	33%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1982	26,979	30,651	57,630	1.6%	47%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1983	2,574	882	3,456	0.9%	74%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1984	17,564	4,211	21,775	1.1%	81%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1990	35,651	32,702	68,353	0.8%	52%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1991	3,235	11,558	14,793	0.2%	22%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1992	31,391	27,684	59,075	0.9%	53%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1993	37,991	30,389	68,380	1.1%	56%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1995	54,914	-	54,914	0.6%	100%
QCI	EAST HG	Pallant Cr	Fall	Seapen	1996	44,051	-	44,051	0.4%	100%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
QCI	EAST HG	Pallant Cr	Fall	Seapen	1997	5,786	-	5,786	0.1%	100%
QCI	EAST HG	Pallant Cr	Fall	Unfed	1984	9,301	2,483	11,784	1.2%	79%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1984	254	2,179	2,433	0.1%	10%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1985	-	12,706	12,706	0.2%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1986	-	10,268	10,268	0.2%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1987	2,145	9,388	11,532	0.2%	19%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1988	10,925	17,788	28,713	0.8%	38%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1989	8,784	14,969	23,753	0.6%	37%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1990	46,453	40,544	86,997	1.5%	53%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1991	4,013	7,098	11,112	0.2%	36%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1992	-	471	471	0.0%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1993	4,698	74,033	78,732	2.4%	6%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1994	2,933	109,182	112,115	5.4%	3%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1995	1,358	12,939	14,297	0.7%	9%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1996	1,333	2,026	3,359	0.5%	40%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1997	2,407	3,660	6,066	0.6%	40%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1998	2,193	1,689	3,882	0.4%	57%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	1999	1,332	-	1,332	0.3%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Fed Fry	2000	1,350	-	1,350	0.3%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1984	12	67	79	0.1%	15%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1989	1,034	2,164	3,199	1.1%	32%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1990	12,222	6,670	18,891	1.9%	65%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1991	3,436	2,507	5,942	0.4%	58%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1992	-	704	704	0.0%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1993	10,039	18,079	28,118	1.3%	36%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1996	5,398	8,332	13,730	0.5%	39%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1997	10,013	15,221	25,235	0.6%	40%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1998	7,316	5,627	12,943	0.4%	57%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	1999	3,468	-	3,468	0.3%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Conuma R	Fall	Seapen	2000	3,793	-	3,793	0.3%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Deserted R/NWVI	Fall	Fed Fry	1983	2,534	6,234	8,768	0.1%	29%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
NWVI	SOUTHWEST VANCOUVER ISLAN	Deserted R/NWVI	Fall	Fed Fry	1997	147	87	233	0.2%	63%
NWVI	SOUTHWEST VANCOUVER ISLAN	Deserted R/NWVI	Fall	Fed Fry	1998	2,107	346	2,453	0.1%	86%
NWVI	SOUTHWEST VANCOUVER ISLAN	Deserted R/NWVI	Fall	Fed Fry	1999	1,903	-	1,903	0.1%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Deserted R/NWVI	Fall	Fed Fry	2000	195	-	195	0.1%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1981	14,919	6,939	21,858	1.4%	68%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1982	42,555	34,003	76,558	1.6%	56%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1983	2,196	2,826	5,022	0.1%	44%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1985	-	4,697	4,697	0.1%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1986	-	11,559	11,559	0.3%	0%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1987	195	1,545	1,740	0.3%	11%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1988	1,428	3,336	4,764	0.9%	30%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1989	1,301	1,881	3,181	1.0%	41%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1990	13,389	14,082	27,470	1.1%	49%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1991	2,434	6,646	9,080	0.3%	27%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1992	77	300	377	0.0%	20%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1993	4,874	14,335	19,209	1.0%	25%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1994	14,967	29,338	44,304	1.4%	34%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1995	2,186	615	2,801	0.3%	78%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1996	1,459	1,126	2,585	0.2%	56%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1997	3,764	-	3,764	0.2%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1998	3,409	34	3,443	0.2%	99%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	1999	1,744	-	1,744	0.1%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Fed Fry	2000	109	-	109	0.1%	100%
NWVI	SOUTHWEST VANCOUVER ISLAN	Sucwoa R	Fall	Seapen	1990	1,485	1,562	3,047	1.1%	49%
NWVI	SOUTHWEST VANCOUVER ISLAN	Tlupana R	Fall	Fed Fry	1981	3,578	1,562	5,140	1.4%	70%
NWVI	SOUTHWEST VANCOUVER ISLAN	Tlupana R	Fall	Fed Fry	1982	19,716	18,964	38,680	1.5%	51%
NWVI	SOUTHWEST VANCOUVER ISLAN	Tlupana R	Fall	Fed Fry	1994	6,319	8,075	14,393	0.8%	44%
NWVI	SOUTHWEST VANCOUVER ISLAN	Tlupana R	Fall	Fed Fry	1995	560	469	1,029	0.5%	54%
NWVI	SOUTHWEST VANCOUVER ISLAN	Tlupana R	Fall	Fed Fry	1996	7,186	12,175	19,361	1.2%	37%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1981	1,118,490	540,516	1,659,006	7.3%	67%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1982	47,893	24,128	72,021	2.4%	66%

Prod Area	Conservation Unit	Stock	Run	Release Stage	Brood Year	Catch	Escapement	Catch+Esc	MS	ER
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1983	121,136	23,766	144,902	0.8%	84%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1984	1,400,548	210,241	1,610,789	6.1%	87%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1985	138,572	202,853	341,425	1.9%	41%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1986	65,657	163,945	229,603	1.5%	29%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1987	44,278	66,186	110,464	2.2%	40%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1988	216,757	80,288	297,045	2.1%	73%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1989	204,610	143,961	348,571	2.9%	59%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1990	157,200	68,361	225,562	1.0%	70%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1991	60,934	18,390	79,324	0.4%	77%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1992	12,118	43,217	55,335	0.7%	22%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1993	424,322	367,271	791,593	3.7%	54%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1994	268,602	167,888	436,489	1.9%	62%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1995	77,159	86,663	163,822	0.8%	47%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1996	8,344	21,434	29,779	0.1%	28%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1997	22,235	60,916	83,151	1.3%	27%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Fed Fry	1998	12,482	19,525	32,007	0.2%	39%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1991	2,557	502	3,060	0.4%	84%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1992	6,593	13,303	19,895	1.1%	33%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1993	201,230	114,908	316,138	6.1%	64%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1994	129,190	35,251	164,441	3.3%	79%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1995	16,469	15,529	31,998	1.0%	51%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1997	40,629	63,367	103,996	1.7%	39%
SWVI	SOUTHWEST VANCOUVER ISLAN	Nitinat R	Fall	Seapen	1998	32,371	24,015	56,387	0.3%	57%

Table 24 Age Class Composition by Stock in Catch and Escapement, 1980 through 2018 Return Years

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Alouette R	Escapement	1985		11				11	0	100	0	0	0
Big Qualicum R	Catch	1980		35,304	62,749	921		98,974	0	35.7	63.4	0.9	0
Big Qualicum R	Catch	1981		6,270	38,671	1,375		46,316	0	13.5	83.5	3	0
Big Qualicum R	Catch	1982		49,145	151,703	6,906		207,754	0	23.7	73	3.3	0
Big Qualicum R	Catch	1983		9,109	78,996	12,500		100,605	0	9.1	78.5	12.4	0
Big Qualicum R	Catch	1984		76,191	60,533	13,177		149,901	0	50.8	40.4	8.8	0
Big Qualicum R	Catch	1985		153,089	253,423	3,158		409,670	0	37.4	61.9	0.8	0
Big Qualicum R	Catch	1986		41,474	278,335	14,311		334,120	0	12.4	83.3	4.3	0
Big Qualicum R	Catch	1987		4,342	121,133	18,436		143,911	0	3	84.2	12.8	0
Big Qualicum R	Catch	1988		730	79,723	38,625	1,744	120,822	0	0.6	66	32	1.4
Big Qualicum R	Catch	1989		13,916	55,342	24,236		93,494	0	14.9	59.2	25.9	0
Big Qualicum R	Catch	1990		2,299	214,700	7,482	50	224,531	0	1	95.6	3.3	0
Big Qualicum R	Catch	1991		4,159	72,764	65,886		142,809	0	2.9	51	46.1	0
Big Qualicum R	Catch	1992		5,844	392,959	25,357	1,895	426,055	0	1.4	92.2	6	0.4
Big Qualicum R	Catch	1993		11,715	179,019	151,017	878	342,629	0	3.4	52.2	44.1	0.3
Big Qualicum R	Catch	1994		14,001	116,178	31,708	5,279	167,166	0	8.4	69.5	19	3.2
Big Qualicum R	Catch	1995		1,451	7,871	8,164		17,486	0	8.3	45	46.7	0
Big Qualicum R	Catch	1996		1,720				1,720	0	100	0	0	0
Big Qualicum R	Catch	1997		159	3,468			3,627	0	4.4	95.6	0	0
Big Qualicum R	Catch	1998	101	16,019	225,233	20,172		261,525	0	6.1	86.1	7.7	0
Big Qualicum R	Catch	1999		111	1,417	1,797		3,325	0	3.3	42.6	54	0
Big Qualicum R	Catch	2000		10	581	5		596	0	1.7	97.5	0.8	0
Big Qualicum R	Catch	2001		2,055	5,877	279		8,211	0	25	71.6	3.4	0
Big Qualicum R	Catch	2002		754	58,240	5,172		64,166	0	1.2	90.8	8.1	0
Big Qualicum R	Catch	2003			8,594	2,262		10,856	0	0	79.2	20.8	0
Big Qualicum R	Catch	2004		3,261		4,300		7,561	0	43.1	0	56.9	0
Big Qualicum R	Catch	2005		507	15,518			16,025	0	3.2	96.8	0	0
Big Qualicum R	Catch	2006		1,736	12,417	659		14,812	0	11.7	83.8	4.4	0
Big Qualicum R	Catch	2007		1,007	2,777			3,784	0	26.6	73.4	0	0
Big Qualicum R	Catch	2008			415	422		837	0	0	49.6	50.4	0
Big Qualicum R	Catch	2009			3,069			3,069	0	0	100	0	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Big Qualicum R	Catch	2010			2,225	260		2,485	0	0	89.5	10.5	0
Big Qualicum R	Catch	2011			20,362	1,413		21,775	0	0	93.5	6.5	0
Big Qualicum R	Catch	2012		2,133	2,361	4,456		8,950	0	23.8	26.4	49.8	0
Big Qualicum R	Catch	2013		140	4,072	155		4,367	0	3.2	93.2	3.6	0
Big Qualicum R	Catch	2014		1,337	1,366	607		3,310	0	40.4	41.3	18.3	0
Big Qualicum R	Catch	2016		659	87,285	13,508		101,452	0	0.6	86	13.3	0
Big Qualicum R	Escapement	1980		34,801	61,861	913		97,575	0	35.7	63.4	0.9	0
Big Qualicum R	Escapement	1981		12,026	74,168	2,637		88,831	0	13.5	83.5	3	0
Big Qualicum R	Escapement	1982		32,962	101,750	4,632		139,344	0	23.7	73	3.3	0
Big Qualicum R	Escapement	1983		21,465	110,717	13,466		145,648	0	14.7	76	9.2	0
Big Qualicum R	Escapement	1984		52,540	41,384	6,296		100,220	0	52.4	41.3	6.3	0
Big Qualicum R	Escapement	1985		118,740	69,843			188,583	0	63	37	0	0
Big Qualicum R	Escapement	1986		9,860	153,452	3,990		167,302	0	5.9	91.7	2.4	0
Big Qualicum R	Escapement	1987		1,979	50,067	24,376		76,422	0	2.6	65.5	31.9	0
Big Qualicum R	Escapement	1988		879	69,105	14,744	1,887	86,615	0	1	79.8	17	2.2
Big Qualicum R	Escapement	1989		13,527	29,562	19,257		62,346	0	21.7	47.4	30.9	0
Big Qualicum R	Escapement	1990		862	81,937	3,333		86,132	0	1	95.1	3.9	0
Big Qualicum R	Escapement	1991		17,735	31,642	18,488		67,865	0	26.1	46.6	27.2	0
Big Qualicum R	Escapement	1992		820	40,948	916	10	42,694	0	1.9	95.9	2.1	0
Big Qualicum R	Escapement	1993		2,187	33,847	26,425		62,459	0	3.5	54.2	42.3	0
Big Qualicum R	Escapement	1994		2,133	22,679	5,833	555	31,200	0	6.8	72.7	18.7	1.8
Big Qualicum R	Escapement	1995		3,993	5,407	8,684	133	18,217	0	21.9	29.7	47.7	0.7
Big Qualicum R	Escapement	1996		29,121	18,434	904	181	48,640	0	59.9	37.9	1.9	0.4
Big Qualicum R	Escapement	1997		12,376	75,234	1,813		89,423	0	13.8	84.1	2	0
Big Qualicum R	Escapement	1998		4,459	64,020	9,747		78,226	0	5.7	81.8	12.5	0
Big Qualicum R	Escapement	1999		1,257	17,281	12,661		31,199	0	4	55.4	40.6	0
Big Qualicum R	Escapement	2000		1,387	5,179	584		7,150	0	19.4	72.4	8.2	0
Big Qualicum R	Escapement	2001		32,234	34,379	614		67,227	0	47.9	51.1	0.9	0
Big Qualicum R	Escapement	2002		2,435	41,697	1,171		45,303	0	5.4	92	2.6	0
Big Qualicum R	Escapement	2003			14,127	1,882		16,009	0	0	88.2	11.8	0
Big Qualicum R	Escapement	2004		16,423		6,531	609	23,563	0	69.7	0	27.7	2.6
Big Qualicum R	Escapement	2005		4,737	21,326			26,063	0	18.2	81.8	0	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Big Qualicum R	Escapement	2006		4,239	22,341	2,307		28,887	0	14.7	77.3	8	0
Big Qualicum R	Escapement	2007		181	10,153	981		11,315	0	1.6	89.7	8.7	0
Big Qualicum R	Escapement	2008		1,751	4,664	3,544		9,959	0	17.6	46.8	35.6	0
Big Qualicum R	Escapement	2009		1,700	14,800	618	331	17,449	0	9.7	84.8	3.5	1.9
Big Qualicum R	Escapement	2010		1,884	10,932	733		13,549	0	13.9	80.7	5.4	0
Big Qualicum R	Escapement	2011		35	20,061	936		21,032	0	0.2	95.4	4.5	0
Big Qualicum R	Escapement	2012		3,054	5,909	13,297		22,260	0	13.7	26.5	59.7	0
Big Qualicum R	Escapement	2013		563	6,206	549	201	7,519	0	7.5	82.5	7.3	2.7
Big Qualicum R	Escapement	2014		382	4,169	1,768		6,319	0	6	66	28	0
Big Qualicum R	Escapement	2015		14,210	97,653	1,305		113,168	0	12.6	86.3	1.2	0
Big Qualicum R	Escapement	2016		2,169	46,272	5,165		53,606	0	4	86.3	9.6	0
Big Qualicum R	Escapement	2017				24,625		24,625	0	0	0	100	0
Big Qualicum R	Catch + Escapement	1980		70,105	124,610	1,834		196,549	0	35.7	63.4	0.9	0
Big Qualicum R	Catch + Escapement	1981		18,296	112,839	4,012		135,147	0	13.5	83.5	3	0
Big Qualicum R	Catch + Escapement	1982		82,107	253,453	11,538		347,098	0	23.7	73	3.3	0
Big Qualicum R	Catch + Escapement	1983		30,574	189,713	25,966		246,253	0	12.4	77	10.5	0
Big Qualicum R	Catch + Escapement	1984		128,731	101,917	19,473		250,121	0	51.5	40.7	7.8	0
Big Qualicum R	Catch + Escapement	1985		271,829	323,266	3,158		598,253	0	45.4	54	0.5	0
Big Qualicum R	Catch + Escapement	1986		51,334	431,787	18,301		501,422	0	10.2	86.1	3.6	0
Big Qualicum R	Catch + Escapement	1987		6,321	171,200	42,812		220,333	0	2.9	77.7	19.4	0
Big Qualicum R	Catch + Escapement	1988		1,609	148,828	53,369	3,631	207,437	0	0.8	71.7	25.7	1.8
Big Qualicum R	Catch + Escapement	1989		27,443	84,904	43,494		155,841	0	17.6	54.5	27.9	0
Big Qualicum R	Catch + Escapement	1990		3,162	296,638	10,815	50	310,665	0	1	95.5	3.5	0
Big Qualicum R	Catch + Escapement	1991		21,893	104,405	84,374		210,672	0	10.4	49.6	40	0
Big Qualicum R	Catch + Escapement	1992		6,665	433,908	26,273	1,905	468,751	0	1.4	92.6	5.6	0.4
Big Qualicum R	Catch + Escapement	1993		13,902	212,866	177,442	878	405,088	0	3.4	52.5	43.8	0.2
Big Qualicum R	Catch + Escapement	1994		16,134	138,857	37,542	5,833	198,366	0	8.1	70	18.9	2.9
Big Qualicum R	Catch + Escapement	1995		5,444	13,278	16,848	133	35,703	0	15.2	37.2	47.2	0.4
Big Qualicum R	Catch + Escapement	1996		30,841	18,434	904	181	50,360	0	61.2	36.6	1.8	0.4
Big Qualicum R	Catch + Escapement	1997		12,535	78,702	1,813		93,050	0	13.5	84.6	1.9	0
Big Qualicum R	Catch + Escapement	1998	101	20,478	289,252	29,919		339,750	0	6	85.1	8.8	0
Big Qualicum R	Catch + Escapement	1999		1,368	18,698	14,458		34,524	0	4	54.2	41.9	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Big Qualicum R	Catch + Escapement	2000		1,397	5,760	589		7,746	0	18	74.4	7.6	0
Big Qualicum R	Catch + Escapement	2001		34,289	40,256	893		75,438	0	45.5	53.4	1.2	0
Big Qualicum R	Catch + Escapement	2002		3,188	99,937	6,343		109,468	0	2.9	91.3	5.8	0
Big Qualicum R	Catch + Escapement	2003			22,721	4,145		26,866	0	0	84.6	15.4	0
Big Qualicum R	Catch + Escapement	2004		19,685		10,832	609	31,126	0	63.2	0	34.8	2
Big Qualicum R	Catch + Escapement	2005		5,244	36,844			42,088	0	12.5	87.5	0	0
Big Qualicum R	Catch + Escapement	2006		5,975	34,758	2,966		43,699	0	13.7	79.5	6.8	0
Big Qualicum R	Catch + Escapement	2007		1,188	12,930	981		15,099	0	7.9	85.6	6.5	0
Big Qualicum R	Catch + Escapement	2008		1,751	5,078	3,967		10,796	0	16.2	47	36.7	0
Big Qualicum R	Catch + Escapement	2009		1,700	17,869	618	331	20,518	0	8.3	87.1	3	1.6
Big Qualicum R	Catch + Escapement	2010		1,884	13,158	993		16,035	0	11.7	82.1	6.2	0
Big Qualicum R	Catch + Escapement	2011		35	40,423	2,349		42,807	0	0.1	94.4	5.5	0
Big Qualicum R	Catch + Escapement	2012		5,187	8,270	17,753		31,210	0	16.6	26.5	56.9	0
Big Qualicum R	Catch + Escapement	2013		702	10,278	704	201	11,885	0	5.9	86.5	5.9	1.7
Big Qualicum R	Catch + Escapement	2014		1,718	5,534	2,375		9,627	0	17.8	57.5	24.7	0
Big Qualicum R	Catch + Escapement	2015		14,210	97,653	1,305		113,168	0	12.6	86.3	1.2	0
Big Qualicum R	Catch + Escapement	2016		2,828	133,557	18,673		155,058	0	1.8	86.1	12	0
Big Qualicum R	Catch + Escapement	2017				24,625		24,625	0	0	0	100	0
Bish Cr	Catch	1988		1,114				1,114	0.0	100.0	0.0	0.0	0.0
Bish Cr	Catch	1989		21	160			181	0.0	11.6	88.4	0.0	0.0
Bish Cr	Catch	1990		97	915	400		1,412	0.0	6.9	64.8	28.3	0.0
Bish Cr	Catch	1991		47	187	59		293	0.0	16.0	63.8	20.1	0.0
Bish Cr	Catch	1992		97	49	8	7	161	0.0	60.2	30.4	5.0	4.3
Bish Cr	Catch	1993		145	122			267	0.0	54.3	45.7	0.0	0.0
Bish Cr	Catch	1994		87	771	171		1,029	0.0	8.5	74.9	16.6	0.0
Bish Cr	Catch	1995		143	54	91		288	0.0	49.7	18.8	31.6	0.0
Bish Cr	Catch	1996			277			277	0.0	0.0	100.0	0.0	0.0
Bish Cr	Escapement	1988		681				681	0.0	100.0	0.0	0.0	0.0
Bish Cr	Escapement	1989		496	6,230			6,726	0.0	7.4	92.6	0.0	0.0
Bish Cr	Escapement	1991		131	1,183	320		1,634	0.0	8.0	72.4	19.6	0.0
Bish Cr	Escapement	1995		15,360	5,563	4,545		25,468	0.0	60.3	21.8	17.8	0.0
Bish Cr	Catch + Escapement	1988		1,795				1,795	0.0	100.0	0.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Bish Cr	Catch + Escapement	1989		517	6,390			6,907	0.0	7.5	92.5	0.0	0.0
Bish Cr	Catch + Escapement	1990		97	915	400		1,412	0.0	6.9	64.8	28.3	0.0
Bish Cr	Catch + Escapement	1991		177	1,371	379		1,927	0.0	9.2	71.1	19.7	0.0
Bish Cr	Catch + Escapement	1992		97	49	8	7	161	0.0	60.2	30.4	5.0	4.3
Bish Cr	Catch + Escapement	1993		145	122			267	0.0	54.3	45.7	0.0	0.0
Bish Cr	Catch + Escapement	1994		87	771	171		1,029	0.0	8.5	74.9	16.6	0.0
Bish Cr	Catch + Escapement	1995		15,503	5,617	4,636		25,756	0.0	60.2	21.8	18.0	0.0
Bish Cr	Catch + Escapement	1996			277			277	0.0	0.0	100.0	0.0	0.0
Blaney Cr/LWFR	Catch	1980		690	320	8		1,018	0	67.8	31.4	0.8	0
Blaney Cr/LWFR	Catch	1981		1	277	3		281	0	0.4	98.6	1.1	0
Blaney Cr/LWFR	Catch	1982		165	200	306		671	0	24.6	29.8	45.6	0
Blaney Cr/LWFR	Catch	1983			57	5		62	0	0	91.9	8.1	0
Blaney Cr/LWFR	Catch	1985		889	259			1,148	0.0	77.4	22.6	0.0	0.0
Blaney Cr/LWFR	Catch	1986		126	2,743			2,869	0.0	4.4	95.6	0.0	0.0
Blaney Cr/LWFR	Catch	1987		76	57			133	0.0	57.1	42.9	0.0	0.0
Blaney Cr/LWFR	Catch	1988		3,954	8,403	97		12,454	0.0	31.7	67.5	0.8	0.0
Blaney Cr/LWFR	Catch	1989			1,515	103		1,618	0.0	0.0	93.6	6.4	0.0
Blaney Cr/LWFR	Catch	1990			1,485		20	1,505	0.0	0.0	98.7	0.0	1.3
Blaney Cr/LWFR	Catch	1991				271		271	0.0	0.0	0.0	100.0	0.0
Blaney Cr/LWFR	Catch	1992					6	6	0.0	0.0	0.0	0.0	100.0
Blaney Cr/LWFR	Escapement	1980		622	289	7		918	0	67.8	31.5	0.8	0
Blaney Cr/LWFR	Escapement	1981		12	3,470	37		3,519	0	0.3	98.6	1.1	0
Blaney Cr/LWFR	Escapement	1982		172	207	317		696	0	24.7	29.7	45.5	0
Blaney Cr/LWFR	Escapement	1983			409	39		448	0	0	91.3	8.7	0
Blaney Cr/LWFR	Escapement	1984		2,933		59		2,992	0.0	98.0	0.0	2.0	0.0
Blaney Cr/LWFR	Escapement	1985		9,936				9,936	0.0	100.0	0.0	0.0	0.0
Blaney Cr/LWFR	Escapement	1986		76	5,517			5,593	0.0	1.4	98.6	0.0	0.0
Blaney Cr/LWFR	Escapement	1987			179			179	0.0	0.0	100.0	0.0	0.0
Blaney Cr/LWFR	Escapement	1988		3,478	72	25		3,575	0.0	97.3	2.0	0.7	0.0
Blaney Cr/LWFR	Escapement	1989			4,676			4,676	0.0	0.0	100.0	0.0	0.0
Blaney Cr/LWFR	Escapement	1990			1,001			1,001	0.0	0.0	100.0	0.0	0.0
Blaney Cr/LWFR	Escapement	1992					1	1	0.0	0.0	0.0	0.0	100.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Blaney Cr/LWFR	Catch + Escapement	1980		1,312	609	15		1,936	0	67.8	31.5	0.8	0
Blaney Cr/LWFR	Catch + Escapement	1981		13	3,747	40		3,800	0	0.3	98.6	1.1	0
Blaney Cr/LWFR	Catch + Escapement	1982		337	407	623		1,367	0	24.7	29.8	45.6	0
Blaney Cr/LWFR	Catch + Escapement	1983			466	44		510	0	0	91.4	8.6	0
Blaney Cr/LWFR	Catch + Escapement	1984		2,933		59		2,992	0.0	98.0	0.0	2.0	0.0
Blaney Cr/LWFR	Catch + Escapement	1985		10,825	259			11,084	0.0	97.7	2.3	0.0	0.0
Blaney Cr/LWFR	Catch + Escapement	1986		202	8,260			8,462	0.0	2.4	97.6	0.0	0.0
Blaney Cr/LWFR	Catch + Escapement	1987		76	236			312	0.0	24.4	75.6	0.0	0.0
Blaney Cr/LWFR	Catch + Escapement	1988		7,432	8,475	122		16,029	0.0	46.4	52.9	0.8	0.0
Blaney Cr/LWFR	Catch + Escapement	1989			6,191	103		6,294	0.0	0.0	98.4	1.6	0.0
Blaney Cr/LWFR	Catch + Escapement	1990			2,486		20	2,506	0.0	0.0	99.2	0.0	0.8
Blaney Cr/LWFR	Catch + Escapement	1991				271		271	0.0	0.0	0.0	100.0	0.0
Blaney Cr/LWFR	Catch + Escapement	1992					7	7	0.0	0.0	0.0	0.0	100.0
Canton Cr	Catch	1982		76				76	0.0	100.0	0.0	0.0	0.0
Canton Cr	Catch	1984		893	404	4		1,301	0.0	68.6	31.1	0.3	0.0
Canton Cr	Catch	1985		4,745	838			5,583	0.0	85.0	15.0	0.0	0.0
Canton Cr	Catch	1986		429	8,372	80		8,881	0.0	4.8	94.3	0.9	0.0
Canton Cr	Catch	1987			36	138		174	0.0	0.0	20.7	79.3	0.0
Canton Cr	Catch	1992		300	1,591	15		1,906	0.0	15.7	83.5	0.8	0.0
Canton Cr	Catch	1993		161	1,144	455		1,760	0.0	9.1	65.0	25.9	0.0
Canton Cr	Catch	1994		303	805	630		1,738	0.0	17.4	46.3	36.2	0.0
Canton Cr	Catch	1995			169	26		195	0.0	0.0	86.7	13.3	0.0
Canton Cr	Catch	1997		419	3,548	60		4,027	0.0	10.4	88.1	1.5	0.0
Canton Cr	Catch	1998		46	1,638	264		1,948	0.0	2.4	84.1	13.6	0.0
Canton Cr	Catch	1999		648	428	360		1,436	0.0	45.1	29.8	25.1	0.0
Canton Cr	Catch	2000		516	315			831	0.0	62.1	37.9	0.0	0.0
Canton Cr	Catch	2001		2,527	3,119			5,646	0.0	44.8	55.2	0.0	0.0
Canton Cr	Catch	2003		2,006	903	133		3,042	0.0	65.9	29.7	4.4	0.0
Canton Cr	Escapement	1982		151				151	0.0	100.0	0.0	0.0	0.0
Canton Cr	Escapement	1983		336	183			519	0.0	64.7	35.3	0.0	0.0
Canton Cr	Escapement	1984		1,248	644	8		1,900	0.0	65.7	33.9	0.4	0.0
Canton Cr	Escapement	1985		4,372	1,967			6,339	0.0	69.0	31.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Canton Cr	Escapement	1986		105	5,242	29		5,376	0.0	2.0	97.5	0.5	0.0
Canton Cr	Escapement	1987		1,437	500	1,470		3,407	0.0	42.2	14.7	43.1	0.0
Canton Cr	Escapement	1988			4,349	109	30	4,488	0.0	0.0	96.9	2.4	0.7
Canton Cr	Escapement	1989		1,384	7,879			9,263	0.0	14.9	85.1	0.0	0.0
Canton Cr	Escapement	1990		12	3,028	151		3,191	0.0	0.4	94.9	4.7	0.0
Canton Cr	Escapement	1991		1,224	94	874		2,192	0.0	55.8	4.3	39.9	0.0
Canton Cr	Escapement	1992		458	2,091	12		2,561	0.0	17.9	81.6	0.5	0.0
Canton Cr	Escapement	1993		300	2,727	17		3,044	0.0	9.9	89.6	0.6	0.0
Canton Cr	Escapement	1994		73	910	556		1,539	0.0	4.7	59.1	36.1	0.0
Canton Cr	Escapement	1995		150	1,184	421		1,755	0.0	8.5	67.5	24.0	0.0
Canton Cr	Escapement	1996		2,628	82	32	3	2,745	0.0	95.7	3.0	1.2	0.1
Canton Cr	Escapement	1997		512	8,583			9,095	0.0	5.6	94.4	0.0	0.0
Canton Cr	Escapement	1998		1,264	2,065			3,329	0.0	38.0	62.0	0.0	0.0
Canton Cr	Escapement	1999		734	3,069	512		4,315	0.0	17.0	71.1	11.9	0.0
Canton Cr	Escapement	2000		757	656	187		1,600	0.0	47.3	41.0	11.7	0.0
Canton Cr	Escapement	2001		2,048	4,771	91		6,910	0.0	29.6	69.0	1.3	0.0
Canton Cr	Catch + Escapement	1982		227				227	0.0	100.0	0.0	0.0	0.0
Canton Cr	Catch + Escapement	1983		336	183			519	0.0	64.7	35.3	0.0	0.0
Canton Cr	Catch + Escapement	1984		2,141	1,048	12		3,201	0.0	66.9	32.7	0.4	0.0
Canton Cr	Catch + Escapement	1985		9,117	2,805			11,922	0.0	76.5	23.5	0.0	0.0
Canton Cr	Catch + Escapement	1986		534	13,614	109		14,257	0.0	3.7	95.5	0.8	0.0
Canton Cr	Catch + Escapement	1987		1,437	536	1,608		3,581	0.0	40.1	15.0	44.9	0.0
Canton Cr	Catch + Escapement	1988			4,349	109	30	4,488	0.0	0.0	96.9	2.4	0.7
Canton Cr	Catch + Escapement	1989		1,384	7,879			9,263	0.0	14.9	85.1	0.0	0.0
Canton Cr	Catch + Escapement	1990		12	3,028	151		3,191	0.0	0.4	94.9	4.7	0.0
Canton Cr	Catch + Escapement	1991		1,224	94	874		2,192	0.0	55.8	4.3	39.9	0.0
Canton Cr	Catch + Escapement	1992		758	3,682	26		4,466	0.0	17.0	82.4	0.6	0.0
Canton Cr	Catch + Escapement	1993		461	3,871	472		4,804	0.0	9.6	80.6	9.8	0.0
Canton Cr	Catch + Escapement	1994		376	1,715	1,186		3,277	0.0	11.5	52.3	36.2	0.0
Canton Cr	Catch + Escapement	1995		150	1,354	447		1,951	0.0	7.7	69.4	22.9	0.0
Canton Cr	Catch + Escapement	1996		2,628	82	32	3	2,745	0.0	95.7	3.0	1.2	0.1
Canton Cr	Catch + Escapement	1997		931	12,131	60		13,122	0.0	7.1	92.4	0.5	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Canton Cr	Catch + Escapement	1998		1,311	3,703	264		5,278	0.0	24.8	70.2	5.0	0.0
Canton Cr	Catch + Escapement	1999		1,382	3,498	872		5,752	0.0	24.0	60.8	15.2	0.0
Canton Cr	Catch + Escapement	2000		1,273	971	187		2,431	0.0	52.4	39.9	7.7	0.0
Canton Cr	Catch + Escapement	2001		4,575	7,890	91		12,556	0.0	36.4	62.8	0.7	0.0
Canton Cr	Catch + Escapement	2003		2,006	903	133		3,042	0.0	65.9	29.7	4.4	0.0
Cheakamus R	Catch	1997		10				10	0.0	100.0	0.0	0.0	0.0
Cheakamus R	Catch	1998		1,395	4,674			6,069	0.0	23.0	77.0	0.0	0.0
Cheakamus R	Catch	1999			406	53		459	0.0	0.0	88.5	11.5	0.0
Cheakamus R	Catch	2000				79		79	0.0	0.0	0.0	100.0	0.0
Cheakamus R	Catch + Escapement	1997		10				10	0.0	100.0	0.0	0.0	0.0
Cheakamus R	Catch + Escapement	1998		1,395	4,674			6,069	0.0	23.0	77.0	0.0	0.0
Cheakamus R	Catch + Escapement	1999			406	53		459	0.0	0.0	88.5	11.5	0.0
Cheakamus R	Catch + Escapement	2000				79		79	0.0	0.0	0.0	100.0	0.0
Chehalis R	Catch	1985		1,752				1,752	0.0	100.0	0.0	0.0	0.0
Chehalis R	Catch	1986		631	5,970			6,601	0.0	9.6	90.4	0.0	0.0
Chehalis R	Catch	1987		132	301	95		528	0.0	25.0	57.0	18.0	0.0
Chehalis R	Catch	1988		11,511	6,843	395		18,749	0.0	61.4	36.5	2.1	0.0
Chehalis R	Catch	1989		6,426	43,776	1,778		51,980	0.0	12.4	84.2	3.4	0.0
Chehalis R	Catch	1990			133,304	2,414	36	135,754	0.0	0.0	98.2	1.8	0.0
Chehalis R	Catch	1991		5,714		14,165		19,879	0.0	28.7	0.0	71.3	0.0
Chehalis R	Catch	1992		11,123	75,334		135	86,592	0.0	12.8	87.0	0.0	0.2
Chehalis R	Catch	1993		8,834	61,103	7,725		77,662	0.0	11.4	78.7	9.9	0.0
Chehalis R	Catch	1994		10,972	61,137	3,703		75,812	0.0	14.5	80.6	4.9	0.0
Chehalis R	Catch	1995		6,230	35,150	10,637		52,017	0.0	12.0	67.6	20.4	0.0
Chehalis R	Catch	1996		18,935	9,312	1,646	103	29,996	0.0	63.1	31.0	5.5	0.3
Chehalis R	Catch	1997	105	5,925	27,378	99		33,507	0.3	17.7	81.7	0.3	0.0
Chehalis R	Catch	1998		29,853	52,564	2,795		85,212	0.0	35.0	61.7	3.3	0.0
Chehalis R	Catch	1999		5,163	83,505	1,602		90,270	0.0	5.7	92.5	1.8	0.0
Chehalis R	Catch	2000		1,288	16,640	716		18,644	0.0	6.9	89.3	3.8	0.0
Chehalis R	Catch	2001		3,633	21,266	354		25,253	0.0	14.4	84.2	1.4	0.0
Chehalis R	Catch	2002			20,631	3,966		24,597	0.0	0.0	83.9	16.1	0.0
Chehalis R	Catch	2003				137		137	0.0	0.0	0.0	100.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Chehalis R	Escapement	1985		4,471				4,471	0.0	100.0	0.0	0.0	0.0
Chehalis R	Escapement	1986		590	9,761			10,351	0.0	5.7	94.3	0.0	0.0
Chehalis R	Escapement	1987		494	1,474	382		2,350	0.0	21.0	62.7	16.3	0.0
Chehalis R	Escapement	1988		5,140	8,947	123		14,210	0.0	36.2	63.0	0.9	0.0
Chehalis R	Escapement	1989		20,622	91,925	688		113,235	0.0	18.2	81.2	0.6	0.0
Chehalis R	Escapement	1990			53,143	2,090	5	55,238	0.0	0.0	96.2	3.8	0.0
Chehalis R	Escapement	1991		5,371		11,953		17,324	0.0	31.0	0.0	69.0	0.0
Chehalis R	Escapement	1992		4,608	26,996		114	31,718	0.0	14.5	85.1	0.0	0.4
Chehalis R	Escapement	1993		2,787	19,595	1,111		23,493	0.0	11.9	83.4	4.7	0.0
Chehalis R	Escapement	1994		2,352	26,310	215		28,877	0.0	8.1	91.1	0.7	0.0
Chehalis R	Escapement	1995		2,561	14,479	4,329		21,369	0.0	12.0	67.8	20.3	0.0
Chehalis R	Escapement	1996		11,274	4,481	833	52	16,640	0.0	67.8	26.9	5.0	0.3
Chehalis R	Escapement	1997	56	2,787	13,973	52		16,868	0.3	16.5	82.8	0.3	0.0
Chehalis R	Escapement	1998		13,077	21,176	1,066		35,319	0.0	37.0	60.0	3.0	0.0
Chehalis R	Escapement	1999		1,844	28,347	572		30,763	0.0	6.0	92.1	1.9	0.0
Chehalis R	Escapement	2000		755	6,735	420		7,910	0.0	9.5	85.1	5.3	0.0
Chehalis R	Escapement	2001		1,207	6,775	123		8,105	0.0	14.9	83.6	1.5	0.0
Chehalis R	Escapement	2002			6,822	1,129		7,951	0.0	0.0	85.8	14.2	0.0
Chehalis R	Escapement	2003				205		205	0.0	0.0	0.0	100.0	0.0
Chehalis R	Catch + Escapement	1985		6,223				6,223	0.0	100.0	0.0	0.0	0.0
Chehalis R	Catch + Escapement	1986		1,221	15,731			16,952	0.0	7.2	92.8	0.0	0.0
Chehalis R	Catch + Escapement	1987		626	1,775	477		2,878	0.0	21.8	61.7	16.6	0.0
Chehalis R	Catch + Escapement	1988		16,651	15,790	518		32,959	0.0	50.5	47.9	1.6	0.0
Chehalis R	Catch + Escapement	1989		27,048	135,701	2,466		165,215	0.0	16.4	82.1	1.5	0.0
Chehalis R	Catch + Escapement	1990			186,447	4,504	41	190,992	0.0	0.0	97.6	2.4	0.0
Chehalis R	Catch + Escapement	1991		11,086		26,118		37,204	0.0	29.8	0.0	70.2	0.0
Chehalis R	Catch + Escapement	1992		15,732	102,330		250	118,312	0.0	13.3	86.5	0.0	0.2
Chehalis R	Catch + Escapement	1993		11,621	80,698	8,836		101,155	0.0	11.5	79.8	8.7	0.0
Chehalis R	Catch + Escapement	1994		13,324	87,448	3,918		104,690	0.0	12.7	83.5	3.7	0.0
Chehalis R	Catch + Escapement	1995		8,791	49,629	14,967		73,387	0.0	12.0	67.6	20.4	0.0
Chehalis R	Catch + Escapement	1996		30,209	13,793	2,480	155	46,637	0.0	64.8	29.6	5.3	0.3
Chehalis R	Catch + Escapement	1997	161	8,712	41,351	151		50,375	0.3	17.3	82.1	0.3	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Chehalis R	Catch + Escapement	1998		42,930	73,739	3,861		120,530	0.0	35.6	61.2	3.2	0.0
Chehalis R	Catch + Escapement	1999		7,007	111,852	2,174		121,033	0.0	5.8	92.4	1.8	0.0
Chehalis R	Catch + Escapement	2000		2,043	23,375	1,135		26,553	0.0	7.7	88.0	4.3	0.0
Chehalis R	Catch + Escapement	2001		4,840	28,041	478		33,359	0.0	14.5	84.1	1.4	0.0
Chehalis R	Catch + Escapement	2002			27,453	5,095		32,548	0.0	0.0	84.3	15.7	0.0
Chehalis R	Catch + Escapement	2003				342		342	0.0	0.0	0.0	100.0	0.0
Chilliwack R	Catch	1984		1,282	412			1,694	0	75.7	24.3	0	0
Chilliwack R	Catch	1985		5,312	7,212			12,524	0	42.4	57.6	0	0
Chilliwack R	Catch	1986		651	45,488	3,763		49,902	0	1.3	91.2	7.5	0
Chilliwack R	Catch	1987		207	581	1,730		2,518	0	8.2	23.1	68.7	0
Chilliwack R	Catch	1988		3,482	49,678	2,310	145	55,615	0	6.3	89.3	4.2	0.3
Chilliwack R	Catch	1989		828	7,481	2,599	13	10,921	0	7.6	68.5	23.8	0.1
Chilliwack R	Catch	1990		322	36,357	2,003	130	38,812	0	0.8	93.7	5.2	0.3
Chilliwack R	Catch	1991		517	3,852	4,786		9,155	0	5.6	42.1	52.3	0
Chilliwack R	Catch	1992		2,122	21,820	3,495	108	27,545	0	7.7	79.2	12.7	0.4
Chilliwack R	Catch	1993		3,229	37,851	5,387	47	46,514	0	6.9	81.4	11.6	0.1
Chilliwack R	Catch	1994		2,323	36,833	14,669	125	53,950	0	4.3	68.3	27.2	0.2
Chilliwack R	Catch	1995		575	5,510	3,118	127	9,330	0	6.2	59.1	33.4	1.4
Chilliwack R	Catch	1996		859	3,255	860	42	5,016	0	17.1	64.9	17.1	0.8
Chilliwack R	Catch	1997		3,022	15,601	475		19,098	0	15.8	81.7	2.5	0
Chilliwack R	Catch	1998		19,990	151,993	5,869	155	178,007	0	11.2	85.4	3.3	0.1
Chilliwack R	Catch	1999		576	31,752	5,295		37,623	0	1.5	84.4	14.1	0
Chilliwack R	Catch	2000		345	9,059	1,058		10,462	0	3.3	86.6	10.1	0
Chilliwack R	Catch	2001			29,565	1,231		30,796	0	0	96	4	0
Chilliwack R	Catch	2002				6,859		6,859	0	0	0	100	0
Chilliwack R	Escapement	1983		174				174	0	100	0	0	0
Chilliwack R	Escapement	1984		3,323	999			4,322	0	76.9	23.1	0	0
Chilliwack R	Escapement	1985		11,787	32,280	9		44,076	0	26.7	73.2	0	0
Chilliwack R	Escapement	1986		572	33,754	1,309		35,635	0	1.6	94.7	3.7	0
Chilliwack R	Escapement	1987		3,840	9,378	10,630		23,848	0	16.1	39.3	44.6	0
Chilliwack R	Escapement	1988		1,846	18,763	1,486	106	22,201	0	8.3	84.5	6.7	0.5
Chilliwack R	Escapement	1989		1,811	17,089	2,133		21,033	0	8.6	81.2	10.1	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Chilliwack R	Escapement	1990			8,469	331		8,800	0	0	96.2	3.8	0
Chilliwack R	Escapement	1991		1,483	6,876	9,341		17,700	0	8.4	38.8	52.8	0
Chilliwack R	Escapement	1992		1,683	11,015	3,433	252	16,383	0	10.3	67.2	21	1.5
Chilliwack R	Escapement	1993		1,450	46,123	3,010	8	50,591	0	2.9	91.2	5.9	0
Chilliwack R	Escapement	1994		1,618	36,188	10,783	317	48,906	0	3.3	74	22	0.6
Chilliwack R	Escapement	1995		1,265	11,268	5,574	34	18,141	0	7	62.1	30.7	0.2
Chilliwack R	Escapement	1996		5,501	9,331	1,868	17	16,717	0	32.9	55.8	11.2	0.1
Chilliwack R	Escapement	1997		923	7,795	38		8,756	0	10.5	89	0.4	0
Chilliwack R	Escapement	1998		9,136	19,574	596		29,306	0	31.2	66.8	2	0
Chilliwack R	Escapement	1999		2,047	41,564	2,655		46,266	0	4.4	89.8	5.7	0
Chilliwack R	Escapement	2000		59	2,992	730		3,781	0	1.6	79.1	19.3	0
Chilliwack R	Escapement	2001			11,584	173		11,757	0	0	98.5	1.5	0
Chilliwack R	Catch + Escapement	1983		174				174	0	100	0	0	0
Chilliwack R	Catch + Escapement	1984		4,605	1,411			6,016	0	76.5	23.5	0	0
Chilliwack R	Catch + Escapement	1985		17,099	39,492	9		56,600	0	30.2	69.8	0	0
Chilliwack R	Catch + Escapement	1986		1,223	79,242	5,072		85,537	0	1.4	92.6	5.9	0
Chilliwack R	Catch + Escapement	1987		4,047	9,959	12,360		26,366	0	15.3	37.8	46.9	0
Chilliwack R	Catch + Escapement	1988		5,328	68,441	3,796	251	77,816	0	6.8	88	4.9	0.3
Chilliwack R	Catch + Escapement	1989		2,639	24,570	4,732	13	31,954	0	8.3	76.9	14.8	0
Chilliwack R	Catch + Escapement	1990		322	44,825	2,334	130	47,611	0	0.7	94.1	4.9	0.3
Chilliwack R	Catch + Escapement	1991		2,000	10,728	14,126		26,854	0	7.4	39.9	52.6	0
Chilliwack R	Catch + Escapement	1992		3,806	32,834	6,928	360	43,928	0	8.7	74.7	15.8	0.8
Chilliwack R	Catch + Escapement	1993		4,679	83,974	8,396	55	97,104	0	4.8	86.5	8.6	0.1
Chilliwack R	Catch + Escapement	1994		3,940	73,021	25,452	442	102,855	0	3.8	71	24.7	0.4
Chilliwack R	Catch + Escapement	1995		1,840	16,778	8,691	162	27,471	0	6.7	61.1	31.6	0.6
Chilliwack R	Catch + Escapement	1996		6,360	12,586	2,728	59	21,733	0	29.3	57.9	12.6	0.3
Chilliwack R	Catch + Escapement	1997		3,944	23,396	513		27,853	0	14.2	84	1.8	0
Chilliwack R	Catch + Escapement	1998		29,126	171,566	6,465	155	207,312	0	14	82.8	3.1	0.1
Chilliwack R	Catch + Escapement	1999		2,623	73,316	7,950		83,889	0	3.1	87.4	9.5	0
Chilliwack R	Catch + Escapement	2000		403	12,051	1,788		14,242	0	2.8	84.6	12.6	0
Chilliwack R	Catch + Escapement	2001			41,149	1,404		42,553	0	0	96.7	3.3	0
Chilliwack R	Catch + Escapement	2002				6,859		6,859	0	0	0	100	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Conuma R	Catch	1981		89				89	0.0	100.0	0.0	0.0	0.0
Conuma R	Catch	1982		2,670	4,753			7,423	0.0	36.0	64.0	0.0	0.0
Conuma R	Catch	1984		14,817	8,231	133		23,181	0.0	63.9	35.5	0.6	0.0
Conuma R	Catch	1985		8,172	19,854			28,026	0.0	29.2	70.8	0.0	0.0
Conuma R	Catch	1986		1,614	22,639	2,838		27,091	0.0	6.0	83.6	10.5	0.0
Conuma R	Catch	1987		296	516	647		1,459	0.0	20.3	35.4	44.3	0.0
Conuma R	Catch	1988			67			67	0.0	0.0	100.0	0.0	0.0
Conuma R	Catch	1992		2,410	15,723	2,270		20,403	0.0	11.8	77.1	11.1	0.0
Conuma R	Catch	1993		4,942	10,254	2,718		17,914	0.0	27.6	57.2	15.2	0.0
Conuma R	Catch	1994		6,111	55,352	5,159	145	66,767	0.0	9.2	82.9	7.7	0.2
Conuma R	Catch	1995			1,365	2,484		3,849	0.0	0.0	35.5	64.5	0.0
Conuma R	Catch	1997		2,913	17,026	15		19,954	0.0	14.6	85.3	0.1	0.0
Conuma R	Catch	1998		213	15,284	812		16,309	0.0	1.3	93.7	5.0	0.0
Conuma R	Catch	1999		4,827	1,790	2,025		8,642	0.0	55.9	20.7	23.4	0.0
Conuma R	Catch	2000		1,764	2,201		68	4,033	0.0	43.7	54.6	0.0	1.7
Conuma R	Catch	2001		9,258	11,157	20		20,435	0.0	45.3	54.6	0.1	0.0
Conuma R	Catch	2003		5,382	4,800	474		10,656	0.0	50.5	45.0	4.4	0.0
Conuma R	Escapement	1981		155				155	0.0	100.0	0.0	0.0	0.0
Conuma R	Escapement	1982		2,399	4,394			6,793	0.0	35.3	64.7	0.0	0.0
Conuma R	Escapement	1983		13,263	5,416	1,965		20,644	0.0	64.2	26.2	9.5	0.0
Conuma R	Escapement	1984		6,911	10,069	179		17,159	0.0	40.3	58.7	1.0	0.0
Conuma R	Escapement	1985		10,279	9,073			19,352	0.0	53.1	46.9	0.0	0.0
Conuma R	Escapement	1986		229	10,225	360		10,814	0.0	2.1	94.6	3.3	0.0
Conuma R	Escapement	1987		3,168	1,856	4,769		9,793	0.0	32.3	19.0	48.7	0.0
Conuma R	Escapement	1988		128	8,831	354	162	9,475	0.0	1.4	93.2	3.7	1.7
Conuma R	Escapement	1989		1,366	12,346	1,895		15,607	0.0	8.8	79.1	12.1	0.0
Conuma R	Escapement	1990			7,648	232		7,880	0.0	0.0	97.1	2.9	0.0
Conuma R	Escapement	1991		11,713	8,294	1,253		21,260	0.0	55.1	39.0	5.9	0.0
Conuma R	Escapement	1992		2,560	19,771	968		23,299	0.0	11.0	84.9	4.2	0.0
Conuma R	Escapement	1993		11,164	16,824	271		28,259	0.0	39.5	59.5	1.0	0.0
Conuma R	Escapement	1994		775	26,661	2,647		30,083	0.0	2.6	88.6	8.8	0.0
Conuma R	Escapement	1995		19	8,403	5,965	11	14,398	0.0	0.1	58.4	41.4	0.1

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Conuma R	Escapement	1996		33,841	887	400	208	35,336	0.0	95.8	2.5	1.1	0.6
Conuma R	Escapement	1997		10,857	50,390	253		61,500	0.0	17.7	81.9	0.4	0.0
Conuma R	Escapement	1998		3,538	252,516	4,780		260,834	0.0	1.4	96.8	1.8	0.0
Conuma R	Escapement	1999		4,834	8,220	9,829		22,883	0.0	21.1	35.9	43.0	0.0
Conuma R	Escapement	2000		2,585	4,592	536		7,713	0.0	33.5	59.5	6.9	0.0
Conuma R	Escapement	2001		7,094	15,795	615		23,504	0.0	30.2	67.2	2.6	0.0
Conuma R	Catch + Escapement	1981		244				244	0.0	100.0	0.0	0.0	0.0
Conuma R	Catch + Escapement	1982		5,069	9,147			14,216	0.0	35.7	64.3	0.0	0.0
Conuma R	Catch + Escapement	1983		13,263	5,416	1,965		20,644	0.0	64.2	26.2	9.5	0.0
Conuma R	Catch + Escapement	1984		21,728	18,300	312		40,340	0.0	53.9	45.4	0.8	0.0
Conuma R	Catch + Escapement	1985		18,451	28,927			47,378	0.0	38.9	61.1	0.0	0.0
Conuma R	Catch + Escapement	1986		1,843	32,864	3,198		37,905	0.0	4.9	86.7	8.4	0.0
Conuma R	Catch + Escapement	1987		3,464	2,372	5,416		11,252	0.0	30.8	21.1	48.1	0.0
Conuma R	Catch + Escapement	1988		128	8,898	354	162	9,542	0.0	1.3	93.3	3.7	1.7
Conuma R	Catch + Escapement	1989		1,366	12,346	1,895		15,607	0.0	8.8	79.1	12.1	0.0
Conuma R	Catch + Escapement	1990			7,648	232		7,880	0.0	0.0	97.1	2.9	0.0
Conuma R	Catch + Escapement	1991		11,713	8,294	1,253		21,260	0.0	55.1	39.0	5.9	0.0
Conuma R	Catch + Escapement	1992		4,970	35,494	3,239		43,703	0.0	11.4	81.2	7.4	0.0
Conuma R	Catch + Escapement	1993		16,106	27,078	2,988		46,172	0.0	34.9	58.6	6.5	0.0
Conuma R	Catch + Escapement	1994		6,886	82,014	7,806	145	96,851	0.0	7.1	84.7	8.1	0.1
Conuma R	Catch + Escapement	1995		19	9,767	8,449	11	18,246	0.0	0.1	53.5	46.3	0.1
Conuma R	Catch + Escapement	1996		33,841	887	400	208	35,336	0.0	95.8	2.5	1.1	0.6
Conuma R	Catch + Escapement	1997		13,770	67,417	268		81,455	0.0	16.9	82.8	0.3	0.0
Conuma R	Catch + Escapement	1998		3,751	267,800	5,592		277,143	0.0	1.4	96.6	2.0	0.0
Conuma R	Catch + Escapement	1999		9,662	10,011	11,853		31,526	0.0	30.6	31.8	37.6	0.0
Conuma R	Catch + Escapement	2000		4,349	6,793	536	68	11,746	0.0	37.0	57.8	4.6	0.6
Conuma R	Catch + Escapement	2001		16,351	26,952	635		43,938	0.0	37.2	61.3	1.4	0.0
Conuma R	Catch + Escapement	2003		5,382	4,800	474		10,656	0.0	50.5	45.0	4.4	0.0
Dala R	Catch	1987		1,805				1,805	0.0	100.0	0.0	0.0	0.0
Dala R	Catch	1988		1,240	5,392			6,632	0.0	18.7	81.3	0.0	0.0
Dala R	Catch	1989			178			178	0.0	0.0	100.0	0.0	0.0
Dala R	Catch	1990		194		446		640	0.0	30.3	0.0	69.7	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Dala R	Catch	1991		36	346			382	0.0	9.4	90.6	0.0	0.0
Dala R	Catch	1992		181	38			219	0.0	82.6	17.4	0.0	0.0
Dala R	Catch	1993		22	227			249	0.0	8.8	91.2	0.0	0.0
Dala R	Catch	1994		97	117	318		532	0.0	18.2	22.0	59.8	0.0
Dala R	Catch	1995		115	42	14		171	0.0	67.3	24.6	8.2	0.0
Dala R	Catch	1996			224			224	0.0	0.0	100.0	0.0	0.0
Dala R	Escapement	1987		4,051				4,051	0.0	100.0	0.0	0.0	0.0
Dala R	Escapement	1988		758	8,393			9,151	0.0	8.3	91.7	0.0	0.0
Dala R	Escapement	1989			6,935			6,935	0.0	0.0	100.0	0.0	0.0
Dala R	Escapement	1990		442		655		1,097	0.0	40.3	0.0	59.7	0.0
Dala R	Escapement	1991		102	1,697			1,799	0.0	5.7	94.3	0.0	0.0
Dala R	Escapement	1992		597	6,320	433		7,350	0.0	8.1	86.0	5.9	0.0
Dala R	Escapement	1995		12,416	4,424	691		17,531	0.0	70.8	25.2	3.9	0.0
Dala R	Catch + Escapement	1987		5,856				5,856	0.0	100.0	0.0	0.0	0.0
Dala R	Catch + Escapement	1988		1,998	13,785			15,783	0.0	12.7	87.3	0.0	0.0
Dala R	Catch + Escapement	1989			7,113			7,113	0.0	0.0	100.0	0.0	0.0
Dala R	Catch + Escapement	1990		637		1,100		1,737	0.0	36.7	0.0	63.3	0.0
Dala R	Catch + Escapement	1991		138	2,042			2,180	0.0	6.3	93.7	0.0	0.0
Dala R	Catch + Escapement	1992		778	6,358	433		7,569	0.0	10.3	84.0	5.7	0.0
Dala R	Catch + Escapement	1993		22	227			249	0.0	8.8	91.2	0.0	0.0
Dala R	Catch + Escapement	1994		97	117	318		532	0.0	18.2	22.0	59.8	0.0
Dala R	Catch + Escapement	1995		12,532	4,467	705		17,704	0.0	70.8	25.2	4.0	0.0
Dala R	Catch + Escapement	1996			224			224	0.0	0.0	100.0	0.0	0.0
Deserted R	Catch	1982		3,027				3,027	0.0	100.0	0.0	0.0	0.0
Deserted R	Catch	1984		10,375	2,140	307		12,822	0.0	80.9	16.7	2.4	0.0
Deserted R	Catch	1985		7,669	18,535			26,204	0.0	29.3	70.7	0.0	0.0
Deserted R	Catch	1986		219	15,748	4,580		20,547	0.0	1.1	76.6	22.3	0.0
Deserted R	Catch	1987			2,314	380		2,694	0.0	0.0	85.9	14.1	0.0
Deserted R	Catch	1992		1,776	9,995	1,277		13,048	0.0	13.6	76.6	9.8	0.0
Deserted R	Catch	1993		2,360	26,902	2,775		32,037	0.0	7.4	84.0	8.7	0.0
Deserted R	Catch	1994		1,953	9,826	3,567	154	15,500	0.0	12.6	63.4	23.0	1.0
Deserted R	Catch	1995			985	209		1,194	0.0	0.0	82.5	17.5	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Deserted R	Catch	1997		1,202	3,503			4,705	0.0	25.5	74.5	0.0	0.0
Deserted R	Catch	1998		171	6,380	114		6,665	0.0	2.6	95.7	1.7	0.0
Deserted R	Catch	1999		22	581	564		1,167	0.0	1.9	49.8	48.3	0.0
Deserted R	Catch	2000		5	14	19		38	0.0	13.2	36.8	50.0	0.0
Deserted R	Catch	2001		1,382	141	2		1,525	0.0	90.6	9.2	0.1	0.0
Deserted R	Catch	2003		195	1,903	725		2,823	0.0	6.9	67.4	25.7	0.0
Deserted R	Escapement	1982		16,142				16,142	0.0	100.0	0.0	0.0	0.0
Deserted R	Escapement	1983		2,993	13,703			16,696	0.0	17.9	82.1	0.0	0.0
Deserted R	Escapement	1984		3,492	4,618	719		8,829	0.0	39.6	52.3	8.1	0.0
Deserted R	Escapement	1985		8,388	10,402			18,790	0.0	44.6	55.4	0.0	0.0
Deserted R	Escapement	1986			8,192	667		8,859	0.0	0.0	92.5	7.5	0.0
Deserted R	Escapement	1987		669	6,234	2,045		8,948	0.0	7.5	69.7	22.9	0.0
Deserted R	Escapement	1988		207	5,314		112	5,633	0.0	3.7	94.3	0.0	2.0
Deserted R	Escapement	1989		564	4,480	736		5,780	0.0	9.8	77.5	12.7	0.0
Deserted R	Escapement	1990			2,906	263		3,169	0.0	0.0	91.7	8.3	0.0
Deserted R	Escapement	1991		591	4,939	333		5,863	0.0	10.1	84.2	5.7	0.0
Deserted R	Escapement	1992		3,324	6,208	652		10,184	0.0	32.6	61.0	6.4	0.0
Deserted R	Escapement	1993		1,365	11,370			12,735	0.0	10.7	89.3	0.0	0.0
Deserted R	Escapement	1994		233	4,025	217		4,475	0.0	5.2	89.9	4.8	0.0
Deserted R	Escapement	1995			6,886	3,403	134	10,423	0.0	0.0	66.1	32.6	1.3
Deserted R	Escapement	1996		2,416	160	184	25	2,785	0.0	86.8	5.7	6.6	0.9
Deserted R	Escapement	1997		645	4,096	212		4,953	0.0	13.0	82.7	4.3	0.0
Deserted R	Escapement	1998			14,907			14,907	0.0	0.0	100.0	0.0	0.0
Deserted R	Escapement	1999		13	217	416		646	0.0	2.0	33.6	64.4	0.0
Deserted R	Escapement	2000		26				26	0.0	100.0	0.0	0.0	0.0
Deserted R	Escapement	2001		346	61			407	0.0	85.0	15.0	0.0	0.0
Deserted R	Catch + Escapement	1982		19,169				19,169	0.0	100.0	0.0	0.0	0.0
Deserted R	Catch + Escapement	1983		2,993	13,703			16,696	0.0	17.9	82.1	0.0	0.0
Deserted R	Catch + Escapement	1984		13,867	6,758	1,026		21,651	0.0	64.0	31.2	4.7	0.0
Deserted R	Catch + Escapement	1985		16,057	28,937			44,994	0.0	35.7	64.3	0.0	0.0
Deserted R	Catch + Escapement	1986		219	23,940	5,247		29,406	0.0	0.7	81.4	17.8	0.0
Deserted R	Catch + Escapement	1987		669	8,548	2,425		11,642	0.0	5.7	73.4	20.8	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Deserted R	Catch + Escapement	1988		207	5,314		112	5,633	0.0	3.7	94.3	0.0	2.0
Deserted R	Catch + Escapement	1989		564	4,480	736		5,780	0.0	9.8	77.5	12.7	0.0
Deserted R	Catch + Escapement	1990			2,906	263		3,169	0.0	0.0	91.7	8.3	0.0
Deserted R	Catch + Escapement	1991		591	4,939	333		5,863	0.0	10.1	84.2	5.7	0.0
Deserted R	Catch + Escapement	1992		5,101	16,203	1,929		23,233	0.0	22.0	69.7	8.3	0.0
Deserted R	Catch + Escapement	1993		3,725	38,272	2,775		44,772	0.0	8.3	85.5	6.2	0.0
Deserted R	Catch + Escapement	1994		2,186	13,850	3,784	154	19,974	0.0	10.9	69.3	18.9	0.8
Deserted R	Catch + Escapement	1995			7,872	3,612	134	11,618	0.0	0.0	67.8	31.1	1.2
Deserted R	Catch + Escapement	1996		2,416	160	184	25	2,785	0.0	86.8	5.7	6.6	0.9
Deserted R	Catch + Escapement	1997		1,847	7,599	212		9,658	0.0	19.1	78.7	2.2	0.0
Deserted R	Catch + Escapement	1998		171	21,287	114		21,572	0.0	0.8	98.7	0.5	0.0
Deserted R	Catch + Escapement	1999		35	798	981		1,814	0.0	1.9	44.0	54.1	0.0
Deserted R	Catch + Escapement	2000		31	14	19		64	0.0	48.4	21.9	29.7	0.0
Deserted R	Catch + Escapement	2001		1,728	203	2		1,933	0.0	89.4	10.5	0.1	0.0
Deserted R	Catch + Escapement	2003		195	1,903	725		2,823	0.0	6.9	67.4	25.7	0.0
Fish Cr+Airport Ch	Catch	1983		952				952	0.0	100.0	0.0	0.0	0.0
Fish Cr+Airport Ch	Catch	1984		1,746	912			2,658	0.0	65.7	34.3	0.0	0.0
Fish Cr+Airport Ch	Catch	1985		96	5,545	122		5,763	0.0	1.7	96.2	2.1	0.0
Fish Cr+Airport Ch	Catch	1986		5,792	465	557		6,814	0.0	85.0	6.8	8.2	0.0
Fish Cr+Airport Ch	Catch	1987		9,424	34,234	113	39	43,810	0.0	21.5	78.1	0.3	0.1
Fish Cr+Airport Ch	Catch	1988		8,120	110,978	11,170	3	130,271	0.0	6.2	85.2	8.6	0.0
Fish Cr+Airport Ch	Catch	1989		8,348	23,296	7,906		39,550	0.0	21.1	58.9	20.0	0.0
Fish Cr+Airport Ch	Catch	1990		1,538	22,525	1,978		26,041	0.0	5.9	86.5	7.6	0.0
Fish Cr+Airport Ch	Catch	1991		804	4,832	2,881		8,517	0.0	9.4	56.7	33.8	0.0
Fish Cr+Airport Ch	Catch	1992		1,422	5,549	388		7,359	0.0	19.3	75.4	5.3	0.0
Fish Cr+Airport Ch	Catch	1993		3,244	3,557	753	37	7,591	0.0	42.7	46.9	9.9	0.5
Fish Cr+Airport Ch	Catch	1994		4,942	11,012	1,035	45	17,034	0.0	29.0	64.6	6.1	0.3
Fish Cr+Airport Ch	Catch	1995		9,863	26,712	1,444	35	38,054	0.0	25.9	70.2	3.8	0.1
Fish Cr+Airport Ch	Catch	1996	64	2,883	6,188	512		9,647	0.7	29.9	64.1	5.3	0.0
Fish Cr+Airport Ch	Catch	1997		7,788	3,384	61		11,233	0.0	69.3	30.1	0.5	0.0
Fish Cr+Airport Ch	Catch	1998		3,352	17,528	401		21,281	0.0	15.8	82.4	1.9	0.0
Fish Cr+Airport Ch	Catch	1999		1,625	7,479	701		9,805	0.0	16.6	76.3	7.1	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Fish Cr+Airport Ch	Catch	2000		292	2,953	277		3,522	0.0	8.3	83.8	7.9	0.0
Fish Cr+Airport Ch	Catch	2001		11,890	7,898	959	66	20,813	0.0	57.1	37.9	4.6	0.3
Fish Cr+Airport Ch	Catch	2002		10,088	13,897	1,214		25,199	0.0	40.0	55.1	4.8	0.0
Fish Cr+Airport Ch	Catch	2003		16,964	33,261	699		50,924	0.0	33.3	65.3	1.4	0.0
Fish Cr+Airport Ch	Catch	2004		6,878	130,983	8,067		145,928	0.0	4.7	89.8	5.5	0.0
Fish Cr+Airport Ch	Catch	2005		2,232	7,730	1,522		11,484	0.0	19.4	67.3	13.3	0.0
Fish Cr+Airport Ch	Catch	2006		5,347	19,514	958		25,819	0.0	20.7	75.6	3.7	0.0
Fish Cr+Airport Ch	Catch	2007			10,337	1,075	72	11,484	0.0	0.0	90.0	9.4	0.6
Fish Cr+Airport Ch	Catch	2008				182		182	0.0	0.0	0.0	100.0	0.0
Fish Cr+Airport Ch	Catch	2009		120	1,361			1,481	0.0	8.1	91.9	0.0	0.0
Fish Cr+Airport Ch	Catch	2011			2,692			2,692	0.0	0.0	100.0	0.0	0.0
Fish Cr+Airport Ch	Catch	2012		13,597	2,020	2,454		18,071	0.0	75.2	11.2	13.6	0.0
Fish Cr+Airport Ch	Catch	2013		1,977	43,347	1,462	53	46,839	0.0	4.2	92.5	3.1	0.1
Fish Cr+Airport Ch	Catch	2014		2,133	2,965	892		5,990	0.0	35.6	49.5	14.9	0.0
Fish Cr+Airport Ch	Catch	2015		5,643	33,808	550		40,001	0.0	14.1	84.5	1.4	0.0
Fish Cr+Airport Ch	Catch	2016		17,884	16,340	1,120		35,344	0.0	50.6	46.2	3.2	0.0
Fish Cr+Airport Ch	Catch	2017		7,021	27,947	2,045		37,013	0.0	19.0	75.5	5.5	0.0
Fish Cr+Airport Ch	Catch	2018		13,410	24,233	1,657		39,300	0.0	34.1	61.7	4.2	0.0
Fish Cr+Airport Ch	Escapement	1983		452				452	0.0	100.0	0.0	0.0	0.0
Fish Cr+Airport Ch	Escapement	1984			5,450			5,450	0.0	0.0	100.0	0.0	0.0
Fish Cr+Airport Ch	Escapement	1985		81	2,882	50		3,013	0.0	2.7	95.7	1.7	0.0
Fish Cr+Airport Ch	Escapement	1986		235	151	50		436	0.0	53.9	34.6	11.5	0.0
Fish Cr+Airport Ch	Escapement	1987		297	2,284	22		2,603	0.0	11.4	87.7	0.8	0.0
Fish Cr+Airport Ch	Escapement	1988		87	5,049	643		5,779	0.0	1.5	87.4	11.1	0.0
Fish Cr+Airport Ch	Escapement	1989		909	5,675	2,778		9,362	0.0	9.7	60.6	29.7	0.0
Fish Cr+Airport Ch	Escapement	1990		62	1,709	80		1,851	0.0	3.3	92.3	4.3	0.0
Fish Cr+Airport Ch	Escapement	1991		456	676	142		1,274	0.0	35.8	53.1	11.1	0.0
Fish Cr+Airport Ch	Escapement	1992		876	4,543	200	80	5,699	0.0	15.4	79.7	3.5	1.4
Fish Cr+Airport Ch	Escapement	1993		302	2,645	570		3,517	0.0	8.6	75.2	16.2	0.0
Fish Cr+Airport Ch	Escapement	1994		634	2,761	316		3,711	0.0	17.1	74.4	8.5	0.0
Fish Cr+Airport Ch	Escapement	1995		890	3,140	212	17	4,259	0.0	20.9	73.7	5.0	0.4
Fish Cr+Airport Ch	Escapement	1996		665	3,226	250		4,141	0.0	16.1	77.9	6.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Fish Cr+Airport Ch	Escapement	1997		1,198	2,213	92		3,503	0.0	34.2	63.2	2.6	0.0
Fish Cr+Airport Ch	Escapement	1998		62	6,730	391		7,183	0.0	0.9	93.7	5.4	0.0
Fish Cr+Airport Ch	Escapement	1999		71	4,294	233		4,598	0.0	1.5	93.4	5.1	0.0
Fish Cr+Airport Ch	Escapement	2000		70	2,347	369		2,786	0.0	2.5	84.2	13.2	0.0
Fish Cr+Airport Ch	Escapement	2001		178	1,918	226		2,322	0.0	7.7	82.6	9.7	0.0
Fish Cr+Airport Ch	Escapement	2002		184	1,547	124		1,855	0.0	9.9	83.4	6.7	0.0
Fish Cr+Airport Ch	Escapement	2003		962	2,787	82		3,831	0.0	25.1	72.7	2.1	0.0
Fish Cr+Airport Ch	Escapement	2004		77	7,513	509		8,099	0.0	1.0	92.8	6.3	0.0
Fish Cr+Airport Ch	Escapement	2005		162	1,086	422		1,670	0.0	9.7	65.0	25.3	0.0
Fish Cr+Airport Ch	Escapement	2006		291	1,486	154		1,931	0.0	15.1	77.0	8.0	0.0
Fish Cr+Airport Ch	Escapement	2007			1,576	66		1,642	0.0	0.0	96.0	4.0	0.0
Fish Cr+Airport Ch	Escapement	2008		667		515		1,182	0.0	56.4	0.0	43.6	0.0
Fish Cr+Airport Ch	Escapement	2009		100	1,744			1,844	0.0	5.4	94.6	0.0	0.0
Fish Cr+Airport Ch	Escapement	2010		253	563	159		975	0.0	25.9	57.7	16.3	0.0
Fish Cr+Airport Ch	Escapement	2011			4,985	236		5,221	0.0	0.0	95.5	4.5	0.0
Fish Cr+Airport Ch	Escapement	2012		1,989	2,864	1,214		6,067	0.0	32.8	47.2	20.0	0.0
Fish Cr+Airport Ch	Escapement	2013		173	9,670	518		10,361	0.0	1.7	93.3	5.0	0.0
Fish Cr+Airport Ch	Escapement	2014		998	882	716		2,596	0.0	38.4	34.0	27.6	0.0
Fish Cr+Airport Ch	Escapement	2015		1,691	4,857	191		6,739	0.0	25.1	72.1	2.8	0.0
Fish Cr+Airport Ch	Catch + Escapement	1983		1,404				1,404	0.0	100.0	0.0	0.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	1984		1,746	6,362			8,108	0.0	21.5	78.5	0.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	1985		177	8,427	172		8,776	0.0	2.0	96.0	2.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	1986		6,027	616	607		7,250	0.0	83.1	8.5	8.4	0.0
Fish Cr+Airport Ch	Catch + Escapement	1987		9,721	36,518	135	39	46,413	0.0	20.9	78.7	0.3	0.1
Fish Cr+Airport Ch	Catch + Escapement	1988		8,207	116,027	11,813	3	136,050	0.0	6.0	85.3	8.7	0.0
Fish Cr+Airport Ch	Catch + Escapement	1989		9,257	28,971	10,684		48,912	0.0	18.9	59.2	21.8	0.0
Fish Cr+Airport Ch	Catch + Escapement	1990		1,600	24,233	2,059		27,892	0.0	5.7	86.9	7.4	0.0
Fish Cr+Airport Ch	Catch + Escapement	1991		1,260	5,507	3,024		9,791	0.0	12.9	56.2	30.9	0.0
Fish Cr+Airport Ch	Catch + Escapement	1992		2,299	10,091	588	80	13,058	0.0	17.6	77.3	4.5	0.6
Fish Cr+Airport Ch	Catch + Escapement	1993		3,545	6,202	1,323	37	11,107	0.0	31.9	55.8	11.9	0.3
Fish Cr+Airport Ch	Catch + Escapement	1994		5,577	13,773	1,351	45	20,746	0.0	26.9	66.4	6.5	0.2
Fish Cr+Airport Ch	Catch + Escapement	1995		10,753	29,852	1,656	52	42,313	0.0	25.4	70.6	3.9	0.1

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Fish Cr+Airport Ch	Catch + Escapement	1996	64	3,548	9,415	762		13,789	0.5	25.7	68.3	5.5	0.0
Fish Cr+Airport Ch	Catch + Escapement	1997		8,986	5,597	153		14,736	0.0	61.0	38.0	1.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	1998		3,414	24,258	793		28,465	0.0	12.0	85.2	2.8	0.0
Fish Cr+Airport Ch	Catch + Escapement	1999		1,695	11,773	934		14,402	0.0	11.8	81.7	6.5	0.0
Fish Cr+Airport Ch	Catch + Escapement	2000		362	5,301	646		6,309	0.0	5.7	84.0	10.2	0.0
Fish Cr+Airport Ch	Catch + Escapement	2001		12,068	9,816	1,185	66	23,135	0.0	52.2	42.4	5.1	0.3
Fish Cr+Airport Ch	Catch + Escapement	2002		10,273	15,444	1,338		27,055	0.0	38.0	57.1	4.9	0.0
Fish Cr+Airport Ch	Catch + Escapement	2003		17,926	36,049	781		54,756	0.0	32.7	65.8	1.4	0.0
Fish Cr+Airport Ch	Catch + Escapement	2004		6,955	138,496	8,576		154,027	0.0	4.5	89.9	5.6	0.0
Fish Cr+Airport Ch	Catch + Escapement	2005		2,394	8,816	1,943		13,153	0.0	18.2	67.0	14.8	0.0
Fish Cr+Airport Ch	Catch + Escapement	2006		5,638	21,000	1,112		27,750	0.0	20.3	75.7	4.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	2007			11,914	1,141	72	13,127	0.0	0.0	90.8	8.7	0.5
Fish Cr+Airport Ch	Catch + Escapement	2008		667		697		1,364	0.0	48.9	0.0	51.1	0.0
Fish Cr+Airport Ch	Catch + Escapement	2009		220	3,104			3,324	0.0	6.6	93.4	0.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	2010		253	563	159		975	0.0	25.9	57.7	16.3	0.0
Fish Cr+Airport Ch	Catch + Escapement	2011			7,677	236		7,913	0.0	0.0	97.0	3.0	0.0
Fish Cr+Airport Ch	Catch + Escapement	2012		15,586	4,883	3,668		24,137	0.0	64.6	20.2	15.2	0.0
Fish Cr+Airport Ch	Catch + Escapement	2013		2,149	53,017	1,980	53	57,199	0.0	3.8	92.7	3.5	0.1
Fish Cr+Airport Ch	Catch + Escapement	2014		3,131	3,847	1,609		8,587	0.0	36.5	44.8	18.7	0.0
Fish Cr+Airport Ch	Catch + Escapement	2015		7,335	38,664	741		46,740	0.0	15.7	82.7	1.6	0.0
Fish Cr+Airport Ch	Catch + Escapement	2016		17,884	16,340	1,120		35,344	0.0	50.6	46.2	3.2	0.0
Fish Cr+Airport Ch	Catch + Escapement	2017		7,021	27,947	2,045		37,013	0.0	19.0	75.5	5.5	0.0
Fish Cr+Airport Ch	Catch + Escapement	2018		13,410	24,233	1,657		39,300	0.0	34.1	61.7	4.2	0.0
Harrison R	Catch	1985		5,806				5,806	0.0	100.0	0.0	0.0	0.0
Harrison R	Catch	1986		1,055	36,079			37,134	0.0	2.8	97.2	0.0	0.0
Harrison R	Catch	1987			872	935		1,807	0.0	0.0	48.3	51.7	0.0
Harrison R	Catch	1988			41,354	162		41,516	0.0	0.0	99.6	0.4	0.0
Harrison R	Catch	1989			311	3,456		3,767	0.0	0.0	8.3	91.7	0.0
Harrison R	Catch	1990				123	22	145	0.0	0.0	0.0	84.8	15.2
Harrison R	Escapement	1985		29,048				29,048	0.0	100.0	0.0	0.0	0.0
Harrison R	Escapement	1986		1,967	81,253			83,220	0.0	2.4	97.6	0.0	0.0
Harrison R	Escapement	1987		3,341	24,860	2,464		30,665	0.0	10.9	81.1	8.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Harrison R	Escapement	1988		7,902	31,409	2,291		41,602	0.0	19.0	75.5	5.5	0.0
Harrison R	Escapement	1989			1,416	4,431		5,847	0.0	0.0	24.2	75.8	0.0
Harrison R	Escapement	1990				18	3	21	0.0	0.0	0.0	85.7	14.3
Harrison R	Catch + Escapement	1985		34,854				34,854	0.0	100.0	0.0	0.0	0.0
Harrison R	Catch + Escapement	1986		3,022	117,332			120,354	0.0	2.5	97.5	0.0	0.0
Harrison R	Catch + Escapement	1987		3,341	25,732	3,399		32,472	0.0	10.3	79.2	10.5	0.0
Harrison R	Catch + Escapement	1988		7,902	72,763	2,453		83,118	0.0	9.5	87.5	3.0	0.0
Harrison R	Catch + Escapement	1989			1,727	7,887		9,614	0.0	0.0	18.0	82.0	0.0
Harrison R	Catch + Escapement	1990				141	26	167	0.0	0.0	0.0	84.4	15.6
Hirsch Cr	Catch	1987		1,810				1,810	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Catch	1988		1,302	3,413			4,715	0.0	27.6	72.4	0.0	0.0
Hirsch Cr	Catch	1989			186	124		310	0.0	0.0	60.0	40.0	0.0
Hirsch Cr	Catch	1990				468		468	0.0	0.0	0.0	100.0	0.0
Hirsch Cr	Catch	1991		412				412	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Catch	1992		31	841			872	0.0	3.6	96.4	0.0	0.0
Hirsch Cr	Catch	1993		175	165			340	0.0	51.5	48.5	0.0	0.0
Hirsch Cr	Catch	1994		230	931	203		1,364	0.0	16.9	68.3	14.9	0.0
Hirsch Cr	Catch	1995		135	142	109		386	0.0	35.0	36.8	28.2	0.0
Hirsch Cr	Catch	1996		1,068	262			1,330	0.0	80.3	19.7	0.0	0.0
Hirsch Cr	Catch	1997		286	336			622	0.0	46.0	54.0	0.0	0.0
Hirsch Cr	Catch	1998		949	4,917			5,866	0.0	16.2	83.8	0.0	0.0
Hirsch Cr	Catch	1999		298	722	489		1,509	0.0	19.7	47.8	32.4	0.0
Hirsch Cr	Catch	2000			786	55		841	0.0	0.0	93.5	6.5	0.0
Hirsch Cr	Catch	2001		881	1,153			2,034	0.0	43.3	56.7	0.0	0.0
Hirsch Cr	Catch	2002		971	3,094	257		4,322	0.0	22.5	71.6	5.9	0.0
Hirsch Cr	Catch	2003		1,171	3,964			5,135	0.0	22.8	77.2	0.0	0.0
Hirsch Cr	Escapement	1987		3,890				3,890	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Escapement	1988		796	4,251			5,047	0.0	15.8	84.2	0.0	0.0
Hirsch Cr	Escapement	1989			7,283	159		7,442	0.0	0.0	97.9	2.1	0.0
Hirsch Cr	Escapement	1991		1,321				1,321	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Escapement	1992		209	22,914			23,123	0.0	0.9	99.1	0.0	0.0
Hirsch Cr	Escapement	1993		1,738	3,560	5,163		10,461	0.0	16.6	34.0	49.4	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Hirsch Cr	Escapement	1994		4,629	26,946	3,831		35,406	0.0	13.1	76.1	10.8	0.0
Hirsch Cr	Escapement	1995		14,522	14,679	5,490	288	34,979	0.0	41.5	42.0	15.7	0.8
Hirsch Cr	Escapement	1996		14,411	12,744	340		27,495	0.0	52.4	46.4	1.2	0.0
Hirsch Cr	Escapement	1997		1,823	9,678	352		11,853	0.0	15.4	81.7	3.0	0.0
Hirsch Cr	Escapement	1998			45,510	792		46,302	0.0	0.0	98.3	1.7	0.0
Hirsch Cr	Escapement	1999		744		1,020		1,764	0.0	42.2	0.0	57.8	0.0
Hirsch Cr	Escapement	2000			346			346	0.0	0.0	100.0	0.0	0.0
Hirsch Cr	Escapement	2001		1,164				1,164	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Escapement	2002		2,118	3,932			6,050	0.0	35.0	65.0	0.0	0.0
Hirsch Cr	Escapement	2003		50	301	14		365	0.0	13.7	82.5	3.8	0.0
Hirsch Cr	Catch + Escapement	1987		5,700				5,700	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Catch + Escapement	1988		2,098	7,664			9,762	0.0	21.5	78.5	0.0	0.0
Hirsch Cr	Catch + Escapement	1989			7,469	283		7,752	0.0	0.0	96.3	3.7	0.0
Hirsch Cr	Catch + Escapement	1990				468		468	0.0	0.0	0.0	100.0	0.0
Hirsch Cr	Catch + Escapement	1991		1,733				1,733	0.0	100.0	0.0	0.0	0.0
Hirsch Cr	Catch + Escapement	1992		240	23,755			23,995	0.0	1.0	99.0	0.0	0.0
Hirsch Cr	Catch + Escapement	1993		1,913	3,725	5,163		10,801	0.0	17.7	34.5	47.8	0.0
Hirsch Cr	Catch + Escapement	1994		4,860	27,877	4,034		36,771	0.0	13.2	75.8	11.0	0.0
Hirsch Cr	Catch + Escapement	1995		14,657	14,821	5,600	288	35,366	0.0	41.4	41.9	15.8	0.8
Hirsch Cr	Catch + Escapement	1996		15,479	13,006	340		28,825	0.0	53.7	45.1	1.2	0.0
Hirsch Cr	Catch + Escapement	1997		2,109	10,014	352		12,475	0.0	16.9	80.3	2.8	0.0
Hirsch Cr	Catch + Escapement	1998		949	50,427	792		52,168	0.0	1.8	96.7	1.5	0.0
Hirsch Cr	Catch + Escapement	1999		1,042	722	1,509		3,273	0.0	31.8	22.1	46.1	0.0
Hirsch Cr	Catch + Escapement	2000			1,131	55		1,186	0.0	0.0	95.4	4.6	0.0
Hirsch Cr	Catch + Escapement	2001		2,045	1,153			3,198	0.0	63.9	36.1	0.0	0.0
Hirsch Cr	Catch + Escapement	2002		3,090	7,025	257		10,372	0.0	29.8	67.7	2.5	0.0
Hirsch Cr	Catch + Escapement	2003		1,221	4,265	14		5,500	0.0	22.2	77.5	0.3	0.0
Hopedale Ch	Catch	1993		183				183	0	100	0	0	0
Hopedale Ch	Catch	1994		118	4,256			4,374	0	2.7	97.3	0	0
Hopedale Ch	Catch	1995		62	177	417		656	0	9.5	27	63.6	0
Hopedale Ch	Catch	1996			201	68		269	0	0	74.7	25.3	0
Hopedale Ch	Catch	1997				103		103	0	0	0	100	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Hopedale Ch	Escapement	1993		146				146	0	100	0	0	0
Hopedale Ch	Escapement	1994		60	4,762			4,822	0	1.2	98.8	0	0
Hopedale Ch	Escapement	1995		204	618	2,166		2,988	0	6.8	20.7	72.5	0
Hopedale Ch	Escapement	1996			590	52	54	696	0	0	84.8	7.5	7.8
Hopedale Ch	Escapement	1997				95		95	0	0	0	100	0
Hopedale Ch	Catch + Escapement	1993		330				330	0	100	0	0	0
Hopedale Ch	Catch + Escapement	1994		179	9,018			9,197	0	1.9	98.1	0	0
Hopedale Ch	Catch + Escapement	1995		266	795	2,583		3,644	0	7.3	21.8	70.9	0
Hopedale Ch	Catch + Escapement	1996			791	120	54	965	0	0	82	12.4	5.6
Hopedale Ch	Catch + Escapement	1997				199		199	0	0	0	100	0
Hopedale Sl	Catch	1993		5				5	0	100	0	0	0
Hopedale Sl	Catch	1994		0	128			128	0	0	100	0	0
Hopedale Sl	Catch	1995			0	13		13	0	0	0	100	0
Hopedale Sl	Catch	1996				0		0					
Hopedale Sl	Escapement	1994			144			144	0	0	100	0	0
Hopedale Sl	Escapement	1995				66		66	0	0	0	100	0
Hopedale Sl	Escapement	1996					2	2	0	0	0	0	100
Hopedale Sl	Catch + Escapement	1993		5				5	0	100	0	0	0
Hopedale Sl	Catch + Escapement	1994		0	272			272	0	0	100	0	0
Hopedale Sl	Catch + Escapement	1995			0	78		78	0	0	0	100	0
Hopedale Sl	Catch + Escapement	1996				0	2	2	0	0	0	0	100
Humphreys Cr	Catch	1987		1,944				1,944	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Catch	1988		681	3,893			4,574	0.0	14.9	85.1	0.0	0.0
Humphreys Cr	Catch	1989			98			98	0.0	0.0	100.0	0.0	0.0
Humphreys Cr	Catch	1990				245		245	0.0	0.0	0.0	100.0	0.0
Humphreys Cr	Catch	1991		62				62	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Catch	1992		15	65			80	0.0	18.8	81.3	0.0	0.0
Humphreys Cr	Catch	1993			78			78	0.0	0.0	100.0	0.0	0.0
Humphreys Cr	Catch	1994				96		96	0.0	0.0	0.0	100.0	0.0
Humphreys Cr	Escapement	1987		4,373				4,373	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Escapement	1988		416	7,305			7,721	0.0	5.4	94.6	0.0	0.0
Humphreys Cr	Escapement	1989			3,812			3,812	0.0	0.0	100.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Humphreys Cr	Escapement	1991		174				174	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Catch + Escapement	1987		6,317				6,317	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Catch + Escapement	1988		1,097	11,198			12,295	0.0	8.9	91.1	0.0	0.0
Humphreys Cr	Catch + Escapement	1989			3,910			3,910	0.0	0.0	100.0	0.0	0.0
Humphreys Cr	Catch + Escapement	1990				245		245	0.0	0.0	0.0	100.0	0.0
Humphreys Cr	Catch + Escapement	1991		237				237	0.0	100.0	0.0	0.0	0.0
Humphreys Cr	Catch + Escapement	1992		15	65			80	0.0	18.8	81.3	0.0	0.0
Humphreys Cr	Catch + Escapement	1993			78			78	0.0	0.0	100.0	0.0	0.0
Humphreys Cr	Catch + Escapement	1994				96		96	0.0	0.0	0.0	100.0	0.0
Inch Cr	Catch	1980		2,077	1,783			3,860	0.0	53.8	46.2	0.0	0.0
Inch Cr	Catch	1981			34			34	0.0	0.0	100.0	0.0	0.0
Inch Cr	Catch	1982		542	967	50		1,559	0.0	34.8	62.0	3.2	0.0
Inch Cr	Catch	1984		547	1,452			1,999	0.0	27.4	72.6	0.0	0.0
Inch Cr	Catch	1985			2,225			2,225	0.0	0.0	100.0	0.0	0.0
Inch Cr	Catch	1986		272	557	1,287		2,116	0.0	12.9	26.3	60.8	0.0
Inch Cr	Catch	1987		204	1,474	25		1,703	0.0	12.0	86.6	1.5	0.0
Inch Cr	Catch	1988		1,634	6,281	568		8,483	0.0	19.3	74.0	6.7	0.0
Inch Cr	Catch	1989		41	1,828	789		2,658	0.0	1.5	68.8	29.7	0.0
Inch Cr	Catch	1990		133	2,677	442		3,252	0.0	4.1	82.3	13.6	0.0
Inch Cr	Catch	1991		1,110	1,879	623		3,612	0.0	30.7	52.0	17.2	0.0
Inch Cr	Catch	1992		630	7,213	291	7	8,141	0.0	7.7	88.6	3.6	0.1
Inch Cr	Catch	1993		1,262	4,224	1,473		6,959	0.0	18.1	60.7	21.2	0.0
Inch Cr	Catch	1994		4,806	9,790	394	17	15,007	0.0	32.0	65.2	2.6	0.1
Inch Cr	Catch	1995		688	3,238	228		4,154	0.0	16.6	77.9	5.5	0.0
Inch Cr	Catch	1996		2,255	836	64		3,155	0.0	71.5	26.5	2.0	0.0
Inch Cr	Catch	1997		996	7,467	107		8,570	0.0	11.6	87.1	1.2	0.0
Inch Cr	Catch	1998		10,583	10,792	420		21,795	0.0	48.6	49.5	1.9	0.0
Inch Cr	Catch	1999		6,597	7,189	618		14,404	0.0	45.8	49.9	4.3	0.0
Inch Cr	Catch	2000		212	3,011	59		3,282	0.0	6.5	91.7	1.8	0.0
Inch Cr	Catch	2001		2,666	6,022	41		8,729	0.0	30.5	69.0	0.5	0.0
Inch Cr	Catch	2002		4,895	3,499	703		9,097	0.0	53.8	38.5	7.7	0.0
Inch Cr	Catch	2003		1,774	7,233	20		9,027	0.0	19.7	80.1	0.2	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Inch Cr	Catch	2004		607	1,357			1,964	0.0	30.9	69.1	0.0	0.0
Inch Cr	Catch	2005			4,622			4,622	0.0	0.0	100.0	0.0	0.0
Inch Cr	Escapement	1980		1,870	1,609			3,479	0.0	53.8	46.2	0.0	0.0
Inch Cr	Escapement	1981		1,155	547	51		1,753	0.0	65.9	31.2	2.9	0.0
Inch Cr	Escapement	1982		3,186	2,936	36		6,158	0.0	51.7	47.7	0.6	0.0
Inch Cr	Escapement	1983		3,074	2,137	51		5,262	0.0	58.4	40.6	1.0	0.0
Inch Cr	Escapement	1984		1,419	955			2,374	0.0	59.8	40.2	0.0	0.0
Inch Cr	Escapement	1985		2,324	12,107	28		14,459	0.0	16.1	83.7	0.2	0.0
Inch Cr	Escapement	1986		2,166	7,698	424		10,288	0.0	21.1	74.8	4.1	0.0
Inch Cr	Escapement	1987		3,104	8,437	216		11,757	0.0	26.4	71.8	1.8	0.0
Inch Cr	Escapement	1988		246	8,136	779		9,161	0.0	2.7	88.8	8.5	0.0
Inch Cr	Escapement	1989		81	1,155	167		1,403	0.0	5.8	82.3	11.9	0.0
Inch Cr	Escapement	1990		46	773	23		842	0.0	5.5	91.8	2.7	0.0
Inch Cr	Escapement	1991		309	759	144		1,212	0.0	25.5	62.6	11.9	0.0
Inch Cr	Escapement	1992		1,119	960	12	1	2,092	0.0	53.5	45.9	0.6	0.0
Inch Cr	Escapement	1993		387	3,596	204		4,187	0.0	9.2	85.9	4.9	0.0
Inch Cr	Escapement	1994		834	2,811	88		3,733	0.0	22.3	75.3	2.4	0.0
Inch Cr	Escapement	1995		386	1,392	462		2,240	0.0	17.2	62.1	20.6	0.0
Inch Cr	Escapement	1996		609	235	13		857	0.0	71.1	27.4	1.5	0.0
Inch Cr	Escapement	1997		445	2,607	20		3,072	0.0	14.5	84.9	0.7	0.0
Inch Cr	Escapement	1998		1,657	5,599	139		7,395	0.0	22.4	75.7	1.9	0.0
Inch Cr	Escapement	1999		1,228	1,560	179		2,967	0.0	41.4	52.6	6.0	0.0
Inch Cr	Escapement	2000		336	3,043	56		3,435	0.0	9.8	88.6	1.6	0.0
Inch Cr	Escapement	2001		1,763	3,742	53		5,558	0.0	31.7	67.3	1.0	0.0
Inch Cr	Escapement	2002		2,045	1,312	270		3,627	0.0	56.4	36.2	7.4	0.0
Inch Cr	Escapement	2003		472	2,502	26		3,000	0.0	15.7	83.4	0.9	0.0
Inch Cr	Catch + Escapement	1980		3,947	3,392			7,339	0.0	53.8	46.2	0.0	0.0
Inch Cr	Catch + Escapement	1981		1,155	581	51		1,787	0.0	64.6	32.5	2.9	0.0
Inch Cr	Catch + Escapement	1982		3,728	3,903	86		7,717	0.0	48.3	50.6	1.1	0.0
Inch Cr	Catch + Escapement	1983		3,074	2,137	51		5,262	0.0	58.4	40.6	1.0	0.0
Inch Cr	Catch + Escapement	1984		1,966	2,407			4,373	0.0	45.0	55.0	0.0	0.0
Inch Cr	Catch + Escapement	1985		2,324	14,332	28		16,684	0.0	13.9	85.9	0.2	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Inch Cr	Catch + Escapement	1986		2,438	8,255	1,711		12,404	0.0	19.7	66.6	13.8	0.0
Inch Cr	Catch + Escapement	1987		3,308	9,912	241		13,461	0.0	24.6	73.6	1.8	0.0
Inch Cr	Catch + Escapement	1988		1,880	14,417	1,347		17,644	0.0	10.7	81.7	7.6	0.0
Inch Cr	Catch + Escapement	1989		122	2,983	956		4,061	0.0	3.0	73.5	23.5	0.0
Inch Cr	Catch + Escapement	1990		179	3,450	464		4,093	0.0	4.4	84.3	11.3	0.0
Inch Cr	Catch + Escapement	1991		1,419	2,638	767		4,824	0.0	29.4	54.7	15.9	0.0
Inch Cr	Catch + Escapement	1992		1,749	8,173	304	8	10,234	0.0	17.1	79.9	3.0	0.1
Inch Cr	Catch + Escapement	1993		1,649	7,820	1,677		11,146	0.0	14.8	70.2	15.0	0.0
Inch Cr	Catch + Escapement	1994		5,640	12,601	482	17	18,740	0.0	30.1	67.2	2.6	0.1
Inch Cr	Catch + Escapement	1995		1,074	4,630	691		6,395	0.0	16.8	72.4	10.8	0.0
Inch Cr	Catch + Escapement	1996		2,864	1,070	77		4,011	0.0	71.4	26.7	1.9	0.0
Inch Cr	Catch + Escapement	1997		1,441	10,074	127		11,642	0.0	12.4	86.5	1.1	0.0
Inch Cr	Catch + Escapement	1998		12,240	16,391	560		29,191	0.0	41.9	56.2	1.9	0.0
Inch Cr	Catch + Escapement	1999		7,826	8,748	797		17,371	0.0	45.1	50.4	4.6	0.0
Inch Cr	Catch + Escapement	2000		547	6,054	114		6,715	0.0	8.1	90.2	1.7	0.0
Inch Cr	Catch + Escapement	2001		4,429	9,764	95		14,288	0.0	31.0	68.3	0.7	0.0
Inch Cr	Catch + Escapement	2002		6,939	4,810	974		12,723	0.0	54.5	37.8	7.7	0.0
Inch Cr	Catch + Escapement	2003		2,246	9,735	46		12,027	0.0	18.7	80.9	0.4	0.0
Inch Cr	Catch + Escapement	2004		607	1,357			1,964	0.0	30.9	69.1	0.0	0.0
Inch Cr	Catch + Escapement	2005			4,622			4,622	0.0	0.0	100.0	0.0	0.0
Kildala R	Catch	1987		1,269				1,269	0.0	100.0	0.0	0.0	0.0
Kildala R	Catch	1988		1,453	3,787			5,240	0.0	27.7	72.3	0.0	0.0
Kildala R	Catch	1989			258			258	0.0	0.0	100.0	0.0	0.0
Kildala R	Catch	1990		141		283		424	0.0	33.3	0.0	66.7	0.0
Kildala R	Catch	1991		170	337			507	0.0	33.5	66.5	0.0	0.0
Kildala R	Catch	1992		176	778			954	0.0	18.4	81.6	0.0	0.0
Kildala R	Catch	1993			222	67		289	0.0	0.0	76.8	23.2	0.0
Kildala R	Catch	1994		117	286	310		713	0.0	16.4	40.1	43.5	0.0
Kildala R	Catch	1995		117	51			168	0.0	69.6	30.4	0.0	0.0
Kildala R	Catch	1996		504	228			732	0.0	68.9	31.1	0.0	0.0
Kildala R	Catch	1997		168	159			327	0.0	51.4	48.6	0.0	0.0
Kildala R	Catch	1998		529	2,884			3,413	0.0	15.5	84.5	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Kildala R	Catch	1999		163	402	287		852	0.0	19.1	47.2	33.7	0.0
Kildala R	Catch	2000			428	31		459	0.0	0.0	93.2	6.8	0.0
Kildala R	Catch	2001		494	696			1,190	0.0	41.5	58.5	0.0	0.0
Kildala R	Catch	2002			1,734	155		1,889	0.0	0.0	91.8	8.2	0.0
Kildala R	Escapement	1987		2,845				2,845	0.0	100.0	0.0	0.0	0.0
Kildala R	Escapement	1988		1,577	5,895			7,472	0.0	21.1	78.9	0.0	0.0
Kildala R	Escapement	1989			10,838			10,838	0.0	0.0	100.0	0.0	0.0
Kildala R	Escapement	1990		182		285		467	0.0	39.0	0.0	61.0	0.0
Kildala R	Escapement	1991		726	2,565			3,291	0.0	22.1	77.9	0.0	0.0
Kildala R	Escapement	1992		583	7,852	103		8,538	0.0	6.8	92.0	1.2	0.0
Kildala R	Escapement	1993		826	4,381	582		5,789	0.0	14.3	75.7	10.1	0.0
Kildala R	Escapement	1994		1,442	4,899	812		7,153	0.0	20.2	68.5	11.4	0.0
Kildala R	Escapement	1995		12,645	5,304	581		18,530	0.0	68.2	28.6	3.1	0.0
Kildala R	Escapement	1996		6,808	11,096	83		17,987	0.0	37.8	61.7	0.5	0.0
Kildala R	Escapement	1997		1,069	4,573	307		5,949	0.0	18.0	76.9	5.2	0.0
Kildala R	Escapement	1998			26,692	374		27,066	0.0	0.0	98.6	1.4	0.0
Kildala R	Escapement	1999		406				406	0.0	100.0	0.0	0.0	0.0
Kildala R	Escapement	2000			188			188	0.0	0.0	100.0	0.0	0.0
Kildala R	Catch	1990		141		283		424	0.0	33.3	0.0	66.7	0.0
Kildala R	Catch + Escapement	1987		4,114				4,114	0.0	100.0	0.0	0.0	0.0
Kildala R	Catch + Escapement	1988		3,030	9,682			12,712	0.0	23.8	76.2	0.0	0.0
Kildala R	Catch + Escapement	1989			11,096			11,096	0.0	0.0	100.0	0.0	0.0
Kildala R	Catch + Escapement	1990		323		569		892	0.0	36.2	0.0	63.8	0.0
Kildala R	Catch + Escapement	1991		896	2,901			3,797	0.0	23.6	76.4	0.0	0.0
Kildala R	Catch + Escapement	1992		759	8,630	103		9,492	0.0	8.0	90.9	1.1	0.0
Kildala R	Catch + Escapement	1994		1,558	5,185	1,122		7,865	0.0	19.8	65.9	14.3	0.0
Kildala R	Catch + Escapement	1995		12,762	5,355	581		18,698	0.0	68.3	28.6	3.1	0.0
Kildala R	Catch + Escapement	1996		7,313	11,324	83		18,720	0.0	39.1	60.5	0.4	0.0
Kildala R	Catch + Escapement	1997		1,237	4,731	307		6,275	0.0	19.7	75.4	4.9	0.0
Kildala R	Catch + Escapement	1998		529	29,575	374		30,478	0.0	1.7	97.0	1.2	0.0
Kildala R	Catch + Escapement	1999		568	402	287		1,257	0.0	45.2	32.0	22.8	0.0
Kildala R	Catch + Escapement	2000			617	31		648	0.0	0.0	95.2	4.8	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Kildala R	Catch + Escapement	2001		494	696			1,190	0.0	41.5	58.5	0.0	0.0
Kildala R	Catch + Escapement	2002			1,734	155		1,889	0.0	0.0	91.8	8.2	0.0
Kimsquit R	Catch	1991		253				253	0.0	100.0	0.0	0.0	0.0
Kimsquit R	Catch	1992			947			947	0.0	0.0	100.0	0.0	0.0
Kimsquit R	Catch	1993				165		165	0.0	0.0	0.0	100.0	0.0
Kimsquit R	Catch	1994					13	13	0.0	0.0	0.0	0.0	100.0
Kimsquit R	Escapement	1992			55			55	0.0	0.0	100.0	0.0	0.0
Kimsquit R	Escapement	1993				630		630	0.0	0.0	0.0	100.0	0.0
Kimsquit R	Catch + Escapement	1991		253				253	0.0	100.0	0.0	0.0	0.0
Kimsquit R	Catch + Escapement	1992			1,002			1,002	0.0	0.0	100.0	0.0	0.0
Kimsquit R	Catch + Escapement	1993				795		795	0.0	0.0	0.0	100.0	0.0
Kimsquit R	Catch + Escapement	1994					13	13	0.0	0.0	0.0	0.0	100.0
Kitasoo Cr	Catch	1992		62				62	0	100	0	0	0
Kitasoo Cr	Catch	1993		11	6,412			6,423	0	0.2	99.8	0	0
Kitasoo Cr	Catch	1994		754	498	221		1,473	0	51.2	33.8	15	0
Kitasoo Cr	Catch	1995		112	352	69	11	544	0	20.6	64.7	12.7	2
Kitasoo Cr	Catch	1996		37	16	43		96	0	38.5	16.7	44.8	0
Kitasoo Cr	Catch	1997		344	399	5		748	0	46	53.3	0.7	0
Kitasoo Cr	Catch	1998		173	3,206	129		3,508	0	4.9	91.4	3.7	0
Kitasoo Cr	Catch	1999		34	757	372		1,163	0	2.9	65.1	32	0
Kitasoo Cr	Catch	2000		4	86	31		121	0	3.3	71.1	25.6	0
Kitasoo Cr	Catch	2001		471	184	84		739	0	63.7	24.9	11.4	0
Kitasoo Cr	Catch	2002		402	754	31		1,187	0	33.9	63.5	2.6	0
Kitasoo Cr	Catch	2003			13,079	355		13,434	0	0	97.4	2.6	0
Kitasoo Cr	Escapement	1995		171	681	24		876	0	19.5	77.7	2.7	0
Kitasoo Cr	Escapement	1996		979	443	15	16	1,453	0	67.4	30.5	1	1.1
Kitasoo Cr	Escapement	1997		212	2,525	7		2,744	0	7.7	92	0.3	0
Kitasoo Cr	Escapement	1998		489	810	176		1,475	0	33.2	54.9	11.9	0
Kitasoo Cr	Escapement	1999		33	1,829	103		1,965	0	1.7	93.1	5.2	0
Kitasoo Cr	Catch + Escapement	1992		62				62	0	100	0	0	0
Kitasoo Cr	Catch + Escapement	1993		11	6,412			6,423	0	0.2	99.8	0	0
Kitasoo Cr	Catch + Escapement	1994		754	498	221		1,473	0	51.2	33.8	15	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Kitasoo Cr	Catch + Escapement	1995		283	1,033	93	11	1,420	0	19.9	72.7	6.5	0.8
Kitasoo Cr	Catch + Escapement	1996		1,016	460	58	16	1,550	0	65.5	29.7	3.7	1
Kitasoo Cr	Catch + Escapement	1997		556	2,924	12		3,492	0	15.9	83.7	0.3	0
Kitasoo Cr	Catch + Escapement	1998		661	4,016	305		4,982	0	13.3	80.6	6.1	0
Kitasoo Cr	Catch + Escapement	1999		67	2,585	475		3,127	0	2.1	82.7	15.2	0
Kitasoo Cr	Catch + Escapement	2000		4	86	31		121	0	3.3	71.1	25.6	0
Kitasoo Cr	Catch + Escapement	2001		471	184	84		739	0	63.7	24.9	11.4	0
Kitasoo Cr	Catch + Escapement	2002		402	754	31		1,187	0	33.9	63.5	2.6	0
Kitasoo Cr	Catch + Escapement	2003			13,079	355		13,434	0	0	97.4	2.6	0
Kitimat R	Catch	1987		2,923				2,923	0.0	100.0	0.0	0.0	0.0
Kitimat R	Catch	1988		1,732	7,887			9,619	0.0	18.0	82.0	0.0	0.0
Kitimat R	Catch	1989			159	123		282	0.0	0.0	56.4	43.6	0.0
Kitimat R	Catch	1990		1,054		697		1,751	0.0	60.2	0.0	39.8	0.0
Kitimat R	Catch	1991		226	1,674			1,900	0.0	11.9	88.1	0.0	0.0
Kitimat R	Catch	1992		121	236	25		382	0.0	31.7	61.8	6.5	0.0
Kitimat R	Catch	1993			643			643	0.0	0.0	100.0	0.0	0.0
Kitimat R	Catch	1994		1,165	4,218	790		6,173	0.0	18.9	68.3	12.8	0.0
Kitimat R	Catch	1995		148	508			656	0.0	22.6	77.4	0.0	0.0
Kitimat R	Catch	1996		2,141	288			2,429	0.0	88.1	11.9	0.0	0.0
Kitimat R	Catch	1997		1,081	1,171			2,252	0.0	48.0	52.0	0.0	0.0
Kitimat R	Catch	1998		3,085	25,109	966		29,160	0.0	10.6	86.1	3.3	0.0
Kitimat R	Catch	1999		1,632	944	1,153		3,729	0.0	43.8	25.3	30.9	0.0
Kitimat R	Catch	2000		5	387			392	0.0	1.3	98.7	0.0	0.0
Kitimat R	Catch	2001		1,406	4,069			5,475	0.0	25.7	74.3	0.0	0.0
Kitimat R	Catch	2002		6,390	4,533	1,173		12,096	0.0	52.8	37.5	9.7	0.0
Kitimat R	Catch	2003		4,468	21,808	385		26,661	0.0	16.8	81.8	1.4	0.0
Kitimat R	Escapement	1987		5,528				5,528	0.0	100.0	0.0	0.0	0.0
Kitimat R	Escapement	1988			8,415			8,415	0.0	0.0	100.0	0.0	0.0
Kitimat R	Escapement	1989			9,188	158		9,346	0.0	0.0	98.3	1.7	0.0
Kitimat R	Escapement	1990		4,551		1,361		5,912	0.0	77.0	0.0	23.0	0.0
Kitimat R	Escapement	1991		633	6,447			7,080	0.0	8.9	91.1	0.0	0.0
Kitimat R	Escapement	1992		813	39,405	4,345		44,563	0.0	1.8	88.4	9.8	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Kitimat R	Escapement	1993		12,198	13,847	5,142		31,187	0.0	39.1	44.4	16.5	0.0
Kitimat R	Escapement	1994		14,396	72,338	14,902		101,636	0.0	14.2	71.2	14.7	0.0
Kitimat R	Escapement	1995		15,943	52,971	8,584	1,122	78,620	0.0	20.3	67.4	10.9	1.4
Kitimat R	Escapement	1996		31,228	13,990	832		46,050	0.0	67.8	30.4	1.8	0.0
Kitimat R	Escapement	1997		22,416	92,607	387		115,410	0.0	19.4	80.2	0.3	0.0
Kitimat R	Escapement	1998		18,721	197,648	7,113		223,482	0.0	8.4	88.4	3.2	0.0
Kitimat R	Escapement	1999		15,223	27,603	11,555		54,381	0.0	28.0	50.8	21.2	0.0
Kitimat R	Escapement	2000			40,986			40,986	0.0	0.0	100.0	0.0	0.0
Kitimat R	Escapement	2001		11,525	27,764			39,289	0.0	29.3	70.7	0.0	0.0
Kitimat R	Escapement	2002		61,604	16,633			78,237	0.0	78.7	21.3	0.0	0.0
Kitimat R	Escapement	2003		74	730			804	0.0	9.2	90.8	0.0	0.0
Kitimat R	Catch + Escapement	1987		8,451				8,451	0.0	100.0	0.0	0.0	0.0
Kitimat R	Catch + Escapement	1988		1,732	16,302			18,034	0.0	9.6	90.4	0.0	0.0
Kitimat R	Catch + Escapement	1989			9,347	281		9,628	0.0	0.0	97.1	2.9	0.0
Kitimat R	Catch + Escapement	1990		5,605		2,058		7,663	0.0	73.1	0.0	26.9	0.0
Kitimat R	Catch + Escapement	1991		859	8,121			8,980	0.0	9.6	90.4	0.0	0.0
Kitimat R	Catch + Escapement	1992		934	39,641	4,369		44,944	0.0	2.1	88.2	9.7	0.0
Kitimat R	Catch + Escapement	1993		12,198	14,490	5,142		31,830	0.0	38.3	45.5	16.2	0.0
Kitimat R	Catch + Escapement	1994		15,561	76,556	15,692		107,809	0.0	14.4	71.0	14.6	0.0
Kitimat R	Catch + Escapement	1995		16,091	53,478	8,584	1,122	79,275	0.0	20.3	67.5	10.8	1.4
Kitimat R	Catch + Escapement	1996		33,369	14,277	832		48,478	0.0	68.8	29.5	1.7	0.0
Kitimat R	Catch + Escapement	1997		23,497	93,778	387		117,662	0.0	20.0	79.7	0.3	0.0
Kitimat R	Catch + Escapement	1998		21,806	222,758	8,079		252,643	0.0	8.6	88.2	3.2	0.0
Kitimat R	Catch + Escapement	1999		16,855	28,547	12,708		58,110	0.0	29.0	49.1	21.9	0.0
Kitimat R	Catch + Escapement	2000		5	41,373			41,378	0.0	0.0	100.0	0.0	0.0
Kitimat R	Catch + Escapement	2001		12,931	31,832			44,763	0.0	28.9	71.1	0.0	0.0
Kitimat R	Catch + Escapement	2002		67,994	21,166	1,173		90,333	0.0	75.3	23.4	1.3	0.0
Kitimat R	Catch + Escapement	2003		4,542	22,538	385		27,465	0.0	16.5	82.1	1.4	0.0
Kwakusdis R	Catch	1994		94				94	0.0	100.0	0.0	0.0	0.0
Kwakusdis R	Catch	1995			190			190	0.0	0.0	100.0	0.0	0.0
Kwakusdis R	Catch	1996		379		4		383	0.0	99.0	0.0	1.0	0.0
Kwakusdis R	Catch	1997			2,349			2,349	0.0	0.0	100.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Kwakusdis R	Catch	1998		390		251		641	0.0	60.8	0.0	39.2	0.0
Kwakusdis R	Catch	1999		4	1,004			1,008	0.0	0.4	99.6	0.0	0.0
Kwakusdis R	Catch	2000			47	17		64	0.0	0.0	73.4	26.6	0.0
Kwakusdis R	Catch	2001				9		9	0.0	0.0	0.0	100.0	0.0
Kwakusdis R	Catch + Escapement	1994		94				94	0.0	100.0	0.0	0.0	0.0
Kwakusdis R	Catch + Escapement	1995			190			190	0.0	0.0	100.0	0.0	0.0
Kwakusdis R	Catch + Escapement	1996		379		4		383	0.0	99.0	0.0	1.0	0.0
Kwakusdis R	Catch + Escapement	1997			2,349			2,349	0.0	0.0	100.0	0.0	0.0
Kwakusdis R	Catch + Escapement	1998		390		251		641	0.0	60.8	0.0	39.2	0.0
Kwakusdis R	Catch + Escapement	1999		4	1,004			1,008	0.0	0.4	99.6	0.0	0.0
Kwakusdis R	Catch + Escapement	2000			47	17		64	0.0	0.0	73.4	26.6	0.0
Kwakusdis R	Catch + Escapement	2001				9		9	0.0	0.0	0.0	100.0	0.0
L Qualicum R	Catch	1982		2,828				2,828	0	100	0	0	0
L Qualicum R	Catch	1983		550	3,363			3,913	0	14.1	85.9	0	0
L Qualicum R	Catch	1984		3,577	6,179	888		10,644	0	33.6	58.1	8.3	0
L Qualicum R	Catch	1985		89,908	29,936	347		120,191	0	74.8	24.9	0.3	0
L Qualicum R	Catch	1986		5,225	156,305	2,886		164,416	0	3.2	95.1	1.8	0
L Qualicum R	Catch	1987		3,659	47,514	8,795		59,968	0	6.1	79.2	14.7	0
L Qualicum R	Catch	1988		6,268	44,969	9,437		60,674	0	10.3	74.1	15.6	0
L Qualicum R	Catch	1989		15,264	16,074	9,939	986	42,263	0	36.1	38	23.5	2.3
L Qualicum R	Catch	1990		1,383	90,261	2,355	118	94,117	0	1.5	95.9	2.5	0.1
L Qualicum R	Catch	1991		1,188	10,418	11,456		23,062	0	5.2	45.2	49.7	0
L Qualicum R	Catch	1992		5,154	115,316	8,916		129,386	0	4	89.1	6.9	0
L Qualicum R	Catch	1993		5,900	67,012	30,456		103,368	0	5.7	64.8	29.5	0
L Qualicum R	Catch	1994		7,476	79,035	21,427	1,904	109,842	0	6.8	72	19.5	1.7
L Qualicum R	Catch	1995			3,672	4,884		8,556	0	0	42.9	57.1	0
L Qualicum R	Catch	1996		523				523	0	100	0	0	0
L Qualicum R	Catch	1997			920			920	0	0	100	0	0
L Qualicum R	Catch	1998	65	6,125	91,210	5,094		102,494	0.1	6	89	5	0
L Qualicum R	Catch	1999			473	476		949	0	0	49.8	50.2	0
L Qualicum R	Catch	2000			343			343	0	0	100	0	0
L Qualicum R	Catch	2001		40	702	186		928	0	4.3	75.6	20	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
L Qualicum R	Catch	2002		1,069	9,233	671		10,973	0	9.7	84.1	6.1	0
L Qualicum R	Catch	2003			10,517	357		10,874	0	0	96.7	3.3	0
L Qualicum R	Catch	2004		1,792		2,254		4,046	0	44.3	0	55.7	0
L Qualicum R	Catch	2005		575	7,319			7,894	0	7.3	92.7	0	0
L Qualicum R	Catch	2006		629	3,402	77		4,108	0	15.3	82.8	1.9	0
L Qualicum R	Catch	2007		819	1,421	108		2,348	0	34.9	60.5	4.6	0
L Qualicum R	Catch	2008			337	216		553	0	0	60.9	39.1	0
L Qualicum R	Catch	2009			1,712			1,712	0	0	100	0	0
L Qualicum R	Catch	2010			1,611	145		1,756	0	0	91.7	8.3	0
L Qualicum R	Catch	2011			28,821	1,023		29,844	0	0	96.6	3.4	0
L Qualicum R	Catch	2012		2,396	3,518	5,693		11,607	0	20.6	30.3	49	0
L Qualicum R	Catch	2013		119	4,777	262		5,158	0	2.3	92.6	5.1	0
L Qualicum R	Catch	2014		1,495	1,343	712		3,550	0	42.1	37.8	20.1	0
L Qualicum R	Catch	2016			79,984	13,467		93,451	0	0	85.6	14.4	0
L Qualicum R	Escapement	1982		12,272				12,272	0	100	0	0	0
L Qualicum R	Escapement	1983		2,606	21,515			24,121	0	10.8	89.2	0	0
L Qualicum R	Escapement	1984		18,268	6,688	602		25,558	0	71.5	26.2	2.4	0
L Qualicum R	Escapement	1985		45,303	15,604			60,907	0	74.4	25.6	0	0
L Qualicum R	Escapement	1986		1,977	76,452	511		78,940	0	2.5	96.8	0.6	0
L Qualicum R	Escapement	1987		651	22,143	6,107		28,901	0	2.3	76.6	21.1	0
L Qualicum R	Escapement	1988		1,438	29,290	8,683		39,411	0	3.6	74.3	22	0
L Qualicum R	Escapement	1989		20,434	19,571	7,925	254	48,184	0	42.4	40.6	16.4	0.5
L Qualicum R	Escapement	1990		819	57,939	3,616		62,374	0	1.3	92.9	5.8	0
L Qualicum R	Escapement	1991		11,205	26,199	9,828	1	47,233	0	23.7	55.5	20.8	0
L Qualicum R	Escapement	1992		2,971	34,510	2,621		40,102	0	7.4	86.1	6.5	0
L Qualicum R	Escapement	1993		779	48,904	22,431		72,114	0	1.1	67.8	31.1	0
L Qualicum R	Escapement	1994		8,176	69,951	14,945	156	93,228	0	8.8	75	16	0.2
L Qualicum R	Escapement	1995		178	19,609	11,794		31,581	0	0.6	62.1	37.3	0
L Qualicum R	Escapement	1996		8,849	3,019	2,791		14,659	0	60.4	20.6	19	0
L Qualicum R	Escapement	1997		5,496	22,996	2,711		31,203	0	17.6	73.7	8.7	0
L Qualicum R	Escapement	1998		2,218	35,618	3,997		41,833	0	5.3	85.1	9.6	0
L Qualicum R	Escapement	1999		961	7,145	5,864		13,970	0	6.9	51.1	42	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
L Qualicum R	Escapement	2000		267	3,667	240		4,174	0	6.4	87.9	5.7	0
L Qualicum R	Escapement	2001		6,782	6,556	452		13,790	0	49.2	47.5	3.3	0
L Qualicum R	Escapement	2002		1,167	10,649	424		12,240	0	9.5	87	3.5	0
L Qualicum R	Escapement	2003			9,062	468		9,530	0	0	95.1	4.9	0
L Qualicum R	Escapement	2004		256		157	121	534	0	47.9	0	29.4	22.7
L Qualicum R	Escapement	2005		704	9,265		52	10,021	0	7	92.5	0	0.5
L Qualicum R	Escapement	2006		2,557	1,675	201		4,433	0	57.7	37.8	4.5	0
L Qualicum R	Escapement	2007		141	5,196			5,337	0	2.6	97.4	0	0
L Qualicum R	Escapement	2008		976	3,750	1,814		6,540	0	14.9	57.3	27.7	0
L Qualicum R	Escapement	2009		1,225	10,511	730	169	12,635	0	9.7	83.2	5.8	1.3
L Qualicum R	Escapement	2010		2,667	7,915	409		10,991	0	24.3	72	3.7	0
L Qualicum R	Escapement	2011		59	28,395	688		29,142	0	0.2	97.4	2.4	0
L Qualicum R	Escapement	2012		3,688	10,444	19,435		33,567	0	11	31.1	57.9	0
L Qualicum R	Escapement	2013		480	7,280	927	284	8,971	0	5.4	81.2	10.3	3.2
L Qualicum R	Escapement	2014		396	3,864	2,091		6,351	0	6.2	60.8	32.9	0
L Qualicum R	Escapement	2015		15,670	109,210	1,125		126,005	0	12.4	86.7	0.9	0
L Qualicum R	Escapement	2016		3,546	67,292	7,417		78,255	0	4.5	86	9.5	0
L Qualicum R	Escapement	2017				27,155		27,155	0	0	0	100	0
L Qualicum R	Catch + Escapement	1982		15,100				15,100	0	100	0	0	0
L Qualicum R	Catch + Escapement	1983		3,156	24,878			28,034	0	11.3	88.7	0	0
L Qualicum R	Catch + Escapement	1984		21,845	12,867	1,490		36,202	0	60.3	35.5	4.1	0
L Qualicum R	Catch + Escapement	1985		135,211	45,540	347		181,098	0	74.7	25.1	0.2	0
L Qualicum R	Catch + Escapement	1986		7,202	232,757	3,397		243,356	0	3	95.6	1.4	0
L Qualicum R	Catch + Escapement	1987		4,310	69,657	14,902		88,869	0	4.8	78.4	16.8	0
L Qualicum R	Catch + Escapement	1988		7,706	74,259	18,120		100,085	0	7.7	74.2	18.1	0
L Qualicum R	Catch + Escapement	1989		35,698	35,645	17,863	1,240	90,446	0	39.5	39.4	19.7	1.4
L Qualicum R	Catch + Escapement	1990		2,202	148,200	5,971	118	156,491	0	1.4	94.7	3.8	0.1
L Qualicum R	Catch + Escapement	1991		12,393	36,617	21,284	1	70,295	0	17.6	52.1	30.3	0
L Qualicum R	Catch + Escapement	1992		8,125	149,826	11,537		169,488	0	4.8	88.4	6.8	0
L Qualicum R	Catch + Escapement	1993		6,680	115,916	52,887		175,483	0	3.8	66.1	30.1	0
L Qualicum R	Catch + Escapement	1994		15,652	148,986	36,372	2,060	203,070	0	7.7	73.4	17.9	1
L Qualicum R	Catch + Escapement	1995		178	23,281	16,678		40,137	0	0.4	58	41.6	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
L Qualicum R	Catch + Escapement	1996		9,372	3,019	2,791		15,182	0	61.7	19.9	18.4	0
L Qualicum R	Catch + Escapement	1997		5,496	23,916	2,711		32,123	0	17.1	74.5	8.4	0
L Qualicum R	Catch + Escapement	1998	65	8,343	126,827	9,092		144,327	0	5.8	87.9	6.3	0
L Qualicum R	Catch + Escapement	1999		961	7,618	6,339		14,918	0	6.4	51.1	42.5	0
L Qualicum R	Catch + Escapement	2000		267	4,010	240		4,517	0	5.9	88.8	5.3	0
L Qualicum R	Catch + Escapement	2001		6,822	7,258	637		14,717	0	46.4	49.3	4.3	0
L Qualicum R	Catch + Escapement	2002		2,236	19,883	1,095		23,214	0	9.6	85.7	4.7	0
L Qualicum R	Catch + Escapement	2003			19,579	825		20,404	0	0	96	4	0
L Qualicum R	Catch + Escapement	2004		2,047		2,411	121	4,579	0	44.7	0	52.7	2.6
L Qualicum R	Catch + Escapement	2005		1,279	16,583		52	17,914	0	7.1	92.6	0	0.3
L Qualicum R	Catch + Escapement	2006		3,186	5,077	279		8,542	0	37.3	59.4	3.3	0
L Qualicum R	Catch + Escapement	2007		960	6,617	108		7,685	0	12.5	86.1	1.4	0
L Qualicum R	Catch + Escapement	2008		976	4,087	2,030		7,093	0	13.8	57.6	28.6	0
L Qualicum R	Catch + Escapement	2009		1,225	12,223	730	169	14,344	0	8.5	85.2	5.1	1.2
L Qualicum R	Catch + Escapement	2010		2,667	9,525	554		12,746	0	20.9	74.7	4.4	0
L Qualicum R	Catch + Escapement	2011		59	57,216	1,711		58,986	0	0.1	97	2.9	0
L Qualicum R	Catch + Escapement	2012		6,084	13,962	25,128		45,174	0	13.5	30.9	55.6	0
L Qualicum R	Catch + Escapement	2013		599	12,057	1,189	284	14,129	0	4.2	85.4	8.4	2
L Qualicum R	Catch + Escapement	2014		1,891	5,207	2,802		9,900	0	19.1	52.6	28.3	0
L Qualicum R	Catch + Escapement	2015		15,670	109,210	1,125		126,005	0	12.4	86.7	0.9	0
L Qualicum R	Catch + Escapement	2016		3,546	147,276	20,883		171,705	0	2.1	85.8	12.2	0
L Qualicum R	Catch + Escapement	2017				27,155		27,155	0	0	0	100	0
Lang Ch	Catch	2000		26	218			244	0	10.7	89.3	0	0
Lang Ch	Catch	2001			98	3		101	0	0	97	3	0
Lang Ch	Escapement	2001			6			6	0	0	100	0	0
Lang Ch	Catch + Escapement	2000		26	218			244	0	10.7	89.3	0	0
Lang Ch	Catch + Escapement	2001			104	3		107	0	0	97.2	2.8	0
Lang Cr	Catch	1998			870			870	0.0	0.0	100.0	0.0	0.0
Lang Cr	Catch	2000		148	1,139		52	1,339	0.0	11.1	85.1	0.0	3.9
Lang Cr	Catch	2001			559	13		572	0.0	0.0	97.7	2.3	0.0
Lang Cr	Escapement	1997		264				264	0.0	100.0	0.0	0.0	0.0
Lang Cr	Escapement	1998			234			234	0.0	0.0	100.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Lang Cr	Escapement	2001			32			32	0.0	0.0	100.0	0.0	0.0
Lang Cr	Catch + Escapement	1997		264				264	0.0	100.0	0.0	0.0	0.0
Lang Cr	Catch + Escapement	1998			1,104			1,104	0.0	0.0	100.0	0.0	0.0
Lang Cr	Catch + Escapement	2000		148	1,139		52	1,339	0.0	11.1	85.1	0.0	3.9
Mathers Cr	Catch	1984		2,094	787			2,881	0	72.7	27.3	0	0
Mathers Cr	Catch	1985		504	5,569	44		6,117	0	8.2	91	0.7	0
Mathers Cr	Catch	1986		280	1,365	181		1,826	0	15.3	74.8	9.9	0
Mathers Cr	Catch	1987			2,692	709		3,401	0	0	79.2	20.8	0
Mathers Cr	Catch	1988		1,013		371		1,384	0.0	73.2	0.0	26.8	0.0
Mathers Cr	Catch	1989		391	3,035			3,426	0.0	11.4	88.6	0.0	0.0
Mathers Cr	Catch	1990		313	4,631	2,027		6,971	0.0	4.5	66.4	29.1	0.0
Mathers Cr	Catch	1991		334	4,160	824		5,318	0.0	6.3	78.2	15.5	0.0
Mathers Cr	Catch	1992			1,431	113		1,544	0.0	0.0	92.7	7.3	0.0
Mathers Cr	Catch	1993		374	15,709	684	39	16,806	0.0	2.2	93.5	4.1	0.2
Mathers Cr	Catch	1994		294	4,798	1,759		6,851	0.0	4.3	70.0	25.7	0.0
Mathers Cr	Catch	1995		1,985	743	983		3,711	0.0	53.5	20.0	26.5	0.0
Mathers Cr	Catch	1996		3,024	5,702	47		8,773	0.0	34.5	65.0	0.5	0.0
Mathers Cr	Catch	1997		779	6,478			7,257	0.0	10.7	89.3	0.0	0.0
Mathers Cr	Catch	1998		3,341	10,416	1,864		15,621	0.0	21.4	66.7	11.9	0.0
Mathers Cr	Catch	1999		1,326	5,258	1,319		7,903	0.0	16.8	66.5	16.7	0.0
Mathers Cr	Catch	2000			9,039	985		10,024	0.0	0.0	90.2	9.8	0.0
Mathers Cr	Catch	2001			1,324	35		1,359	0.0	0.0	97.4	2.6	0.0
Mathers Cr	Catch	2002				3,957		3,957	0.0	0.0	0.0	100.0	0.0
Mathers Cr	Escapement	1983		965				965	0	100	0	0	0
Mathers Cr	Escapement	1984		2,924	1,104			4,028	0	72.6	27.4	0	0
Mathers Cr	Escapement	1985		451	2,896	12		3,359	0	13.4	86.2	0.4	0
Mathers Cr	Escapement	1986		565	1,946	128		2,639	0	21.4	73.7	4.9	0
Mathers Cr	Escapement	1987			1,112	279		1,391	0	0	79.9	20.0	0
Mathers Cr	Escapement	1988		215		57	15	287	0	74.9	0	20.0	5.2
Mathers Cr	Escapement	1989		360	7,530			7,890	0.0	4.6	95.4	0.0	0.0
Mathers Cr	Escapement	1990		298	3,629	1,673		5,600	0.0	5.3	64.8	29.9	0.0
Mathers Cr	Escapement	1991		368	1,437	216		2,021	0.0	18.2	71.1	10.7	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Mathers Cr	Escapement	1992		875	2,251	235		3,361	0.0	26.0	67.0	7.0	0.0
Mathers Cr	Escapement	1993		663	7,549	311		8,523	0.0	7.8	88.6	3.6	0.0
Mathers Cr	Escapement	1994		211	4,082	1,610	16	5,919	0.0	3.6	69.0	27.2	0.3
Mathers Cr	Escapement	1995		1,691	714	876	66	3,347	0.0	50.5	21.3	26.2	2.0
Mathers Cr	Escapement	1996		1,936	1,893	64	27	3,920	0.0	49.4	48.3	1.6	0.7
Mathers Cr	Escapement	1997			4,799			4,799	0.0	0.0	100.0	0.0	0.0
Mathers Cr	Catch + Escapement	1983		965				965	0	100	0	0	0
Mathers Cr	Catch + Escapement	1984		5,018	1,891			6,909	0	72.6	27.4	0	0
Mathers Cr	Catch + Escapement	1985		955	8,465	56		9,476	0	10.1	89.3	0.6	0
Mathers Cr	Catch + Escapement	1986		845	3,311	309		4,465	0	18.9	74.2	6.9	0
Mathers Cr	Catch + Escapement	1987			3,804	988		4,792	0	0	79.4	20.6	0
Mathers Cr	Catch + Escapement	1988		1,228		428	15	1,671	0	73.5	0	25.6	0.9
Mathers Cr	Catch + Escapement	1989		751	10,565			11,316	0.0	6.6	93.4	0.0	0.0
Mathers Cr	Catch + Escapement	1990		611	8,260	3,699		12,570	0.0	4.9	65.7	29.4	0.0
Mathers Cr	Catch + Escapement	1991		701	5,597	1,040		7,338	0.0	9.6	76.3	14.2	0.0
Mathers Cr	Catch + Escapement	1992		875	3,682	348		4,905	0.0	17.8	75.1	7.1	0.0
Mathers Cr	Catch + Escapement	1993		1,037	23,258	995	39	25,329	0.0	4.1	91.8	3.9	0.2
Mathers Cr	Catch + Escapement	1994		504	8,880	3,368	16	12,768	0.0	3.9	69.5	26.4	0.1
Mathers Cr	Catch + Escapement	1995		3,676	1,457	1,859	66	7,058	0.0	52.1	20.6	26.3	0.9
Mathers Cr	Catch + Escapement	1996		4,961	7,595	111	27	12,694	0.0	39.1	59.8	0.9	0.2
Mathers Cr	Catch + Escapement	1997		779	11,277			12,056	0.0	6.5	93.5	0.0	0.0
Mathers Cr	Catch + Escapement	1998		3,341	10,416	1,864		15,621	0.0	21.4	66.7	11.9	0.0
Mathers Cr	Catch + Escapement	1999		1,326	5,258	1,319		7,903	0.0	16.8	66.5	16.7	0.0
Mathers Cr	Catch + Escapement	2000			9,039	985		10,024	0.0	0.0	90.2	9.8	0.0
Mathers Cr	Catch + Escapement	2001			1,324	35		1,359	0.0	0.0	97.4	2.6	0.0
Mathers Cr	Catch + Escapement	2002				3,957		3,957	0.0	0.0	0.0	100.0	0.0
McLoughlin Bay Cr	Catch	1990		2,987				2,987	0.0	100.0	0.0	0.0	0.0
McLoughlin Bay Cr	Catch	1991		826	8,283			9,109	0.0	9.1	90.9	0.0	0.0
McLoughlin Bay Cr	Catch	1992	15		4,875	562		5,452	0.3	0.0	89.4	10.3	0.0
McLoughlin Bay Cr	Catch	1993	36	9,189		1,064		10,289	0.3	89.3	0.0	10.3	0.0
McLoughlin Bay Cr	Catch	1994		13,052	5,569		187	18,808	0.0	69.4	29.6	0.0	1.0
McLoughlin Bay Cr	Catch	1995			6,415	540		6,955	0.0	0.0	92.2	7.8	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
McLoughlin Bay Cr	Catch	1996				18	24	42	0.0	0.0	0.0	42.9	57.1
McLoughlin Bay Cr	Catch	1999		3,387				3,387	0.0	100.0	0.0	0.0	0.0
McLoughlin Bay Cr	Catch	2000		795	4,498			5,293	0.0	15.0	85.0	0.0	0.0
McLoughlin Bay Cr	Catch	2001		6,234	3,042	896		10,172	0.0	61.3	29.9	8.8	0.0
McLoughlin Bay Cr	Catch	2002			698	167		865	0.0	0.0	80.7	19.3	0.0
McLoughlin Bay Cr	Catch	2015		3,066	48,925			51,991	0.0	5.9	94.1	0.0	0.0
McLoughlin Bay Cr	Catch	2016		3,387	1,383	468		5,238	0.0	64.7	26.4	8.9	0.0
McLoughlin Bay Cr	Escapement	1995			536	32		568	0.0	0.0	94.4	5.6	0.0
McLoughlin Bay Cr	Escapement	1996				30		30	0.0	0.0	0.0	100.0	0.0
McLoughlin Bay Cr	Escapement	2015			2,190			2,190	0.0	0.0	100.0	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	1990		2,987				2,987	0.0	100.0	0.0	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	1991		826	8,283			9,109	0.0	9.1	90.9	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	1992	15		4,875	562		5,452	0.3	0.0	89.4	10.3	0.0
McLoughlin Bay Cr	Catch + Escapement	1993	36	9,189		1,064		10,289	0.3	89.3	0.0	10.3	0.0
McLoughlin Bay Cr	Catch + Escapement	1994		13,052	5,569		187	18,808	0.0	69.4	29.6	0.0	1.0
McLoughlin Bay Cr	Catch + Escapement	1995			6,951	573		7,524	0.0	0.0	92.4	7.6	0.0
McLoughlin Bay Cr	Catch + Escapement	1996				48	24	72	0.0	0.0	0.0	66.7	33.3
McLoughlin Bay Cr	Catch + Escapement	1999		3,387				3,387	0.0	100.0	0.0	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	2000		795	4,498			5,293	0.0	15.0	85.0	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	2001		6,234	3,042	896		10,172	0.0	61.3	29.9	8.8	0.0
McLoughlin Bay Cr	Catch + Escapement	2002			698	167		865	0.0	0.0	80.7	19.3	0.0
McLoughlin Bay Cr	Catch + Escapement	2015		3,066	51,115			54,181	0.0	5.7	94.3	0.0	0.0
McLoughlin Bay Cr	Catch + Escapement	2016		3,387	1,383	468		5,238	0.0	64.7	26.4	8.9	0.0
Necleetsconnay R	Catch	1984		1,627				1,627	0.0	100.0	0.0	0.0	0.0
Necleetsconnay R	Catch	1985		2,194	4,929			7,123	0.0	30.8	69.2	0.0	0.0
Necleetsconnay R	Catch	1986		6,739	24,564	154		31,457	0.0	21.4	78.1	0.5	0.0
Necleetsconnay R	Catch	1987		562	34,979	5,727		41,268	0.0	1.4	84.8	13.9	0.0
Necleetsconnay R	Catch	1988	137	2,285	17,881	9,885	443	30,631	0.4	7.5	58.4	32.3	1.4
Necleetsconnay R	Catch	1989		13,067	4,719	3,161		20,947	0.0	62.4	22.5	15.1	0.0
Necleetsconnay R	Catch	1990		1,074	15,412	410	77	16,973	0.0	6.3	90.8	2.4	0.5
Necleetsconnay R	Catch	1991		1,502	2,618	2,250		6,370	0.0	23.6	41.1	35.3	0.0
Necleetsconnay R	Catch	1992			3,552	54		3,606	0.0	0.0	98.5	1.5	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Necleetsconnay R	Catch	1993		1,492		453		1,945	0.0	76.7	0.0	23.3	0.0
Necleetsconnay R	Catch	1994		1,545	3,594		36	5,175	0.0	29.9	69.4	0.0	0.7
Necleetsconnay R	Catch	1995			10,536	461		10,997	0.0	0.0	95.8	4.2	0.0
Necleetsconnay R	Catch	1996				187		187	0.0	0.0	0.0	100.0	0.0
Necleetsconnay R	Escapement	1984		495				495	0.0	100.0	0.0	0.0	0.0
Necleetsconnay R	Escapement	1985		732	1,777			2,509	0.0	29.2	70.8	0.0	0.0
Necleetsconnay R	Escapement	1986		215	2,334	62		2,611	0.0	8.2	89.4	2.4	0.0
Necleetsconnay R	Escapement	1987			2,230	380		2,610	0.0	0.0	85.4	14.6	0.0
Necleetsconnay R	Escapement	1988		25	270	537		832	0.0	3.0	32.5	64.5	0.0
Necleetsconnay R	Escapement	1989		83	1,063	183	14	1,343	0.0	6.2	79.2	13.6	1.0
Necleetsconnay R	Escapement	1990			840	55		895	0.0	0.0	93.9	6.1	0.0
Necleetsconnay R	Escapement	1991		21	107			128	0.0	16.4	83.6	0.0	0.0
Necleetsconnay R	Escapement	1992			426	100		526	0.0	0.0	81.0	19.0	0.0
Necleetsconnay R	Escapement	1993		92		194		286	0.0	32.2	0.0	67.8	0.0
Necleetsconnay R	Escapement	1995			1,324	109		1,433	0.0	0.0	92.4	7.6	0.0
Necleetsconnay R	Catch + Escapement	1984		2,122				2,122	0.0	100.0	0.0	0.0	0.0
Necleetsconnay R	Catch + Escapement	1985		2,926	6,706			9,632	0.0	30.4	69.6	0.0	0.0
Necleetsconnay R	Catch + Escapement	1986		6,954	26,898	216		34,068	0.0	20.4	79.0	0.6	0.0
Necleetsconnay R	Catch + Escapement	1987		562	37,209	6,107		43,878	0.0	1.3	84.8	13.9	0.0
Necleetsconnay R	Catch + Escapement	1988	137	2,310	18,151	10,422	443	31,463	0.4	7.3	57.7	33.1	1.4
Necleetsconnay R	Catch + Escapement	1989		13,150	5,782	3,344	14	22,290	0.0	59.0	25.9	15.0	0.1
Necleetsconnay R	Catch + Escapement	1990		1,074	16,251	465	77	17,867	0.0	6.0	91.0	2.6	0.4
Necleetsconnay R	Catch + Escapement	1991		1,523	2,724	2,250		6,497	0.0	23.4	41.9	34.6	0.0
Necleetsconnay R	Catch + Escapement	1992			3,978	154		4,132	0.0	0.0	96.3	3.7	0.0
Necleetsconnay R	Catch + Escapement	1993		1,584		647		2,231	0.0	71.0	0.0	29.0	0.0
Necleetsconnay R	Catch + Escapement	1994		1,545	3,594		36	5,175	0.0	29.9	69.4	0.0	0.7
Necleetsconnay R	Catch + Escapement	1995			11,860	570		12,430	0.0	0.0	95.4	4.6	0.0
Necleetsconnay R	Catch + Escapement	1996				187		187	0.0	0.0	0.0	100.0	0.0
Neekas R	Catch	1985		1,359				1,359	0.0	100.0	0.0	0.0	0.0
Neekas R	Catch	1986			22,704			22,704	0.0	0.0	100.0	0.0	0.0
Neekas R	Catch	1987				4,057		4,057	0.0	0.0	0.0	100.0	0.0
Neekas R	Catch + Escapement	1985		1,359				1,359	0.0	100.0	0.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Neekas R	Catch + Escapement	1986			22,704			22,704	0.0	0.0	100.0	0.0	0.0
Neekas R	Catch + Escapement	1987				4,057		4,057	0.0	0.0	0.0	100.0	0.0
Neekas R	Catch	1985		1,359				1,359	0.0	100.0	0.0	0.0	0.0
Nimpkish R	Catch	1992		94				94	0	100	0	0	0
Nimpkish R	Catch	1993		134	709			843	0	15.9	84.1	0	0
Nimpkish R	Catch	1994			79			79	0	0	100	0	0
Nimpkish R	Catch + Escapement	1992		94				94	0	100	0	0	0
Nimpkish R	Catch + Escapement	1993		134	709			843	0	15.9	84.1	0	0
Nimpkish R	Catch + Escapement	1994			79			79	0	0	100	0	0
Nitinat R	Catch	1984		108,347	5,400			113,747	0	95.3	4.7	0	0
Nitinat R	Catch	1985		20,619	1,037,718	860		1,059,197	0	1.9	98	0.1	0
Nitinat R	Catch	1986		13,185	105,944	152,078		271,207	0	4.9	39.1	56.1	0
Nitinat R	Catch	1987		160,191	84,281	12,261	2,580	259,313	0	61.8	32.5	4.7	1
Nitinat R	Catch	1988		34,930	1,176,327	23,670	967	1,235,894	0	2.8	95.2	1.9	0.1
Nitinat R	Catch	1989		1,755	100,436	64,029		166,220	0	1.1	60.4	38.5	0
Nitinat R	Catch	1990		4,470	31,163	13,670	168	49,471	0	9	63	27.6	0.3
Nitinat R	Catch	1991		23,483	88,536	71,714		183,733	0	12.8	48.2	39	0
Nitinat R	Catch	1992		7,859	196,087	13,758	2,737	220,441	0	3.6	89	6.2	1.2
Nitinat R	Catch	1993		17,917	278,960	59,273	458	356,608	0	5	78.2	16.6	0.1
Nitinat R	Catch	1994		82,326	148,007	113,678	1,127	345,138	0	23.9	42.9	32.9	0.3
Nitinat R	Catch	1995		8,850	39,692	24,475	2,625	75,642	0	11.7	52.5	32.4	3.5
Nitinat R	Catch	1996		142,703	43,330	3,581	1,022	190,636	0	74.9	22.7	1.9	0.5
Nitinat R	Catch	1997		103,227	619,508	5,939	906	729,580	0	14.1	84.9	0.8	0.1
Nitinat R	Catch	1998		66,657	419,124	82,524	129	568,434	0	11.7	73.7	14.5	0
Nitinat R	Catch	1999		13,826	74,096	23,411	1,986	113,319	0	12.2	65.4	20.7	1.8
Nitinat R	Catch	2000		2,095	4,755	309	102	7,261	0	28.9	65.5	4.3	1.4
Nitinat R	Catch	2001		58,968	157,072	906	294	217,240	0	27.1	72.3	0.4	0.1
Nitinat R	Escapement	1983		4,705				4,705	0	100	0	0	0
Nitinat R	Escapement	1984		53,615	2,673			56,288	0	95.3	4.7	0	0
Nitinat R	Escapement	1985		17,401	540,640	65		558,106	0	3.1	96.9	0	0
Nitinat R	Escapement	1986		11,236	44,975	47,886		104,097	0	10.8	43.2	46	0
Nitinat R	Escapement	1987		28,457	11,874	1,437	911	42,679	0	66.7	27.8	3.4	2.1

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Nitinat R	Escapement	1988		11,550	160,326	656		172,532	0	6.7	92.9	0.4	0
Nitinat R	Escapement	1989		1,224	131,098	20,735		153,057	0	0.8	85.7	13.5	0
Nitinat R	Escapement	1990		19,352	111,554	49,741	556	181,203	0	10.7	61.6	27.5	0.3
Nitinat R	Escapement	1991		9,032	81,641	29,315		119,988	0	7.5	68	24.4	0
Nitinat R	Escapement	1992		1,336	31,678	1,719	789	35,522	0	3.8	89.2	4.8	2.2
Nitinat R	Escapement	1993		3,710	112,100	26,483		142,293	0	2.6	78.8	18.6	0
Nitinat R	Escapement	1994		8,050	24,931	20,154	236	53,371	0	15.1	46.7	37.8	0.4
Nitinat R	Escapement	1995		6,709	11,690	7,490	769	26,658	0	25.2	43.9	28.1	2.9
Nitinat R	Escapement	1996		69,898	44,396	1,629	582	116,505	0	60	38.1	1.4	0.5
Nitinat R	Escapement	1997		20,444	253,966	6,083		280,493	0	7.3	90.5	2.2	0
Nitinat R	Escapement	1998		7,824	63,877	19,316		91,017	0	8.6	70.2	21.2	0
Nitinat R	Escapement	1999		12,544	61,423	16,304	1,142	91,413	0	13.7	67.2	17.8	1.2
Nitinat R	Escapement	2000		4,198	9,569	910	300	14,977	0	28	63.9	6.1	2
Nitinat R	Escapement	2001		30,349	169,133	3,147	1,699	204,328	0	14.9	82.8	1.5	0.8
Nitinat R	Catch + Escapement	1983		4,705				4,705	0	100	0	0	0
Nitinat R	Catch + Escapement	1984		161,962	8,073			170,035	0	95.3	4.7	0	0
Nitinat R	Catch + Escapement	1985		38,020	1,578,358	925		1,617,303	0	2.4	97.6	0.1	0
Nitinat R	Catch + Escapement	1986		24,421	150,919	199,964		375,304	0	6.5	40.2	53.3	0
Nitinat R	Catch + Escapement	1987		188,648	96,155	13,698	3,491	301,992	0	62.5	31.8	4.5	1.2
Nitinat R	Catch + Escapement	1988		46,480	1,336,653	24,326	967	1,408,426	0	3.3	94.9	1.7	0.1
Nitinat R	Catch + Escapement	1989		2,979	231,534	84,764		319,277	0	0.9	72.5	26.5	0
Nitinat R	Catch + Escapement	1990		23,823	142,717	63,411	724	230,675	0	10.3	61.9	27.5	0.3
Nitinat R	Catch + Escapement	1991		32,515	170,178	101,029		303,722	0	10.7	56	33.3	0
Nitinat R	Catch + Escapement	1992		9,195	227,765	15,478	3,526	255,964	0	3.6	89	6	1.4
Nitinat R	Catch + Escapement	1993		21,627	391,060	85,757	458	498,902	0	4.3	78.4	17.2	0.1
Nitinat R	Catch + Escapement	1994		90,376	172,938	133,832	1,364	398,510	0	22.7	43.4	33.6	0.3
Nitinat R	Catch + Escapement	1995		15,559	51,382	31,965	3,394	102,300	0	15.2	50.2	31.2	3.3
Nitinat R	Catch + Escapement	1996		212,601	87,726	5,210	1,604	307,141	0	69.2	28.6	1.7	0.5
Nitinat R	Catch + Escapement	1997		123,671	873,474	12,022	906	1,010,073	0	12.2	86.5	1.2	0.1
Nitinat R	Catch + Escapement	1998		74,480	483,001	101,840	129	659,450	0	11.3	73.2	15.4	0
Nitinat R	Catch + Escapement	1999		26,370	135,520	39,715	3,127	204,732	0	12.9	66.2	19.4	1.5
Nitinat R	Catch + Escapement	2000		6,293	14,323	1,219	402	22,237	0	28.3	64.4	5.5	1.8

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Nitinat R	Catch + Escapement	2001		89,318	326,206	4,053	1,994	421,571	0	21.2	77.4	1	0.5
Noohalk Cr	Catch	1983		1,367				1,367	0.0	100.0	0.0	0.0	0.0
Noohalk Cr	Catch	1984			1,144	30		1,174	0.0	0.0	97.4	2.6	0.0
Noohalk Cr	Catch	1985				236		236	0.0	0.0	0.0	100.0	0.0
Noohalk Cr	Escapement	1983		520				520	0.0	100.0	0.0	0.0	0.0
Noohalk Cr	Escapement	1984			4,632	178		4,810	0.0	0.0	96.3	3.7	0.0
Noohalk Cr	Escapement	1985				21		21	0.0	0.0	0.0	100.0	0.0
Noohalk Cr	Catch + Escapement	1983		1,887				1,887	0.0	100.0	0.0	0.0	0.0
Noohalk Cr	Catch + Escapement	1984			5,776	208		5,984	0.0	0.0	96.5	3.5	0.0
Noohalk Cr	Catch + Escapement	1985				257		257	0.0	0.0	0.0	100.0	0.0
Oona R	Catch	2012			45			45	0	0	100	0	0
Oona R	Catch	2013				7		7	0	0	0	100	0
Oona R	Catch + Escapement	2012			45			45	0	0	100	0	0
Oona R	Catch + Escapement	2013				7		7	0	0	0	100	0
Orford R	Catch	1995		79				79	0	100	0	0	0
Orford R	Catch	1996		48	153			201	0	23.9	76.1	0	0
Orford R	Catch	1997			5,881	91		5,972	0	0	98.5	1.5	0
Orford R	Catch	1998				135		135	0	0	0	100	0
Orford R	Catch	1999					45	45	0	0	0	0	100
Orford R	Catch + Escapement	1995		79				79	0	100	0	0	0
Orford R	Catch + Escapement	1996		48	153			201	0	23.9	76.1	0	0
Orford R	Catch + Escapement	1997			5,881	91		5,972	0	0	98.5	1.5	0
Orford R	Catch + Escapement	1998				135		135	0	0	0	100	0
Orford R	Catch + Escapement	1999					45	45	0	0	0	0	100
Pallant Cr	Catch	1981		148				148	0.0	100.0	0.0	0.0	0.0
Pallant Cr	Catch	1982		76	391			467	0.0	16.3	83.7	0.0	0.0
Pallant Cr	Catch	1984		20,125	13,491	25		33,641	0.0	59.8	40.1	0.1	0.0
Pallant Cr	Catch	1985		6,344	43,365	514		50,223	0.0	12.6	86.3	1.0	0.0
Pallant Cr	Catch	1986		4,744	14,832	1,300		20,876	0.0	22.7	71.0	6.2	0.0
Pallant Cr	Catch	1987		10,924	26,585	6,613	413	44,535	0.0	24.5	59.7	14.8	0.9
Pallant Cr	Catch	1988		3,174	71,383	3,638	298	78,493	0.0	4.0	90.9	4.6	0.4
Pallant Cr	Catch	1989		2,603	7,915	2,821		13,339	0.0	19.5	59.3	21.1	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Pallant Cr	Catch	1990		4,013	27,948	4,938		36,899	0.0	10.9	75.7	13.4	0.0
Pallant Cr	Catch	1991		12,038	30,436	6,570		49,044	0.0	24.5	62.1	13.4	0.0
Pallant Cr	Catch	1992		978	111,325	10,057	65	122,425	0.0	0.8	90.9	8.2	0.1
Pallant Cr	Catch	1993		3,469	14,960	8,482		26,911	0.0	12.9	55.6	31.5	0.0
Pallant Cr	Catch	1994		2,680	32,776	1,580		37,036	0.0	7.2	88.5	4.3	0.0
Pallant Cr	Catch	1995		1,457	705	3,337	123	5,622	0.0	25.9	12.5	59.4	2.2
Pallant Cr	Catch	1996		15,447	29,031	480		44,958	0.0	34.4	64.6	1.1	0.0
Pallant Cr	Catch	1997		4,956	19,169	903		25,028	0.0	19.8	76.6	3.6	0.0
Pallant Cr	Catch	1998		12,568	33,735	3,375		49,678	0.0	25.3	67.9	6.8	0.0
Pallant Cr	Catch	1999		11,703	40,002	3,230		54,935	0.0	21.3	72.8	5.9	0.0
Pallant Cr	Catch	2000			33,492	2,344		35,836	0.0	0.0	93.5	6.5	0.0
Pallant Cr	Catch	2001			2,918	2		2,920	0.0	0.0	99.9	0.1	0.0
Pallant Cr	Catch	2002				8,720		8,720	0.0	0.0	0.0	100.0	0.0
Pallant Cr	Escapement	1981		816				816	0.0	100.0	0.0	0.0	0.0
Pallant Cr	Escapement	1982		397	2,095			2,492	0.0	15.9	84.1	0.0	0.0
Pallant Cr	Escapement	1983		15,055	1,051	199		16,305	0.0	92.3	6.4	1.2	0.0
Pallant Cr	Escapement	1984		32,674	15,248	72		47,994	0.0	68.1	31.8	0.2	0.0
Pallant Cr	Escapement	1985		4,394	25,769	27		30,190	0.0	14.6	85.4	0.1	0.0
Pallant Cr	Escapement	1986		2,691	24,344	7,121		34,156	0.0	7.9	71.3	20.8	0.0
Pallant Cr	Escapement	1987		10,402	10,911	3,342		24,655	0.0	42.2	44.3	13.6	0.0
Pallant Cr	Escapement	1988		307	22,496	1,360	163	24,326	0.0	1.3	92.5	5.6	0.7
Pallant Cr	Escapement	1989		3,391	18,418	4,544	39	26,392	0.0	12.8	69.8	17.2	0.1
Pallant Cr	Escapement	1990		3,480	27,778	4,660	128	36,046	0.0	9.7	77.1	12.9	0.4
Pallant Cr	Escapement	1991		7,786	15,170	2,581		25,537	0.0	30.5	59.4	10.1	0.0
Pallant Cr	Escapement	1992		1,042	31,747	4,886	138	37,813	0.0	2.8	84.0	12.9	0.4
Pallant Cr	Escapement	1993		4,178	12,457	4,087	57	20,779	0.0	20.1	59.9	19.7	0.3
Pallant Cr	Escapement	1994		4,535	20,639	1,333		26,507	0.0	17.1	77.9	5.0	0.0
Pallant Cr	Escapement	1995		14,950	7,588	10,865		33,403	0.0	44.8	22.7	32.5	0.0
Pallant Cr	Escapement	1996		12,050	12,297	88	102	24,537	0.0	49.1	50.1	0.4	0.4
Pallant Cr	Escapement	1997		6,734	18,339	436		25,509	0.0	26.4	71.9	1.7	0.0
Pallant Cr	Catch + Escapement	1981		964				964	0.0	100.0	0.0	0.0	0.0
Pallant Cr	Catch + Escapement	1982		473	2,486			2,959	0.0	16.0	84.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Pallant Cr	Catch + Escapement	1983		15,055	1,051	199		16,305	0.0	92.3	6.4	1.2	0.0
Pallant Cr	Catch + Escapement	1984		52,799	28,739	97		81,635	0.0	64.7	35.2	0.1	0.0
Pallant Cr	Catch + Escapement	1985		10,738	69,134	541		80,413	0.0	13.4	86.0	0.7	0.0
Pallant Cr	Catch + Escapement	1986		7,435	39,176	8,421		55,032	0.0	13.5	71.2	15.3	0.0
Pallant Cr	Catch + Escapement	1987		21,326	37,496	9,955	413	69,190	0.0	30.8	54.2	14.4	0.6
Pallant Cr	Catch + Escapement	1988		3,481	93,879	4,998	461	102,819	0.0	3.4	91.3	4.9	0.4
Pallant Cr	Catch + Escapement	1989		5,994	26,333	7,365	39	39,731	0.0	15.1	66.3	18.5	0.1
Pallant Cr	Catch + Escapement	1990		7,494	55,726	9,599	128	72,947	0.0	10.3	76.4	13.2	0.2
Pallant Cr	Catch + Escapement	1991		19,824	45,606	9,151		74,581	0.0	26.6	61.1	12.3	0.0
Pallant Cr	Catch + Escapement	1992		2,020	143,072	14,943	202	160,237	0.0	1.3	89.3	9.3	0.1
Pallant Cr	Catch + Escapement	1993		7,647	27,416	12,569	57	47,689	0.0	16.0	57.5	26.4	0.1
Pallant Cr	Catch + Escapement	1994		7,214	53,415	2,913		63,542	0.0	11.4	84.1	4.6	0.0
Pallant Cr	Catch + Escapement	1995		16,407	8,292	14,202	123	39,024	0.0	42.0	21.2	36.4	0.3
Pallant Cr	Catch + Escapement	1996		27,497	41,328	568	102	69,495	0.0	39.6	59.5	0.8	0.1
Pallant Cr	Catch + Escapement	1997		11,690	37,508	1,340		50,538	0.0	23.1	74.2	2.7	0.0
Pallant Cr	Catch + Escapement	1998		12,568	33,735	3,375		49,678	0.0	25.3	67.9	6.8	0.0
Pallant Cr	Catch + Escapement	1999		11,703	40,002	3,230		54,935	0.0	21.3	72.8	5.9	0.0
Pallant Cr	Catch + Escapement	2000			33,492	2,344		35,836	0.0	0.0	93.5	6.5	0.0
Pallant Cr	Catch + Escapement	2001			2,918	2		2,920	0.0	0.0	99.9	0.1	0.0
Pallant Cr	Catch + Escapement	2002				8,720		8,720	0.0	0.0	0.0	100.0	0.0
Paradise Ch Up	Catch	1997		10				10	0	100	0	0	0
Paradise Ch Up	Catch	1998		1,395	4,674			6,069	0	23	77	0	0
Paradise Ch Up	Catch	1999			406	53		459	0	0	88.5	11.5	0
Paradise Ch Up	Catch	2000				79		79	0	0	0	100	0
Paradise Ch Up	Catch + Escapement	1997		10				10	0	100	0	0	0
Paradise Ch Up	Catch + Escapement	1998		1,395	4,674			6,069	0	23	77	0	0
Paradise Ch Up	Catch + Escapement	1999			406	53		459	0	0	88.5	11.5	0
Paradise Ch Up	Catch + Escapement	2000				79		79	0	0	0	100	0
Puntledge R	Catch	1982		4,757				4,757	0	100	0	0	0
Puntledge R	Catch	1983		1,024	6,249			7,273	0	14.1	85.9	0	0
Puntledge R	Catch	1984		13,609	2,359	801		16,769	0	81.2	14.1	4.8	0
Puntledge R	Catch	1985		28,626	27,722			56,348	0	50.8	49.2	0	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Puntledge R	Catch	1986		9,120	76,735	1,889		87,744	0	10.4	87.5	2.2	0
Puntledge R	Catch	1987		394	65,005	8,263		73,662	0	0.5	88.2	11.2	0
Puntledge R	Catch	1988		1,829	8,193	7,060	405	17,487	0	10.5	46.9	40.4	2.3
Puntledge R	Catch	1989		27	9,736	1,021	446	11,230	0	0.2	86.7	9.1	4
Puntledge R	Catch	1990		420	23,279	1,283		24,982	0	1.7	93.2	5.1	0
Puntledge R	Catch	1991		2,073	24,633	18,753		45,459	0	4.6	54.2	41.3	0
Puntledge R	Catch	1992		1,199	14,769	2,822	303	19,093	0	6.3	77.4	14.8	1.6
Puntledge R	Catch	1993		4,985	28,427	7,294	1	40,707	0	12.2	69.8	17.9	0
Puntledge R	Catch	1994		1,899	20,447	5,455	51	27,852	0	6.8	73.4	19.6	0.2
Puntledge R	Catch	1995		768	2,233	1,024		4,025	0	19.1	55.5	25.4	0
Puntledge R	Catch	1997		505	197			702	0	71.9	28.1	0	0
Puntledge R	Catch	1998		6,081	31,972	2,816		40,869	0	14.9	78.2	6.9	0
Puntledge R	Catch	1999		71	913	60		1,044	0	6.8	87.5	5.7	0
Puntledge R	Catch	2000		450	2,105	428		2,983	0	15.1	70.6	14.3	0
Puntledge R	Catch	2001			2,769			2,769	0	0	100	0	0
Puntledge R	Catch	2002				1,756		1,756	0	0	0	100	0
Puntledge R	Escapement	1982		3,189				3,189	0	100	0	0	0
Puntledge R	Escapement	1983		1,811	8,755			10,566	0	17.1	82.9	0	0
Puntledge R	Escapement	1984		15,618	1,705	383		17,706	0	88.2	9.6	2.2	0
Puntledge R	Escapement	1985		7,759	16,770			24,529	0	31.6	68.4	0	0
Puntledge R	Escapement	1986		4,470	37,623	926		43,019	0	10.4	87.5	2.2	0
Puntledge R	Escapement	1987		200	33,031	4,200		37,431	0	0.5	88.2	11.2	0
Puntledge R	Escapement	1988		2,128	4,497	3,863		10,488	0	20.3	42.9	36.8	0
Puntledge R	Escapement	1989		412	8,203	926		9,541	0	4.3	86	9.7	0
Puntledge R	Escapement	1990		1	21,446	1,273		22,720	0	0	94.4	5.6	0
Puntledge R	Escapement	1991			3,905	807		4,712	0	0	82.9	17.1	0
Puntledge R	Escapement	1992		23	14,995	648		15,666	0	0.1	95.7	4.1	0
Puntledge R	Escapement	1993		67	3,481	2,393		5,941	0	1.1	58.6	40.3	0
Puntledge R	Escapement	1994		250	20,942	52		21,244	0	1.2	98.6	0.2	0
Puntledge R	Escapement	1995		2,659	6,856	2,944		12,459	0	21.3	55	23.6	0
Puntledge R	Escapement	1996		1,574	2,788	384		4,746	0	33.2	58.7	8.1	0
Puntledge R	Escapement	1997		2,215	16,550			18,765	0	11.8	88.2	0	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Puntledge R	Escapement	1998		1,189	21,091	1,407		23,687	0	5	89	5.9	0
Puntledge R	Escapement	1999		2,029	10,447	1,711		14,187	0	14.3	73.6	12.1	0
Puntledge R	Escapement	2000			4,817			4,817	0	0	100	0	0
Puntledge R	Escapement	2001			2,361			2,361	0	0	100	0	0
Puntledge R	Catch + Escapement	1982		7,946				7,946	0	100	0	0	0
Puntledge R	Catch + Escapement	1983		2,835	15,004			17,839	0	15.9	84.1	0	0
Puntledge R	Catch + Escapement	1984		29,227	4,064	1,184		34,475	0	84.8	11.8	3.4	0
Puntledge R	Catch + Escapement	1985		36,385	44,492			80,877	0	45	55	0	0
Puntledge R	Catch + Escapement	1986		13,590	114,358	2,815		130,763	0	10.4	87.5	2.2	0
Puntledge R	Catch + Escapement	1987		594	98,036	12,463		111,093	0	0.5	88.2	11.2	0
Puntledge R	Catch + Escapement	1988		3,957	12,690	10,923	405	27,975	0	14.1	45.4	39	1.4
Puntledge R	Catch + Escapement	1989		439	17,939	1,947	446	20,771	0	2.1	86.4	9.4	2.1
Puntledge R	Catch + Escapement	1990		421	44,725	2,556		47,702	0	0.9	93.8	5.4	0
Puntledge R	Catch + Escapement	1991		2,073	28,538	19,560		50,171	0	4.1	56.9	39	0
Puntledge R	Catch + Escapement	1992		1,223	29,764	3,470	303	34,760	0	3.5	85.6	10	0.9
Puntledge R	Catch + Escapement	1993		5,052	31,908	9,687	1	46,648	0	10.8	68.4	20.8	0
Puntledge R	Catch + Escapement	1994		2,149	41,389	5,507	51	49,096	0	4.4	84.3	11.2	0.1
Puntledge R	Catch + Escapement	1995		3,426	9,089	3,968		16,483	0	20.8	55.1	24.1	0
Puntledge R	Catch + Escapement	1996		1,574	2,788	384		4,746	0	33.2	58.7	8.1	0
Puntledge R	Catch + Escapement	1997		2,720	16,746			19,466	0	14	86	0	0
Puntledge R	Catch + Escapement	1998		7,270	53,064	4,223		64,557	0	11.3	82.2	6.5	0
Puntledge R	Catch + Escapement	1999		2,100	11,360	1,772		15,232	0	13.8	74.6	11.6	0
Puntledge R	Catch + Escapement	2000		450	6,922	428		7,800	0	5.8	88.7	5.5	0
Puntledge R	Catch + Escapement	2001			5,130			5,130	0	0	100	0	0
Puntledge R	Catch + Escapement	2002				1,756		1,756	0	0	0	100	0
Saloompt R	Catch	1982		1,236				1,236	0.0	100.0	0.0	0.0	0.0
Saloompt R	Catch	1983		2,592	4,430			7,022	0.0	36.9	63.1	0.0	0.0
Saloompt R	Catch	1984		1,850	2,193	22		4,065	0.0	45.5	53.9	0.5	0.0
Saloompt R	Catch	1985		5,052	5,104	589		10,745	0.0	47.0	47.5	5.5	0.0
Saloompt R	Catch	1986		4,698	56,524	190		61,412	0.0	7.6	92.0	0.3	0.0
Saloompt R	Catch	1987		12,113	25,562	13,179		50,854	0.0	23.8	50.3	25.9	0.0
Saloompt R	Catch	1988		11,041	97,884	7,688	1,020	117,633	0.0	9.4	83.2	6.5	0.9

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Saloompt R	Catch	1989		9,535	14,237	5,151		28,923	0.0	33.0	49.2	17.8	0.0
Saloompt R	Catch	1990		1,440	22,047	1,577	204	25,268	0.0	5.7	87.3	6.2	0.8
Saloompt R	Catch	1991		840	4,859	2,579		8,278	0.0	10.1	58.7	31.2	0.0
Saloompt R	Catch	1992		1,443	5,795	396		7,634	0.0	18.9	75.9	5.2	0.0
Saloompt R	Catch	1993		3,112	3,610	786	39	7,547	0.0	41.2	47.8	10.4	0.5
Saloompt R	Catch	1994		3,833	10,253	1,051	47	15,184	0.0	25.2	67.5	6.9	0.3
Saloompt R	Catch	1995		10,805	25,982	1,316	36	38,139	0.0	28.3	68.1	3.5	0.1
Saloompt R	Catch	1996		4,488	6,402	462		11,352	0.0	39.5	56.4	4.1	0.0
Saloompt R	Catch	1997		9,402	5,911	27		15,340	0.0	61.3	38.5	0.2	0.0
Saloompt R	Catch	1998		1,889	22,233	1,171		25,293	0.0	7.5	87.9	4.6	0.0
Saloompt R	Catch	1999		839	2,707	1,204		4,750	0.0	17.7	57.0	25.3	0.0
Saloompt R	Catch	2000		519	3,379	197		4,095	0.0	12.7	82.5	4.8	0.0
Saloompt R	Catch	2001		7,643	19,481	1,233		28,357	0.0	27.0	68.7	4.3	0.0
Saloompt R	Catch	2002		10,939	12,826	3,298	51	27,114	0.0	40.3	47.3	12.2	0.2
Saloompt R	Catch	2003		10,937	36,067	1,277	262	48,543	0.0	22.5	74.3	2.6	0.5
Saloompt R	Catch	2004		7,216	62,232	8,747		78,195	0.0	9.2	79.6	11.2	0.0
Saloompt R	Catch	2005		2,716	8,464	668		11,848	0.0	22.9	71.4	5.6	0.0
Saloompt R	Catch	2006		3,695	22,018	849		26,562	0.0	13.9	82.9	3.2	0.0
Saloompt R	Catch	2007			10,971	1,284		12,255	0.0	0.0	89.5	10.5	0.0
Saloompt R	Catch	2008				274		274	0.0	0.0	0.0	100.0	0.0
Saloompt R	Catch	2009		118	1,461			1,579	0.0	7.5	92.5	0.0	0.0
Saloompt R	Catch	2011			2,856			2,856	0.0	0.0	100.0	0.0	0.0
Saloompt R	Catch	2012		6,275	1,982	2,604		10,861	0.0	57.8	18.2	24.0	0.0
Saloompt R	Catch	2013		2,098	20,006	1,435	57	23,596	0.0	8.9	84.8	6.1	0.2
Saloompt R	Catch	2014		2,063	3,148	412		5,623	0.0	36.7	56.0	7.3	0.0
Saloompt R	Catch	2015		2,041	32,699	584		35,324	0.0	5.8	92.6	1.7	0.0
Saloompt R	Catch	2016		5,909	5,909	1,083		12,901	0.0	45.8	45.8	8.4	0.0
Saloompt R	Catch	2017		2,358	9,233	740		12,331	0.0	19.1	74.9	6.0	0.0
Saloompt R	Catch	2018		14,743	8,140	548		23,431	0.0	62.9	34.7	2.3	0.0
Saloompt R	Escapement	1982		625				625	0.0	100.0	0.0	0.0	0.0
Saloompt R	Escapement	1983		86	2,895			2,981	0.0	2.9	97.1	0.0	0.0
Saloompt R	Escapement	1984		185	9,685	417		10,287	0.0	1.8	94.1	4.1	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Saloompt R	Escapement	1985		1,684	1,070	57		2,811	0.0	59.9	38.1	2.0	0.0
Saloompt R	Escapement	1986		62	5,371			5,433	0.0	1.1	98.9	0.0	0.0
Saloompt R	Escapement	1987		346	989	874		2,209	0.0	15.7	44.8	39.6	0.0
Saloompt R	Escapement	1988		131	6,975	261		7,367	0.0	1.8	94.7	3.5	0.0
Saloompt R	Escapement	1989		954	3,012	1,440		5,406	0.0	17.6	55.7	26.6	0.0
Saloompt R	Escapement	1990		59	1,826	361		2,246	0.0	2.6	81.3	16.1	0.0
Saloompt R	Escapement	1991		477	635	164		1,276	0.0	37.4	49.8	12.9	0.0
Saloompt R	Escapement	1992		889	4,744	186	49	5,868	0.0	15.1	80.8	3.2	0.8
Saloompt R	Escapement	1993		291	2,685	595		3,571	0.0	8.1	75.2	16.7	0.0
Saloompt R	Escapement	1994		589	2,749	320		3,658	0.0	16.1	75.2	8.7	0.0
Saloompt R	Escapement	1995		993	3,253	212	17	4,475	0.0	22.2	72.7	4.7	0.4
Saloompt R	Escapement	1996		116	3,533	271		3,920	0.0	3.0	90.1	6.9	0.0
Saloompt R	Escapement	1997		649	3,143	88		3,880	0.0	16.7	81.0	2.3	0.0
Saloompt R	Escapement	1998		463	5,178	532		6,173	0.0	7.5	83.9	8.6	0.0
Saloompt R	Escapement	1999		284	1,997	276		2,557	0.0	11.1	78.1	10.8	0.0
Saloompt R	Escapement	2000		223	2,807	18		3,048	0.0	7.3	92.1	0.6	0.0
Saloompt R	Escapement	2001		264	2,745	220		3,229	0.0	8.2	85.0	6.8	0.0
Saloompt R	Escapement	2002		200	1,084	367		1,651	0.0	12.1	65.7	22.2	0.0
Saloompt R	Escapement	2003		1,168	3,023	92		4,283	0.0	27.3	70.6	2.1	0.0
Saloompt R	Escapement	2004		161	8,089	552		8,802	0.0	1.8	91.9	6.3	0.0
Saloompt R	Escapement	2005		50	1,071	272		1,393	0.0	3.6	76.9	19.5	0.0
Saloompt R	Escapement	2006		290	1,042	44		1,376	0.0	21.1	75.7	3.2	0.0
Saloompt R	Escapement	2007			1,245	54		1,299	0.0	0.0	95.8	4.2	0.0
Saloompt R	Escapement	2008		716		324		1,040	0.0	68.8	0.0	31.2	0.0
Saloompt R	Escapement	2009		98	1,872			1,970	0.0	5.0	95.0	0.0	0.0
Saloompt R	Escapement	2010		269	551	170		990	0.0	27.2	55.7	17.2	0.0
Saloompt R	Escapement	2011			5,290	231		5,521	0.0	0.0	95.8	4.2	0.0
Saloompt R	Escapement	2012		918	2,810	1,288		5,016	0.0	18.3	56.0	25.7	0.0
Saloompt R	Escapement	2013		183	4,463	508		5,154	0.0	3.6	86.6	9.9	0.0
Saloompt R	Escapement	2014		965	936	331		2,232	0.0	43.2	41.9	14.8	0.0
Saloompt R	Escapement	2015		612	4,697	203		5,512	0.0	11.1	85.2	3.7	0.0
Saloompt R	Catch + Escapement	1982		1,861				1,861	0.0	100.0	0.0	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Saloompt R	Catch + Escapement	1983		2,678	7,325			10,003	0.0	26.8	73.2	0.0	0.0
Saloompt R	Catch + Escapement	1984		2,035	11,878	439		14,352	0.0	14.2	82.8	3.1	0.0
Saloompt R	Catch + Escapement	1985		6,736	6,174	646		13,556	0.0	49.7	45.5	4.8	0.0
Saloompt R	Catch + Escapement	1986		4,760	61,895	190		66,845	0.0	7.1	92.6	0.3	0.0
Saloompt R	Catch + Escapement	1987		12,459	26,551	14,053		53,063	0.0	23.5	50.0	26.5	0.0
Saloompt R	Catch + Escapement	1988		11,172	104,859	7,949	1,020	125,000	0.0	8.9	83.9	6.4	0.8
Saloompt R	Catch + Escapement	1989		10,489	17,249	6,591		34,329	0.0	30.6	50.2	19.2	0.0
Saloompt R	Catch + Escapement	1990		1,498	23,873	1,938	204	27,513	0.0	5.4	86.8	7.0	0.7
Saloompt R	Catch + Escapement	1991		1,316	5,494	2,743		9,553	0.0	13.8	57.5	28.7	0.0
Saloompt R	Catch + Escapement	1992		2,333	10,539	582	49	13,503	0.0	17.3	78.0	4.3	0.4
Saloompt R	Catch + Escapement	1993		3,403	6,295	1,381	39	11,118	0.0	30.6	56.6	12.4	0.4
Saloompt R	Catch + Escapement	1994		4,423	13,002	1,371	47	18,843	0.0	23.5	69.0	7.3	0.2
Saloompt R	Catch + Escapement	1995		11,798	29,235	1,528	53	42,614	0.0	27.7	68.6	3.6	0.1
Saloompt R	Catch + Escapement	1996		4,604	9,935	734		15,273	0.0	30.1	65.0	4.8	0.0
Saloompt R	Catch + Escapement	1997		10,051	9,054	115		19,220	0.0	52.3	47.1	0.6	0.0
Saloompt R	Catch + Escapement	1998		2,352	27,411	1,703		31,466	0.0	7.5	87.1	5.4	0.0
Saloompt R	Catch + Escapement	1999		1,123	4,704	1,480		7,307	0.0	15.4	64.4	20.3	0.0
Saloompt R	Catch + Escapement	2000		742	6,186	215		7,143	0.0	10.4	86.6	3.0	0.0
Saloompt R	Catch + Escapement	2001		7,907	22,227	1,453		31,587	0.0	25.0	70.4	4.6	0.0
Saloompt R	Catch + Escapement	2002		11,139	13,909	3,665	51	28,764	0.0	38.7	48.4	12.7	0.2
Saloompt R	Catch + Escapement	2003		12,105	39,090	1,368	262	52,825	0.0	22.9	74.0	2.6	0.5
Saloompt R	Catch + Escapement	2004		7,376	70,320	9,299		86,995	0.0	8.5	80.8	10.7	0.0
Saloompt R	Catch + Escapement	2005		2,765	9,535	940		13,240	0.0	20.9	72.0	7.1	0.0
Saloompt R	Catch + Escapement	2006		3,986	23,060	893		27,939	0.0	14.3	82.5	3.2	0.0
Saloompt R	Catch + Escapement	2007			12,216	1,338		13,554	0.0	0.0	90.1	9.9	0.0
Saloompt R	Catch + Escapement	2008		716		598		1,314	0.0	54.5	0.0	45.5	0.0
Saloompt R	Catch + Escapement	2009		216	3,334			3,550	0.0	6.1	93.9	0.0	0.0
Saloompt R	Catch + Escapement	2010		269	551	170		990	0.0	27.2	55.7	17.2	0.0
Saloompt R	Catch + Escapement	2011			8,145	231		8,376	0.0	0.0	97.2	2.8	0.0
Saloompt R	Catch + Escapement	2012		7,193	4,791	3,892		15,876	0.0	45.3	30.2	24.5	0.0
Saloompt R	Catch + Escapement	2013		2,282	24,469	1,943	57	28,751	0.0	7.9	85.1	6.8	0.2
Saloompt R	Catch + Escapement	2014		3,028	4,084	743		7,855	0.0	38.5	52.0	9.5	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Saloompt R	Catch + Escapement	2015		2,652	37,397	786		40,835	0.0	6.5	91.6	1.9	0.0
Saloompt R	Catch + Escapement	2016		5,909	5,909	1,083		12,901	0.0	45.8	45.8	8.4	0.0
Saloompt R	Catch + Escapement	2017		2,358	9,233	740		12,331	0.0	19.1	74.9	6.0	0.0
Saloompt R	Catch + Escapement	2018		14,743	8,140	548		23,431	0.0	62.9	34.7	2.3	0.0
Sliammon R	Catch	1990				324	33	357	0	0	0	90.8	9.2
Sliammon R	Catch	1996		77				77	0	100	0	0	0
Sliammon R	Catch	1997			1,687			1,687	0	0	100	0	0
Sliammon R	Catch	1998		593	774	2,043		3,410	0	17.4	22.7	59.9	0
Sliammon R	Catch	1999			23			23	0	0	100	0	0
Sliammon R	Catch	2000			248	41		289	0	0	85.8	14.2	0
Sliammon R	Catch	2001			849			849	0	0	100	0	0
Sliammon R	Catch	2002		574				574	0	100	0	0	0
Sliammon R	Catch	2003		94	1,939			2,033	0	4.6	95.4	0	0
Sliammon R	Catch	2004			656	1,192		1,848	0	0	35.5	64.5	0
Sliammon R	Catch	2005		138		521		659	0	23.7	0	76.3	0
Sliammon R	Catch	2006			2,681			2,681	0	0	100	0	0
Sliammon R	Catch	2007				430		430	0	0	0	100	0
Sliammon R	Escapement	1996		719				719	0	100	0	0	0
Sliammon R	Escapement	1997			3,530			3,530	0	0	100	0	0
Sliammon R	Escapement	1998		1,864	1,423	110		3,397	0	54.9	41.9	3.2	0
Sliammon R	Escapement	1999			17			17	0	0	100	0	0
Sliammon R	Escapement	2004			2,403	1,841		4,244	0	0	56.6	43.4	0
Sliammon R	Catch + Escapement	1990				324	33	357	0	0	0	90.8	9.2
Sliammon R	Catch + Escapement	1996		796				796	0	100	0	0	0
Sliammon R	Catch + Escapement	1997			5,217			5,217	0	0	100	0	0
Sliammon R	Catch + Escapement	1998		2,457	2,197	2,154		6,808	0	36.1	32.3	31.6	0
Sliammon R	Catch + Escapement	1999			40			40	0	0	100	0	0
Sliammon R	Catch + Escapement	2000			248	41		289	0	0	85.8	14.2	0
Sliammon R	Catch + Escapement	2001			849			849	0	0	100	0	0
Sliammon R	Catch + Escapement	2002		574				574	0	100	0	0	0
Sliammon R	Catch + Escapement	2003		94	1,939			2,033	0	4.6	95.4	0	0
Sliammon R	Catch + Escapement	2004			3,059	3,033		6,092	0	0	50.2	49.8	0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Sliammon R	Catch + Escapement	2005		138		521		659	0	23.7	0	76.3	0
Sliammon R	Catch + Escapement	2006			2,681			2,681	0	0	100	0	0
Sliammon R	Catch + Escapement	2007				430		430	0	0	0	100	0
Snootli Cr	Catch	1981		197				197	0.0	100.0	0.0	0.0	0.0
Snootli Cr	Catch	1982		1,157	53			1,210	0.0	95.6	4.4	0.0	0.0
Snootli Cr	Catch	1983		1,987	5,677	35		7,699	0.0	25.8	73.7	0.5	0.0
Snootli Cr	Catch	1984		2,040	1,660	82		3,782	0.0	53.9	43.9	2.2	0.0
Snootli Cr	Catch	1985		2,541	6,488	343		9,372	0.0	27.1	69.2	3.7	0.0
Snootli Cr	Catch	1986		3,879	19,349	582		23,810	0.0	16.3	81.3	2.4	0.0
Snootli Cr	Catch	1987		5,743	25,165	5,057		35,965	0.0	16.0	70.0	14.1	0.0
Snootli Cr	Catch	1988		7,849	64,440	8,870	336	81,495	0.0	9.6	79.1	10.9	0.4
Snootli Cr	Catch	1989		6,869	15,230	6,220		28,319	0.0	24.3	53.8	22.0	0.0
Snootli Cr	Catch	1990		1,252	18,530	1,476	94	21,352	0.0	5.9	86.8	6.9	0.4
Snootli Cr	Catch	1991		883	4,392	2,370		7,645	0.0	11.6	57.4	31.0	0.0
Snootli Cr	Catch	1992		1,441	6,095	378		7,914	0.0	18.2	77.0	4.8	0.0
Snootli Cr	Catch	1993		3,313	3,603	827	34	7,777	0.0	42.6	46.3	10.6	0.4
Snootli Cr	Catch	1994		4,728	10,762	1,049	50	16,589	0.0	28.5	64.9	6.3	0.3
Snootli Cr	Catch	1995		10,122	26,060	1,392	36	37,610	0.0	26.9	69.3	3.7	0.1
Snootli Cr	Catch	1996	126	3,257	6,127	496		10,006	1.3	32.6	61.2	5.0	0.0
Snootli Cr	Catch	1997		5,753	3,823	48		9,624	0.0	59.8	39.7	0.5	0.0
Snootli Cr	Catch	1998		1,940	11,858	454		14,252	0.0	13.6	83.2	3.2	0.0
Snootli Cr	Catch	1999		1,696	2,780	154		4,630	0.0	36.6	60.0	3.3	0.0
Snootli Cr	Catch	2000		279	2,937	202		3,418	0.0	8.2	85.9	5.9	0.0
Snootli Cr	Catch	2001		7,428	7,539	947		15,914	0.0	46.7	47.4	6.0	0.0
Snootli Cr	Catch	2002		7,861	12,465	1,159		21,485	0.0	36.6	58.0	5.4	0.0
Snootli Cr	Catch	2003		10,483	27,707	1,241		39,431	0.0	26.6	70.3	3.1	0.0
Snootli Cr	Catch	2004		7,253	59,649	3,202		70,104	0.0	10.3	85.1	4.6	0.0
Snootli Cr	Catch	2005		1,845	7,790	640	75	10,350	0.0	17.8	75.3	6.2	0.7
Snootli Cr	Catch	2006		6,473	17,878	1,170		25,521	0.0	25.4	70.1	4.6	0.0
Snootli Cr	Catch	2007			8,683	914	154	9,751	0.0	0.0	89.0	9.4	1.6
Snootli Cr	Catch	2008				73		73	0.0	0.0	0.0	100.0	0.0
Snootli Cr	Catch	2009		118	1,420			1,538	0.0	7.7	92.3	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Snootli Cr	Catch	2011			2,863			2,863	0.0	0.0	100.0	0.0	0.0
Snootli Cr	Catch	2012		13,538	1,958	2,610		18,106	0.0	74.8	10.8	14.4	0.0
Snootli Cr	Catch	2013		4,025	43,160	1,418	57	48,660	0.0	8.3	88.7	2.9	0.1
Snootli Cr	Catch	2014		2,124	6,038	889		9,051	0.0	23.5	66.7	9.8	0.0
Snootli Cr	Catch	2015		5,389	33,668	1,119		40,176	0.0	13.4	83.8	2.8	0.0
Snootli Cr	Catch	2016		12,143	15,604	1,115		28,862	0.0	42.1	54.1	3.9	0.0
Snootli Cr	Catch	2017		4,589	18,975	1,953		25,517	0.0	18.0	74.4	7.7	0.0
Snootli Cr	Catch	2018		13,365	15,839	1,125		30,329	0.0	44.1	52.2	3.7	0.0
Snootli Cr	Escapement	1981		15				15	0.0	100.0	0.0	0.0	0.0
Snootli Cr	Escapement	1982		563	61			624	0.0	90.2	9.8	0.0	0.0
Snootli Cr	Escapement	1983		358	4,630	17		5,005	0.0	7.2	92.5	0.3	0.0
Snootli Cr	Escapement	1984		98	6,732	502		7,332	0.0	1.3	91.8	6.8	0.0
Snootli Cr	Escapement	1985		1,877	2,145	30		4,052	0.0	46.3	52.9	0.7	0.0
Snootli Cr	Escapement	1986		285	3,829			4,114	0.0	6.9	93.1	0.0	0.0
Snootli Cr	Escapement	1987		142	2,394	839		3,375	0.0	4.2	70.9	24.9	0.0
Snootli Cr	Escapement	1988		90	2,541	708	17	3,356	0.0	2.7	75.7	21.1	0.5
Snootli Cr	Escapement	1989		747	3,557	1,615		5,919	0.0	12.6	60.1	27.3	0.0
Snootli Cr	Escapement	1990		58	1,406	177		1,641	0.0	3.5	85.7	10.8	0.0
Snootli Cr	Escapement	1991		501	599	117		1,217	0.0	41.2	49.2	9.6	0.0
Snootli Cr	Escapement	1992		888	4,990	140	66	6,084	0.0	14.6	82.0	2.3	1.1
Snootli Cr	Escapement	1993		299	2,679	626		3,604	0.0	8.3	74.3	17.4	0.0
Snootli Cr	Escapement	1994		618	2,901	320		3,839	0.0	16.1	75.6	8.3	0.0
Snootli Cr	Escapement	1995		898	3,082	224	17	4,221	0.0	21.3	73.0	5.3	0.4
Snootli Cr	Escapement	1996		752	3,227	246		4,225	0.0	17.8	76.4	5.8	0.0
Snootli Cr	Escapement	1997		1,701	2,500	94		4,295	0.0	39.6	58.2	2.2	0.0
Snootli Cr	Escapement	1998		475	7,969	442		8,886	0.0	5.3	89.7	5.0	0.0
Snootli Cr	Escapement	1999		71	2,051	177		2,299	0.0	3.1	89.2	7.7	0.0
Snootli Cr	Escapement	2000		67	2,330	18		2,415	0.0	2.8	96.5	0.7	0.0
Snootli Cr	Escapement	2001		256	1,831	221		2,308	0.0	11.1	79.3	9.6	0.0
Snootli Cr	Escapement	2002		439	1,053	119		1,611	0.0	27.3	65.4	7.4	0.0
Snootli Cr	Escapement	2003		1,119	8,319	89		9,527	0.0	11.7	87.3	0.9	0.0
Snootli Cr	Escapement	2004			7,753	732		8,485	0.0	0.0	91.4	8.6	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Snootli Cr	Escapement	2005		284	1,215	261		1,760	0.0	16.1	69.0	14.8	0.0
Snootli Cr	Escapement	2006		263	2,003	284		2,550	0.0	10.3	78.5	11.1	0.0
Snootli Cr	Escapement	2007			1,753	80		1,833	0.0	0.0	95.6	4.4	0.0
Snootli Cr	Escapement	2008		696		655		1,351	0.0	51.5	0.0	48.5	0.0
Snootli Cr	Escapement	2009		98	1,820			1,918	0.0	5.1	94.9	0.0	0.0
Snootli Cr	Escapement	2010		269	553	166		988	0.0	27.2	56.0	16.8	0.0
Snootli Cr	Escapement	2011			5,302	232		5,534	0.0	0.0	95.8	4.2	0.0
Snootli Cr	Escapement	2012		1,980	2,776	1,291		6,047	0.0	32.7	45.9	21.3	0.0
Snootli Cr	Escapement	2013		351	9,628	502		10,481	0.0	3.3	91.9	4.8	0.0
Snootli Cr	Escapement	2014		994	1,796	713		3,503	0.0	28.4	51.3	20.4	0.0
Snootli Cr	Escapement	2015		1,615	4,836	389		6,840	0.0	23.6	70.7	5.7	0.0
Snootli Cr	Catch + Escapement	1981		212				212	0.0	100.0	0.0	0.0	0.0
Snootli Cr	Catch + Escapement	1982		1,720	114			1,834	0.0	93.8	6.2	0.0	0.0
Snootli Cr	Catch + Escapement	1983		2,345	10,307	52		12,704	0.0	18.5	81.1	0.4	0.0
Snootli Cr	Catch + Escapement	1984		2,138	8,392	584		11,114	0.0	19.2	75.5	5.3	0.0
Snootli Cr	Catch + Escapement	1985		4,418	8,633	373		13,424	0.0	32.9	64.3	2.8	0.0
Snootli Cr	Catch + Escapement	1986		4,164	23,178	582		27,924	0.0	14.9	83.0	2.1	0.0
Snootli Cr	Catch + Escapement	1987		5,885	27,559	5,896		39,340	0.0	15.0	70.1	15.0	0.0
Snootli Cr	Catch + Escapement	1988		7,939	66,981	9,578	353	84,851	0.0	9.4	78.9	11.3	0.4
Snootli Cr	Catch + Escapement	1989		7,616	18,787	7,835		34,238	0.0	22.2	54.9	22.9	0.0
Snootli Cr	Catch + Escapement	1990		1,310	19,936	1,653	94	22,993	0.0	5.7	86.7	7.2	0.4
Snootli Cr	Catch + Escapement	1991		1,384	4,991	2,488		8,863	0.0	15.6	56.3	28.1	0.0
Snootli Cr	Catch + Escapement	1992		2,328	11,085	518	66	13,997	0.0	16.6	79.2	3.7	0.5
Snootli Cr	Catch + Escapement	1993		3,613	6,282	1,453	34	11,382	0.0	31.7	55.2	12.8	0.3
Snootli Cr	Catch + Escapement	1994		5,347	13,663	1,368	50	20,428	0.0	26.2	66.9	6.7	0.2
Snootli Cr	Catch + Escapement	1995		11,020	29,142	1,616	52	41,830	0.0	26.3	69.7	3.9	0.1
Snootli Cr	Catch + Escapement	1996	126	4,008	9,355	742		14,231	0.9	28.2	65.7	5.2	0.0
Snootli Cr	Catch + Escapement	1997		7,453	6,323	142		13,918	0.0	53.5	45.4	1.0	0.0
Snootli Cr	Catch + Escapement	1998		2,415	19,827	896		23,138	0.0	10.4	85.7	3.9	0.0
Snootli Cr	Catch + Escapement	1999		1,767	4,831	331		6,929	0.0	25.5	69.7	4.8	0.0
Snootli Cr	Catch + Escapement	2000		346	5,267	220		5,833	0.0	5.9	90.3	3.8	0.0
Snootli Cr	Catch + Escapement	2001		7,685	9,370	1,168		18,223	0.0	42.2	51.4	6.4	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Snootli Cr	Catch + Escapement	2002		8,301	13,518	1,278		23,097	0.0	35.9	58.5	5.5	0.0
Snootli Cr	Catch + Escapement	2003		11,603	36,026	1,330		48,959	0.0	23.7	73.6	2.7	0.0
Snootli Cr	Catch + Escapement	2004		7,253	67,402	3,934		78,589	0.0	9.2	85.8	5.0	0.0
Snootli Cr	Catch + Escapement	2005		2,129	9,005	901	75	12,110	0.0	17.6	74.4	7.4	0.6
Snootli Cr	Catch + Escapement	2006		6,736	19,880	1,453		28,069	0.0	24.0	70.8	5.2	0.0
Snootli Cr	Catch + Escapement	2007			10,436	994	154	11,584	0.0	0.0	90.1	8.6	1.3
Snootli Cr	Catch + Escapement	2008		696		727		1,423	0.0	48.9	0.0	51.1	0.0
Snootli Cr	Catch + Escapement	2009		216	3,240			3,456	0.0	6.3	93.8	0.0	0.0
Snootli Cr	Catch + Escapement	2010		269	553	166		988	0.0	27.2	56.0	16.8	0.0
Snootli Cr	Catch + Escapement	2011			8,165	232		8,397	0.0	0.0	97.2	2.8	0.0
Snootli Cr	Catch + Escapement	2012		15,519	4,735	3,902		24,156	0.0	64.2	19.6	16.2	0.0
Snootli Cr	Catch + Escapement	2013		4,377	52,788	1,920	57	59,142	0.0	7.4	89.3	3.2	0.1
Snootli Cr	Catch + Escapement	2014		3,118	7,834	1,602		12,554	0.0	24.8	62.4	12.8	0.0
Snootli Cr	Catch + Escapement	2015		7,004	38,505	1,508		47,017	0.0	14.9	81.9	3.2	0.0
Snootli Cr	Catch + Escapement	2016		12,143	15,604	1,115		28,862	0.0	42.1	54.1	3.9	0.0
Snootli Cr	Catch + Escapement	2017		4,589	18,975	1,953		25,517	0.0	18.0	74.4	7.7	0.0
Snootli Cr	Catch + Escapement	2018		13,365	15,839	1,125		30,329	0.0	44.1	52.2	3.7	0.0
Squakum Cr	Catch	1985		1,050				1,050	0.0	100.0	0.0	0.0	0.0
Squakum Cr	Catch	1986		202	8,788			8,990	0.0	2.2	97.8	0.0	0.0
Squakum Cr	Catch	1987			113	444		557	0.0	0.0	20.3	79.7	0.0
Squakum Cr	Catch	1988		1,709	20,666			22,375	0.0	7.6	92.4	0.0	0.0
Squakum Cr	Catch	1989			2,391	680		3,071	0.0	0.0	77.9	22.1	0.0
Squakum Cr	Catch	1990				50		50	0.0	0.0	0.0	100.0	0.0
Squakum Cr	Escapement	1985		4,557				4,557	0.0	100.0	0.0	0.0	0.0
Squakum Cr	Escapement	1986		471	18,162			18,633	0.0	2.5	97.5	0.0	0.0
Squakum Cr	Escapement	1987		1,339	1,255	170		2,764	0.0	48.4	45.4	6.2	0.0
Squakum Cr	Escapement	1988			18,045	33		18,078	0.0	0.0	99.8	0.2	0.0
Squakum Cr	Escapement	1989			7,983	1,179		9,162	0.0	0.0	87.1	12.9	0.0
Squakum Cr	Catch + Escapement	1985		5,607				5,607	0.0	100.0	0.0	0.0	0.0
Squakum Cr	Catch + Escapement	1986		673	26,950			27,623	0.0	2.4	97.6	0.0	0.0
Squakum Cr	Catch + Escapement	1987		1,339	1,368	614		3,321	0.0	40.3	41.2	18.5	0.0
Squakum Cr	Catch + Escapement	1988		1,709	38,711	33		40,453	0.0	4.2	95.7	0.1	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Squakum Cr	Catch + Escapement	1989			10,374	1,859		12,233	0.0	0.0	84.8	15.2	0.0
Squakum Cr	Catch + Escapement	1990				50		50	0.0	0.0	0.0	100.0	0.0
Stave R	Catch	1985		2,415				2,415	0.0	100.0	0.0	0.0	0.0
Stave R	Catch	1986		730	13,692			14,422	0.0	5.1	94.9	0.0	0.0
Stave R	Catch	1987		247	332	39		618	0.0	40.0	53.7	6.3	0.0
Stave R	Catch	1988		22,198	29,302	563	105	52,168	0.0	42.6	56.2	1.1	0.2
Stave R	Catch	1989		5,687	10,498	2,951		19,136	0.0	29.7	54.9	15.4	0.0
Stave R	Catch	1990			34,006	311		34,317	0.0	0.0	99.1	0.9	0.0
Stave R	Catch	1991		45	2,715	1,946		4,706	0.0	1.0	57.7	41.4	0.0
Stave R	Catch	1992		3,573	23,860	2,490		29,923	0.0	11.9	79.7	8.3	0.0
Stave R	Catch	1993		3,102	30,635	2,302		36,039	0.0	8.6	85.0	6.4	0.0
Stave R	Catch	1994		4,469	16,310	2,580		23,359	0.0	19.1	69.8	11.0	0.0
Stave R	Catch	1995		279	4,956	1,919	63	7,217	0.0	3.9	68.7	26.6	0.9
Stave R	Catch	1996		309	185			494	0.0	62.6	37.4	0.0	0.0
Stave R	Catch	1997		109	1,256			1,365	0.0	8.0	92.0	0.0	0.0
Stave R	Catch	1998		5,357	10,545			15,902	0.0	33.7	66.3	0.0	0.0
Stave R	Catch	1999		1,255	1,063	416		2,734	0.0	45.9	38.9	15.2	0.0
Stave R	Catch	2000		1,083	5,801			6,884	0.0	15.7	84.3	0.0	0.0
Stave R	Catch	2001			490			490	0.0	0.0	100.0	0.0	0.0
Stave R	Catch	2002				417		417	0.0	0.0	0.0	100.0	0.0
Stave R	Escapement	1985		14,747				14,747	0.0	100.0	0.0	0.0	0.0
Stave R	Escapement	1986		439	16,102			16,541	0.0	2.7	97.3	0.0	0.0
Stave R	Escapement	1987	258	2,651	1,031	118		4,058	6.4	65.3	25.4	2.9	0.0
Stave R	Escapement	1988		28,879	19,314	147		48,340	0.0	59.7	40.0	0.3	0.0
Stave R	Escapement	1989		22,618	45,426	1,629		69,673	0.0	32.5	65.2	2.3	0.0
Stave R	Escapement	1990		94	44,281			44,375	0.0	0.2	99.8	0.0	0.0
Stave R	Escapement	1991		10,220	14,120	12,568		36,908	0.0	27.7	38.3	34.1	0.0
Stave R	Escapement	1992		12,915	42,359	2,622		57,896	0.0	22.3	73.2	4.5	0.0
Stave R	Escapement	1993		7,224	70,538	6,850		84,612	0.0	8.5	83.4	8.1	0.0
Stave R	Escapement	1994		2,359	23,613	1,788		27,760	0.0	8.5	85.1	6.4	0.0
Stave R	Escapement	1995		1,294	7,694	6,771		15,759	0.0	8.2	48.8	43.0	0.0
Stave R	Escapement	1996		19,909	4,126	1,801		25,836	0.0	77.1	16.0	7.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Stave R	Escapement	1997		2,123	16,650			18,773	0.0	11.3	88.7	0.0	0.0
Stave R	Escapement	1998		10,408	11,360	1,113		22,881	0.0	45.5	49.6	4.9	0.0
Stave R	Escapement	1999		4,762	9,385			14,147	0.0	33.7	66.3	0.0	0.0
Stave R	Escapement	2000			6,588			6,588	0.0	0.0	100.0	0.0	0.0
Stave R	Escapement	2001			6,634			6,634	0.0	0.0	100.0	0.0	0.0
Stave R	Catch + Escapement	1985		17,162				17,162	0.0	100.0	0.0	0.0	0.0
Stave R	Catch + Escapement	1986		1,169	29,794			30,963	0.0	3.8	96.2	0.0	0.0
Stave R	Catch + Escapement	1987	258	2,898	1,363	157		4,676	5.5	62.0	29.1	3.4	0.0
Stave R	Catch + Escapement	1988		51,076	48,616	710	105	100,507	0.0	50.8	48.4	0.7	0.1
Stave R	Catch + Escapement	1989		28,304	55,924	4,580		88,808	0.0	31.9	63.0	5.2	0.0
Stave R	Catch + Escapement	1990		94	78,286	311		78,691	0.0	0.1	99.5	0.4	0.0
Stave R	Catch + Escapement	1991		10,265	16,835	14,514		41,614	0.0	24.7	40.5	34.9	0.0
Stave R	Catch + Escapement	1992		16,487	66,219	5,111		87,817	0.0	18.8	75.4	5.8	0.0
Stave R	Catch + Escapement	1993		10,326	101,173	9,152		120,651	0.0	8.6	83.9	7.6	0.0
Stave R	Catch + Escapement	1994		6,828	39,922	4,368		51,118	0.0	13.4	78.1	8.5	0.0
Stave R	Catch + Escapement	1995		1,572	12,650	8,691	63	22,976	0.0	6.8	55.1	37.8	0.3
Stave R	Catch + Escapement	1996		20,218	4,311	1,801		26,330	0.0	76.8	16.4	6.8	0.0
Stave R	Catch + Escapement	1997		2,232	17,906			20,138	0.0	11.1	88.9	0.0	0.0
Stave R	Catch + Escapement	1998		15,765	21,905	1,113		38,783	0.0	40.6	56.5	2.9	0.0
Stave R	Catch + Escapement	1999		6,017	10,448	416		16,881	0.0	35.6	61.9	2.5	0.0
Stave R	Catch + Escapement	2000		1,083	12,389			13,472	0.0	8.0	92.0	0.0	0.0
Stave R	Catch + Escapement	2001			7,124			7,124	0.0	0.0	100.0	0.0	0.0
Stave R	Catch + Escapement	2002				417		417	0.0	0.0	0.0	100.0	0.0
Sucwoa R	Catch	1981		31				31	0.0	100.0	0.0	0.0	0.0
Sucwoa R	Catch	1982		3,314	391			3,705	0.0	89.4	10.6	0.0	0.0
Sucwoa R	Catch	1983	383					383	100.0	0.0	0.0	0.0	0.0
Sucwoa R	Catch	1984		7,196	4,173	156	5	11,530	0.0	62.4	36.2	1.4	0.0
Sucwoa R	Catch	1985		16,383	13,888	136		30,407	0.0	53.9	45.7	0.4	0.0
Sucwoa R	Catch	1986		1,796	25,755	1,838		29,389	0.0	6.1	87.6	6.3	0.0
Sucwoa R	Catch	1987		225	400	417		1,042	0.0	21.6	38.4	40.0	0.0
Sucwoa R	Catch	1992		72	1,419	199		1,690	0.0	4.3	84.0	11.8	0.0
Sucwoa R	Catch	1993		431	962	59		1,452	0.0	29.7	66.3	4.1	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Sucwoa R	Catch	1994		1,561	12,818	289	32	14,700	0.0	10.6	87.2	2.0	0.2
Sucwoa R	Catch	1995			874	1,773		2,647	0.0	0.0	33.0	67.0	0.0
Sucwoa R	Catch	1997		2,248	4,789	77		7,114	0.0	31.6	67.3	1.1	0.0
Sucwoa R	Catch	1998		484	11,942	337		12,763	0.0	3.8	93.6	2.6	0.0
Sucwoa R	Catch	1999		827	1,647	1,071		3,545	0.0	23.3	46.5	30.2	0.0
Sucwoa R	Catch	2000		294	541	55		890	0.0	33.0	60.8	6.2	0.0
Sucwoa R	Catch	2001		3,007	3,471	91		6,569	0.0	45.8	52.8	1.4	0.0
Sucwoa R	Catch	2003		109	1,744	530		2,383	0.0	4.6	73.2	22.2	0.0
Sucwoa R	Escapement	1981		61				61	0.0	100.0	0.0	0.0	0.0
Sucwoa R	Escapement	1982		9,303	79			9,382	0.0	99.2	0.8	0.0	0.0
Sucwoa R	Escapement	1983		1,667	8,569	77		10,313	0.0	16.2	83.1	0.7	0.0
Sucwoa R	Escapement	1984		6,196	4,887	251		11,334	0.0	54.7	43.1	2.2	0.0
Sucwoa R	Escapement	1985		14,836	11,033			25,869	0.0	57.4	42.6	0.0	0.0
Sucwoa R	Escapement	1986		330	16,370	303		17,003	0.0	1.9	96.3	1.8	0.0
Sucwoa R	Escapement	1987		1,064	2,075	2,687		5,826	0.0	18.3	35.6	46.1	0.0
Sucwoa R	Escapement	1988		213	7,825	421	110	8,569	0.0	2.5	91.3	4.9	1.3
Sucwoa R	Escapement	1989		3,027	4,220	204		7,451	0.0	40.6	56.6	2.7	0.0
Sucwoa R	Escapement	1990		154	6,620	264		7,038	0.0	2.2	94.1	3.8	0.0
Sucwoa R	Escapement	1991		1,141	1,239	1,912		4,292	0.0	26.6	28.9	44.5	0.0
Sucwoa R	Escapement	1992		453	2,069	148		2,670	0.0	17.0	77.5	5.5	0.0
Sucwoa R	Escapement	1993		2,865	1,288	45		4,198	0.0	68.2	30.7	1.1	0.0
Sucwoa R	Escapement	1994		377	8,996	117		9,490	0.0	4.0	94.8	1.2	0.0
Sucwoa R	Escapement	1995		194	6,106	3,598		9,898	0.0	2.0	61.7	36.4	0.0
Sucwoa R	Escapement	1996		3,360	106	163	36	3,665	0.0	91.7	2.9	4.4	1.0
Sucwoa R	Escapement	1997		1,146	10,723			11,869	0.0	9.7	90.3	0.0	0.0
Sucwoa R	Escapement	1998			27,168			27,168	0.0	0.0	100.0	0.0	0.0
Sucwoa R	Escapement	1999		499	615	730		1,844	0.0	27.1	33.4	39.6	0.0
Sucwoa R	Escapement	2000			626			626	0.0	0.0	100.0	0.0	0.0
Sucwoa R	Escapement	2001		35				35	0.0	100.0	0.0	0.0	0.0
Sucwoa R	Catch + Escapement	1981		92				92	0.0	100.0	0.0	0.0	0.0
Sucwoa R	Catch + Escapement	1982		12,617	470			13,087	0.0	96.4	3.6	0.0	0.0
Sucwoa R	Catch + Escapement	1983	383	1,667	8,569	77		10,696	3.6	15.6	80.1	0.7	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Sucwoa R	Catch + Escapement	1984		13,392	9,060	407	5	22,864	0.0	58.6	39.6	1.8	0.0
Sucwoa R	Catch + Escapement	1985		31,219	24,921	136		56,276	0.0	55.5	44.3	0.2	0.0
Sucwoa R	Catch + Escapement	1986		2,126	42,125	2,141		46,392	0.0	4.6	90.8	4.6	0.0
Sucwoa R	Catch + Escapement	1987		1,289	2,475	3,104		6,868	0.0	18.8	36.0	45.2	0.0
Sucwoa R	Catch + Escapement	1988		213	7,825	421	110	8,569	0.0	2.5	91.3	4.9	1.3
Sucwoa R	Catch + Escapement	1989		3,027	4,220	204		7,451	0.0	40.6	56.6	2.7	0.0
Sucwoa R	Catch + Escapement	1990		154	6,620	264		7,038	0.0	2.2	94.1	3.8	0.0
Sucwoa R	Catch + Escapement	1991		1,141	1,239	1,912		4,292	0.0	26.6	28.9	44.5	0.0
Sucwoa R	Catch + Escapement	1992		525	3,488	347		4,360	0.0	12.0	80.0	8.0	0.0
Sucwoa R	Catch + Escapement	1993		3,296	2,250	104		5,650	0.0	58.3	39.8	1.8	0.0
Sucwoa R	Catch + Escapement	1994		1,938	21,813	406	32	24,189	0.0	8.0	90.2	1.7	0.1
Sucwoa R	Catch + Escapement	1995		194	6,979	5,372		12,545	0.0	1.5	55.6	42.8	0.0
Sucwoa R	Catch + Escapement	1996		3,360	106	163	36	3,665	0.0	91.7	2.9	4.4	1.0
Sucwoa R	Catch + Escapement	1997		3,393	15,512	77		18,982	0.0	17.9	81.7	0.4	0.0
Sucwoa R	Catch + Escapement	1998		484	39,110	337		39,931	0.0	1.2	97.9	0.8	0.0
Sucwoa R	Catch + Escapement	1999		1,327	2,262	1,802		5,391	0.0	24.6	42.0	33.4	0.0
Sucwoa R	Catch + Escapement	2000		294	1,168	55		1,517	0.0	19.4	77.0	3.6	0.0
Sucwoa R	Catch + Escapement	2001		3,042	3,471	91		6,604	0.0	46.1	52.6	1.4	0.0
Sucwoa R	Catch + Escapement	2003		109	1,744	530		2,383	0.0	4.6	73.2	22.2	0.0
Theodosia Cr	Catch	2005		24				24	0.0	100.0	0.0	0.0	0.0
Theodosia Cr	Catch	2006			459			459	0.0	0.0	100.0	0.0	0.0
Theodosia Cr	Catch	2007				74		74	0.0	0.0	0.0	100.0	0.0
Theodosia Cr	Catch + Escapement	2005		24				24	0.0	100.0	0.0	0.0	0.0
Theodosia Cr	Catch + Escapement	2006			459			459	0.0	0.0	100.0	0.0	0.0
Theodosia Cr	Catch + Escapement	2007				74		74	0.0	0.0	0.0	100.0	0.0
Thorsen Cr	Catch	1987		4,199				4,199	0.0	100.0	0.0	0.0	0.0
Thorsen Cr	Catch	1988		4,841	50,991			55,832	0.0	8.7	91.3	0.0	0.0
Thorsen Cr	Catch	1989		5,476	8,281	3,706		17,463	0.0	31.4	47.4	21.2	0.0
Thorsen Cr	Catch	1990		658	13,723	987		15,368	0.0	4.3	89.3	6.4	0.0
Thorsen Cr	Catch	1991		448	2,309	462		3,219	0.0	13.9	71.7	14.4	0.0
Thorsen Cr	Catch	1992		1,391	3,092	200		4,683	0.0	29.7	66.0	4.3	0.0
Thorsen Cr	Catch	1993		1,620	3,478	419	18	5,535	0.0	29.3	62.8	7.6	0.3

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Thorsen Cr	Catch	1994		2,406	5,573	1,012	25	9,016	0.0	26.7	61.8	11.2	0.3
Thorsen Cr	Catch	1995		10,668	13,546	748	34	24,996	0.0	42.7	54.2	3.0	0.1
Thorsen Cr	Catch	1996	63	2,846	6,442	256		9,607	0.7	29.6	67.1	2.7	0.0
Thorsen Cr	Catch	1997		7,605	3,341	39		10,985	0.0	69.2	30.4	0.4	0.0
Thorsen Cr	Catch	1998		3,217	17,117	396		20,730	0.0	15.5	82.6	1.9	0.0
Thorsen Cr	Catch	1999		836	7,176	685		8,697	0.0	9.6	82.5	7.9	0.0
Thorsen Cr	Catch	2000		514	3,360	265		4,139	0.0	12.4	81.2	6.4	0.0
Thorsen Cr	Catch	2001		7,683	19,301	1,227	63	28,274	0.0	27.2	68.3	4.3	0.2
Thorsen Cr	Catch	2002		7,589	12,893	3,270	51	23,803	0.0	31.9	54.2	13.7	0.2
Thorsen Cr	Catch	2003		10,386	26,748	1,283	258	38,675	0.0	26.9	69.2	3.3	0.7
Thorsen Cr	Catch	2004		7,180	59,099	3,091		69,370	0.0	10.4	85.2	4.5	0.0
Thorsen Cr	Catch	2005		2,144	8,070	635	72	10,921	0.0	19.6	73.9	5.8	0.7
Thorsen Cr	Catch	2006		5,221	18,749	1,000		24,970	0.0	20.9	75.1	4.0	0.0
Thorsen Cr	Catch	2007			10,094	1,033	76	11,203	0.0	0.0	90.1	9.2	0.7
Thorsen Cr	Catch	2008				178		178	0.0	0.0	0.0	100.0	0.0
Thorsen Cr	Catch	2009		118	1,413			1,531	0.0	7.7	92.3	0.0	0.0
Thorsen Cr	Catch	2011			2,845			2,845	0.0	0.0	100.0	0.0	0.0
Thorsen Cr	Catch	2012		13,907	2,032	2,594		18,533	0.0	75.0	11.0	14.0	0.0
Thorsen Cr	Catch	2013		1,957	44,334	1,471	57	47,819	0.0	4.1	92.7	3.1	0.1
Thorsen Cr	Catch	2014		2,136	2,936	913		5,985	0.0	35.7	49.1	15.3	0.0
Thorsen Cr	Catch	2015		4,967	33,846	544		39,357	0.0	12.6	86.0	1.4	0.0
Thorsen Cr	Catch	2016		12,196	14,381	1,121		27,698	0.0	44.0	51.9	4.0	0.0
Thorsen Cr	Catch	2017		4,429	19,059	1,800		25,288	0.0	17.5	75.4	7.1	0.0
Thorsen Cr	Catch	2018		13,758	15,287	1,130		30,175	0.0	45.6	50.7	3.7	0.0
Thorsen Cr	Escapement	1987		139				139	0.0	100.0	0.0	0.0	0.0
Thorsen Cr	Escapement	1988		58	2,270			2,328	0.0	2.5	97.5	0.0	0.0
Thorsen Cr	Escapement	1989		266	2,086	1,292		3,644	0.0	7.3	57.2	35.5	0.0
Thorsen Cr	Escapement	1990		31	2,285	97		2,413	0.0	1.3	94.7	4.0	0.0
Thorsen Cr	Escapement	1991		254	319	201		774	0.0	32.8	41.2	26.0	0.0
Thorsen Cr	Escapement	1992		857	2,531	74		3,462	0.0	24.8	73.1	2.1	0.0
Thorsen Cr	Escapement	1993		145	2,586	318		3,049	0.0	4.8	84.8	10.4	0.0
Thorsen Cr	Escapement	1994		316	1,325	309		1,950	0.0	16.2	67.9	15.8	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Thorsen Cr	Escapement	1995		976	1,614	102	16	2,708	0.0	36.0	59.6	3.8	0.6
Thorsen Cr	Escapement	1996		657	3,495	131		4,283	0.0	15.3	81.6	3.1	0.0
Thorsen Cr	Escapement	1997		1,170	2,185	91		3,446	0.0	34.0	63.4	2.6	0.0
Thorsen Cr	Escapement	1998		59	6,572	386		7,017	0.0	0.8	93.7	5.5	0.0
Thorsen Cr	Escapement	1999		284	4,120	227		4,631	0.0	6.1	89.0	4.9	0.0
Thorsen Cr	Escapement	2000		221	2,785	354		3,360	0.0	6.6	82.9	10.5	0.0
Thorsen Cr	Escapement	2001		265	2,719	219		3,203	0.0	8.3	84.9	6.8	0.0
Thorsen Cr	Escapement	2002		424	1,089	364		1,877	0.0	22.6	58.0	19.4	0.0
Thorsen Cr	Escapement	2003		1,109	8,031	92		9,232	0.0	12.0	87.0	1.0	0.0
Thorsen Cr	Escapement	2004		81	7,681	707		8,469	0.0	1.0	90.7	8.3	0.0
Thorsen Cr	Escapement	2005		156	1,133	258		1,547	0.0	10.1	73.2	16.7	0.0
Thorsen Cr	Escapement	2006		285	1,428	161		1,874	0.0	15.2	76.2	8.6	0.0
Thorsen Cr	Escapement	2007			1,539	63		1,602	0.0	0.0	96.1	3.9	0.0
Thorsen Cr	Escapement	2008		693		503		1,196	0.0	57.9	0.0	42.1	0.0
Thorsen Cr	Escapement	2009		98	1,811			1,909	0.0	5.1	94.9	0.0	0.0
Thorsen Cr	Escapement	2010		268	552	165		985	0.0	27.2	56.0	16.8	0.0
Thorsen Cr	Escapement	2011			5,269	231		5,500	0.0	0.0	95.8	4.2	0.0
Thorsen Cr	Escapement	2012		2,034	2,881	1,283		6,198	0.0	32.8	46.5	20.7	0.0
Thorsen Cr	Escapement	2013		171	9,890	521		10,582	0.0	1.6	93.5	4.9	0.0
Thorsen Cr	Escapement	2014		999	873	733		2,605	0.0	38.3	33.5	28.1	0.0
Thorsen Cr	Escapement	2015		1,488	4,862	189		6,539	0.0	22.8	74.4	2.9	0.0
Thorsen Cr	Catch + Escapement	1987		4,338				4,338	0.0	100.0	0.0	0.0	0.0
Thorsen Cr	Catch + Escapement	1988		4,899	53,261			58,160	0.0	8.4	91.6	0.0	0.0
Thorsen Cr	Catch + Escapement	1989		5,742	10,367	4,998		21,107	0.0	27.2	49.1	23.7	0.0
Thorsen Cr	Catch + Escapement	1990		689	16,007	1,084		17,780	0.0	3.9	90.0	6.1	0.0
Thorsen Cr	Catch + Escapement	1991		702	2,627	663		3,992	0.0	17.6	65.8	16.6	0.0
Thorsen Cr	Catch + Escapement	1992		2,247	5,624	275		8,146	0.0	27.6	69.0	3.4	0.0
Thorsen Cr	Catch + Escapement	1993		1,766	6,064	737	18	8,585	0.0	20.6	70.6	8.6	0.2
Thorsen Cr	Catch + Escapement	1994		2,721	6,898	1,321	25	10,965	0.0	24.8	62.9	12.0	0.2
Thorsen Cr	Catch + Escapement	1995		11,644	15,160	849	51	27,704	0.0	42.0	54.7	3.1	0.2
Thorsen Cr	Catch + Escapement	1996	63	3,503	9,937	386		13,889	0.5	25.2	71.5	2.8	0.0
Thorsen Cr	Catch + Escapement	1997		8,775	5,526	129		14,430	0.0	60.8	38.3	0.9	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Thorsen Cr	Catch + Escapement	1998		3,276	23,689	783		27,748	0.0	11.8	85.4	2.8	0.0
Thorsen Cr	Catch + Escapement	1999		1,120	11,296	912		13,328	0.0	8.4	84.8	6.8	0.0
Thorsen Cr	Catch + Escapement	2000		735	6,145	620		7,500	0.0	9.8	81.9	8.3	0.0
Thorsen Cr	Catch + Escapement	2001		7,948	22,020	1,446	63	31,477	0.0	25.3	70.0	4.6	0.2
Thorsen Cr	Catch + Escapement	2002		8,013	13,982	3,634	51	25,680	0.0	31.2	54.4	14.2	0.2
Thorsen Cr	Catch + Escapement	2003		11,496	34,779	1,375	258	47,908	0.0	24.0	72.6	2.9	0.5
Thorsen Cr	Catch + Escapement	2004		7,260	66,781	3,798		77,839	0.0	9.3	85.8	4.9	0.0
Thorsen Cr	Catch + Escapement	2005		2,300	9,203	893	72	12,468	0.0	18.4	73.8	7.2	0.6
Thorsen Cr	Catch + Escapement	2006		5,506	20,177	1,161		26,844	0.0	20.5	75.2	4.3	0.0
Thorsen Cr	Catch + Escapement	2007			11,634	1,096	76	12,806	0.0	0.0	90.8	8.6	0.6
Thorsen Cr	Catch + Escapement	2008		693		681		1,374	0.0	50.4	0.0	49.6	0.0
Thorsen Cr	Catch + Escapement	2009		216	3,224			3,440	0.0	6.3	93.7	0.0	0.0
Thorsen Cr	Catch + Escapement	2010		268	552	165		985	0.0	27.2	56.0	16.8	0.0
Thorsen Cr	Catch + Escapement	2011			8,114	231		8,345	0.0	0.0	97.2	2.8	0.0
Thorsen Cr	Catch + Escapement	2012		15,941	4,912	3,877		24,730	0.0	64.5	19.9	15.7	0.0
Thorsen Cr	Catch + Escapement	2013		2,128	54,224	1,992	57	58,401	0.0	3.6	92.8	3.4	0.1
Thorsen Cr	Catch + Escapement	2014		3,135	3,809	1,645		8,589	0.0	36.5	44.3	19.2	0.0
Thorsen Cr	Catch + Escapement	2015		6,455	38,708	733		45,896	0.0	14.1	84.3	1.6	0.0
Thorsen Cr	Catch + Escapement	2016		12,196	14,381	1,121		27,698	0.0	44.0	51.9	4.0	0.0
Thorsen Cr	Catch + Escapement	2017		4,429	19,059	1,800		25,288	0.0	17.5	75.4	7.1	0.0
Thorsen Cr	Catch + Escapement	2018		13,758	15,287	1,130		30,175	0.0	45.6	50.7	3.7	0.0
Tlupana R	Catch	1982		40				40	0.0	100.0	0.0	0.0	0.0
Tlupana R	Catch	1983			10			10	0.0	0.0	100.0	0.0	0.0
Tlupana R	Catch	1984		1,697	374			2,071	0.0	81.9	18.1	0.0	0.0
Tlupana R	Catch	1985		6,607	1,814	17		8,438	0.0	78.3	21.5	0.2	0.0
Tlupana R	Catch	1986		761	13,002	67		13,830	0.0	5.5	94.0	0.5	0.0
Tlupana R	Catch	1987			487	106		593	0.0	0.0	82.1	17.9	0.0
Tlupana R	Catch	1992		346	1,554	611		2,511	0.0	13.8	61.9	24.3	0.0
Tlupana R	Catch	1993		127	2,851	59		3,037	0.0	4.2	93.9	1.9	0.0
Tlupana R	Catch	1994		356	6,982	1,738	37	9,113	0.0	3.9	76.6	19.1	0.4
Tlupana R	Catch	1995			176	722		898	0.0	0.0	19.6	80.4	0.0
Tlupana R	Catch	1997		1,127	1,409	30		2,566	0.0	43.9	54.9	1.2	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Tlupana R	Catch	1998		88	4,293	105		4,486	0.0	2.0	95.7	2.3	0.0
Tlupana R	Catch	1999		6,047	481	951		7,479	0.0	80.9	6.4	12.7	0.0
Tlupana R	Catch	2000		92	1,135	6		1,233	0.0	7.5	92.1	0.5	0.0
Tlupana R	Catch	2001		895	1,084	90		2,069	0.0	43.3	52.4	4.3	0.0
Tlupana R	Catch	2003		2,920	1,397	158		4,475	0.0	65.3	31.2	3.5	0.0
Tlupana R	Escapement	1983		518	14			532	0.0	97.4	2.6	0.0	0.0
Tlupana R	Escapement	1984		925	615			1,540	0.0	60.1	39.9	0.0	0.0
Tlupana R	Escapement	1985		5,732	637			6,369	0.0	90.0	10.0	0.0	0.0
Tlupana R	Escapement	1986			9,196			9,196	0.0	0.0	100.0	0.0	0.0
Tlupana R	Escapement	1987		2,134	857	4,036		7,027	0.0	30.4	12.2	57.4	0.0
Tlupana R	Escapement	1988			6,458	129		6,587	0.0	0.0	98.0	2.0	0.0
Tlupana R	Escapement	1989		385	6,932			7,317	0.0	5.3	94.7	0.0	0.0
Tlupana R	Escapement	1990		32	2,656	133		2,821	0.0	1.1	94.2	4.7	0.0
Tlupana R	Escapement	1991		1,317	2,138	721		4,176	0.0	31.5	51.2	17.3	0.0
Tlupana R	Escapement	1992		2,311	2,474			4,785	0.0	48.3	51.7	0.0	0.0
Tlupana R	Escapement	1993		1,215	8,537	61		9,813	0.0	12.4	87.0	0.6	0.0
Tlupana R	Escapement	1994		34	1,903	317		2,254	0.0	1.5	84.4	14.1	0.0
Tlupana R	Escapement	1995		76	1,228	1,463		2,767	0.0	2.7	44.4	52.9	0.0
Tlupana R	Escapement	1996		1,044	42	33	15	1,134	0.0	92.1	3.7	2.9	1.3
Tlupana R	Escapement	1997		1,306	3,409			4,715	0.0	27.7	72.3	0.0	0.0
Tlupana R	Escapement	1998		48	5,388			5,436	0.0	0.9	99.1	0.0	0.0
Tlupana R	Escapement	1999		7,281	406	1,328		9,015	0.0	80.8	4.5	14.7	0.0
Tlupana R	Escapement	2000			4,808			4,808	0.0	0.0	100.0	0.0	0.0
Tlupana R	Escapement	2001		10				10	0.0	100.0	0.0	0.0	0.0
Tlupana R	Catch + Escapement	1982		40				40	0.0	100.0	0.0	0.0	0.0
Tlupana R	Catch + Escapement	1983		518	24			542	0.0	95.6	4.4	0.0	0.0
Tlupana R	Catch + Escapement	1984		2,622	989			3,611	0.0	72.6	27.4	0.0	0.0
Tlupana R	Catch + Escapement	1985		12,339	2,451	17		14,807	0.0	83.3	16.6	0.1	0.0
Tlupana R	Catch + Escapement	1986		761	22,198	67		23,026	0.0	3.3	96.4	0.3	0.0
Tlupana R	Catch + Escapement	1987		2,134	1,344	4,142		7,620	0.0	28.0	17.6	54.4	0.0
Tlupana R	Catch + Escapement	1988			6,458	129		6,587	0.0	0.0	98.0	2.0	0.0
Tlupana R	Catch + Escapement	1989		385	6,932			7,317	0.0	5.3	94.7	0.0	0.0

Stock	Recovery Type	Year	Age 2	Age 3	Age 4	Age 5	Age 6	Total	% Age 2	% Age 3	% Age 4	% Age 5	% Age 6
Tlupana R	Catch + Escapement	1990		32	2,656	133		2,821	0.0	1.1	94.2	4.7	0.0
Tlupana R	Catch + Escapement	1991		1,317	2,138	721		4,176	0.0	31.5	51.2	17.3	0.0
Tlupana R	Catch + Escapement	1992		2,657	4,028	611		7,296	0.0	36.4	55.2	8.4	0.0
Tlupana R	Catch + Escapement	1993		1,342	11,388	120		12,850	0.0	10.4	88.6	0.9	0.0
Tlupana R	Catch + Escapement	1994		390	8,884	2,055	37	11,366	0.0	3.4	78.2	18.1	0.3
Tlupana R	Catch + Escapement	1995		76	1,404	2,185		3,665	0.0	2.1	38.3	59.6	0.0
Tlupana R	Catch + Escapement	1996		1,044	42	33	15	1,134	0.0	92.1	3.7	2.9	1.3
Tlupana R	Catch + Escapement	1997		2,434	4,819	30		7,283	0.0	33.4	66.2	0.4	0.0
Tlupana R	Catch + Escapement	1998		136	9,681	105		9,922	0.0	1.4	97.6	1.1	0.0
Tlupana R	Catch + Escapement	1999		13,328	886	2,279		16,493	0.0	80.8	5.4	13.8	0.0
Tlupana R	Catch + Escapement	2000		92	5,943	6		6,041	0.0	1.5	98.4	0.1	0.0
Tlupana R	Catch + Escapement	2001		905	1,084	90		2,079	0.0	43.5	52.1	4.3	0.0
Tlupana R	Catch + Escapement	2003		2,920	1,397	158		4,475	0.0	65.3	31.2	3.5	0.0

Table 25 Sources of Uncertainty in Chum Assessment

Assessment Activity	Source of Error or Uncertainty
Marking	Incorrect fin clips
	Tag loss, especially with half tags on small fry, CWT tag retention checks to fry release
	Mortality rate from fin clipping was highly variable
Enumeration	Predation during river outmigration affected release numbers from book counts in hatcheries
	Trap efficiency estimates expanded downstream counts from channels
	Catch estimates from different methods saleslips vs inseason hails
	Reported catch with combined areas/gears
	Reported catch with incorrect area/gear
	Escapement estimates (even complete fence counts could miss fish in years with big returns)
	Predation during spawning, removing predominantly older females
Sampling	Regenerated fins
	Sampler error examining catch/escapement, missing marks
	Sample representativeness of catch areas, week, gear
	Extrapolations of mark rates to missing strata required assumption of representativeness
Scale Lab Ages	Regenerated scales
	Incorrect reads
Data Collection	Coding errors and typos
Mark Allocations	Identical marks on different stocks required assumptions on likelihood of recovery by week/area
	Assumption of migration patterns
	Assumptions when incorrect scale age plus mark combination
Mark Rate Expansions	Expanding to associated groups assumed similar survival rate and ER, age class composition, and migration patterns

FIGURES

Figure 1 **Map of Major SEP Chum Production Facilities in Canada**

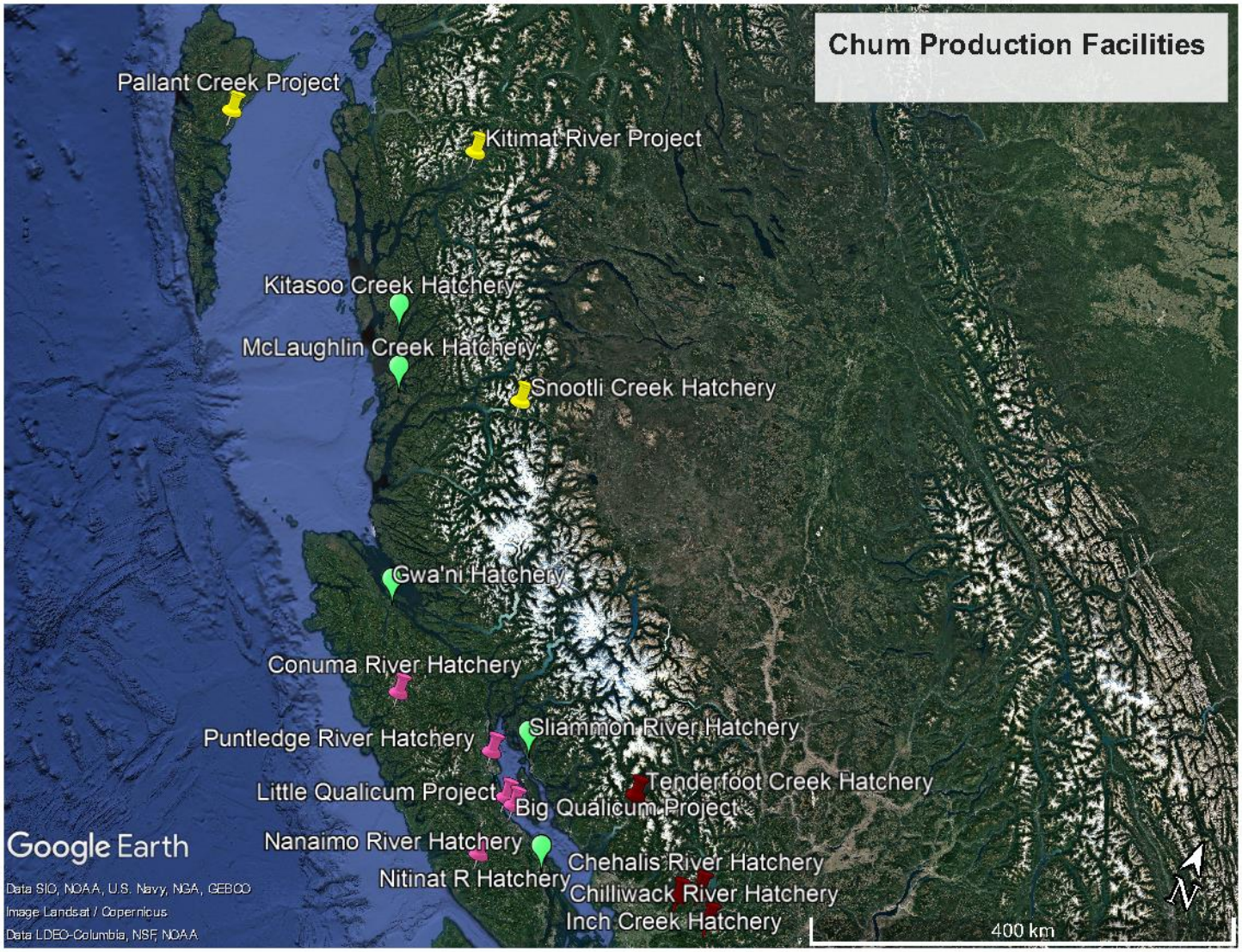


Figure 2 Map of Chum Conservation Units in BC

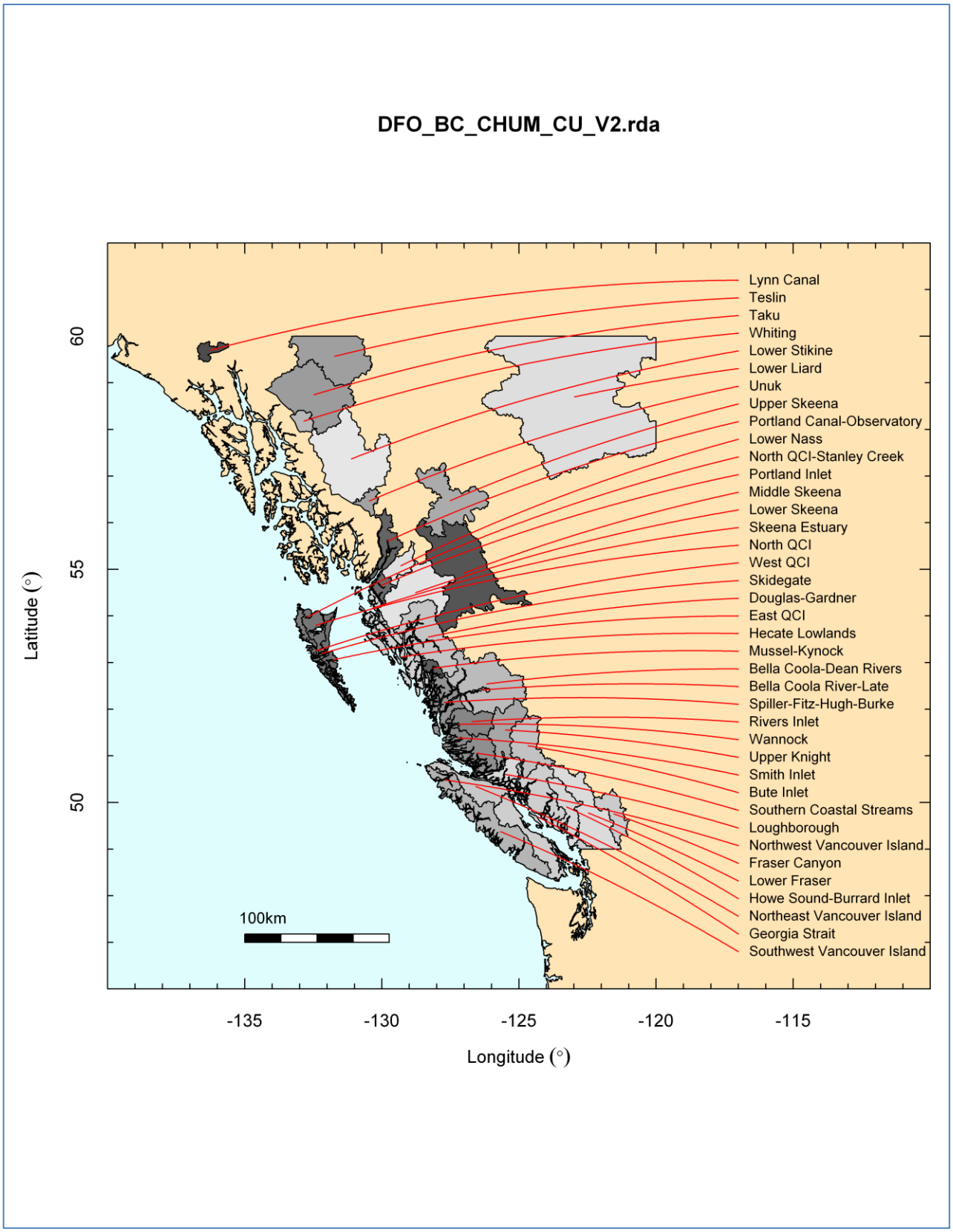


Figure 3 Map of SEP Production Areas

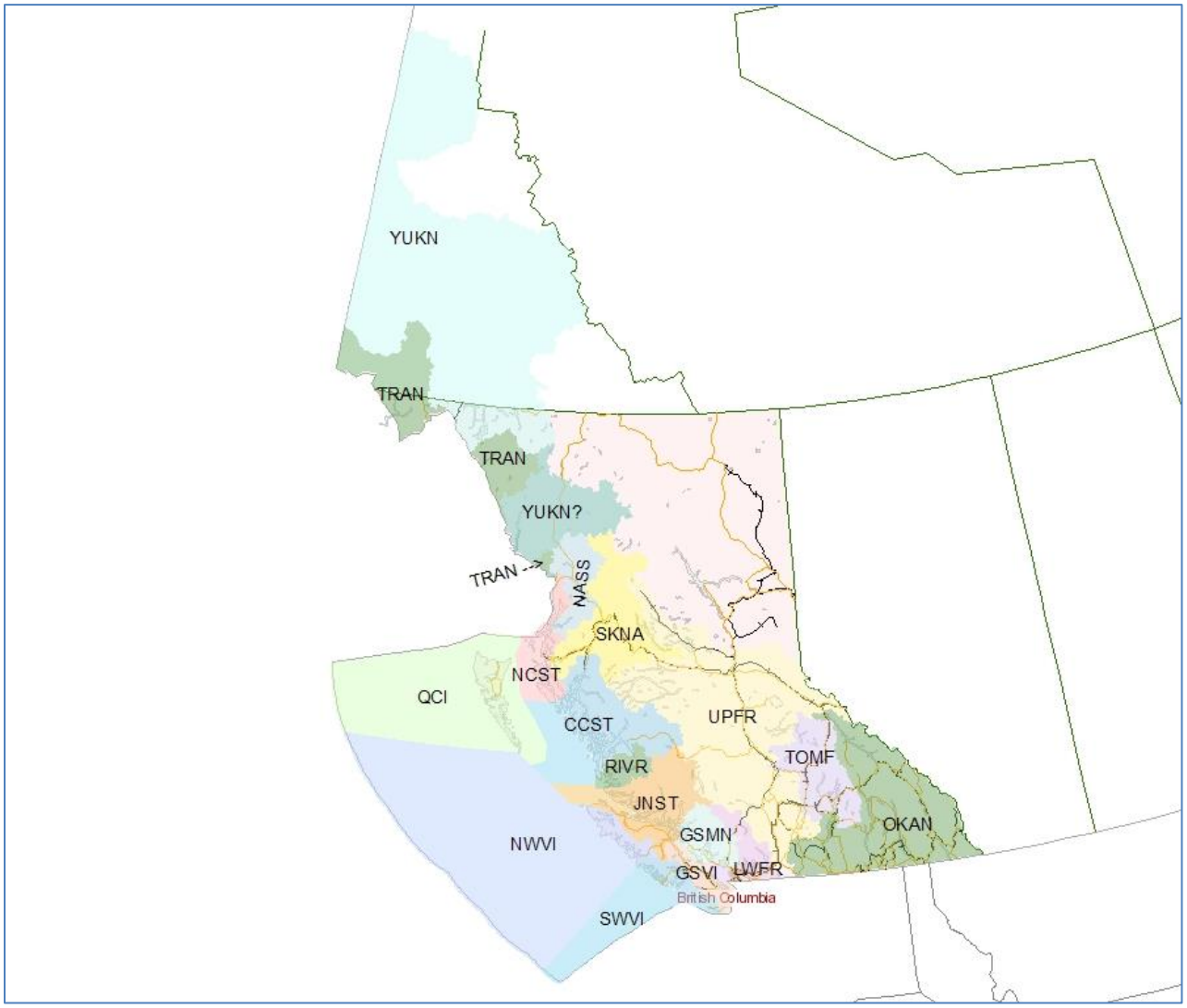


Figure 4 Enhanced Chum Releases in BC by Brood Year and Mark Status

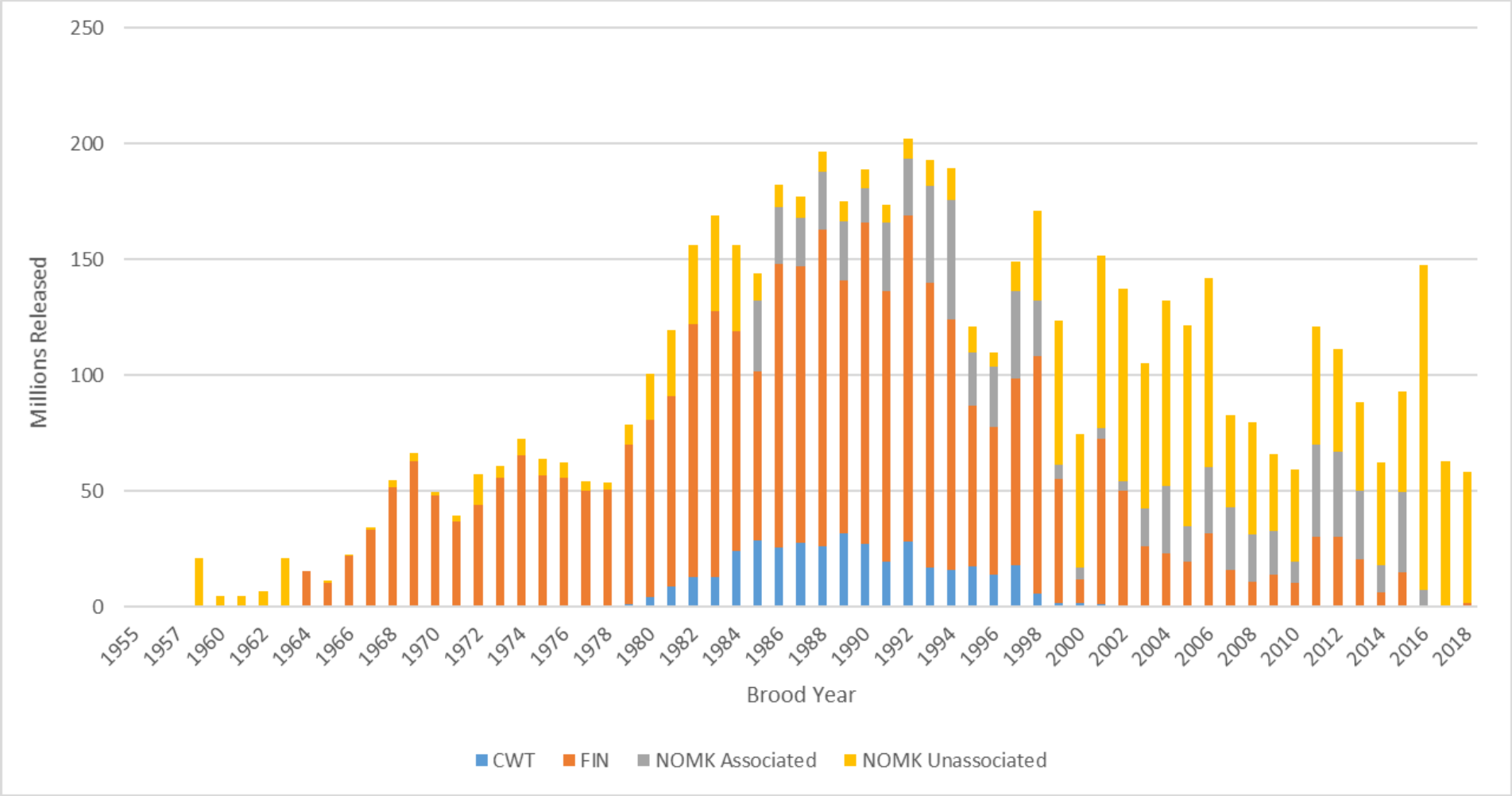


Figure 5 Clipped Chum Releases and Unexpected Clips in Escapement by Year

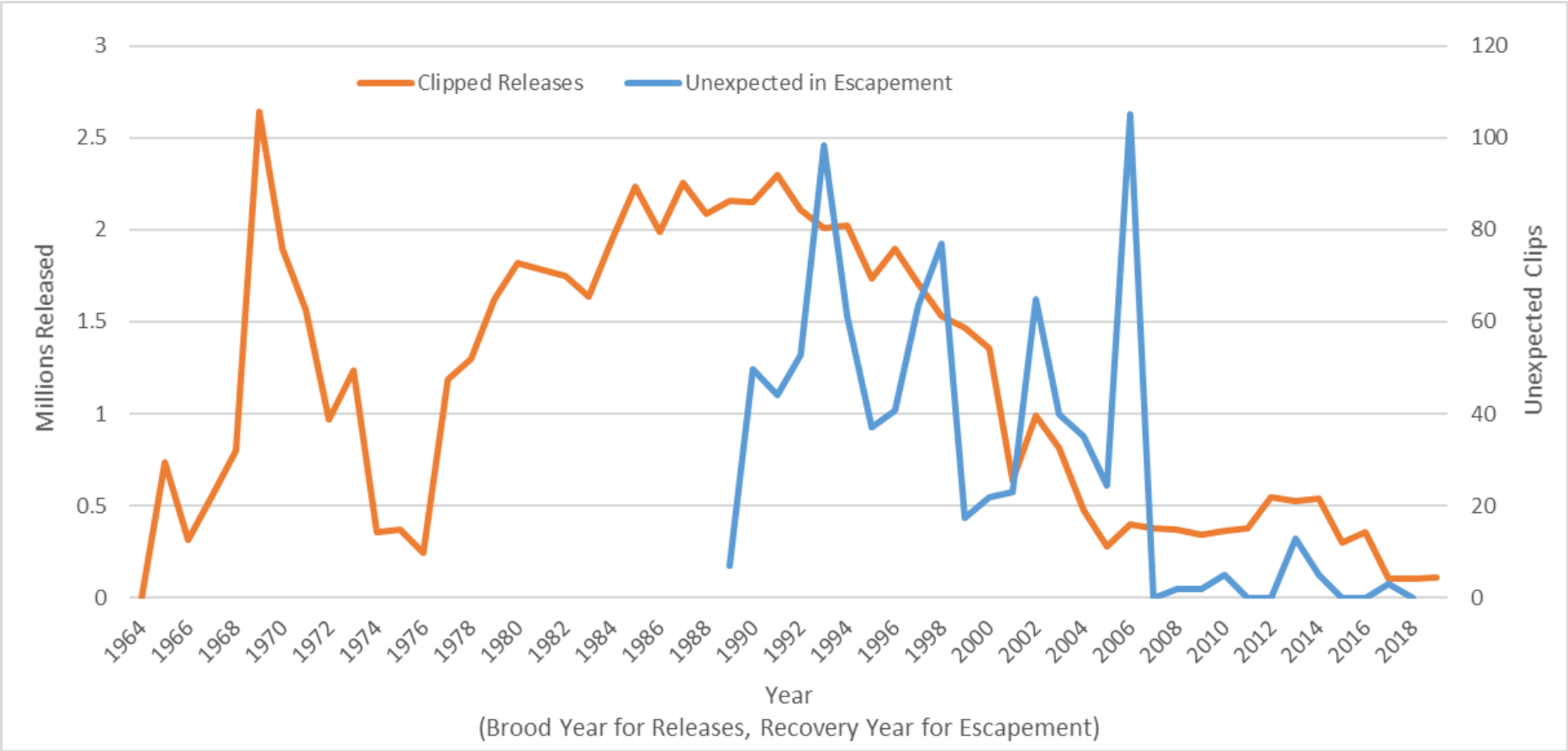
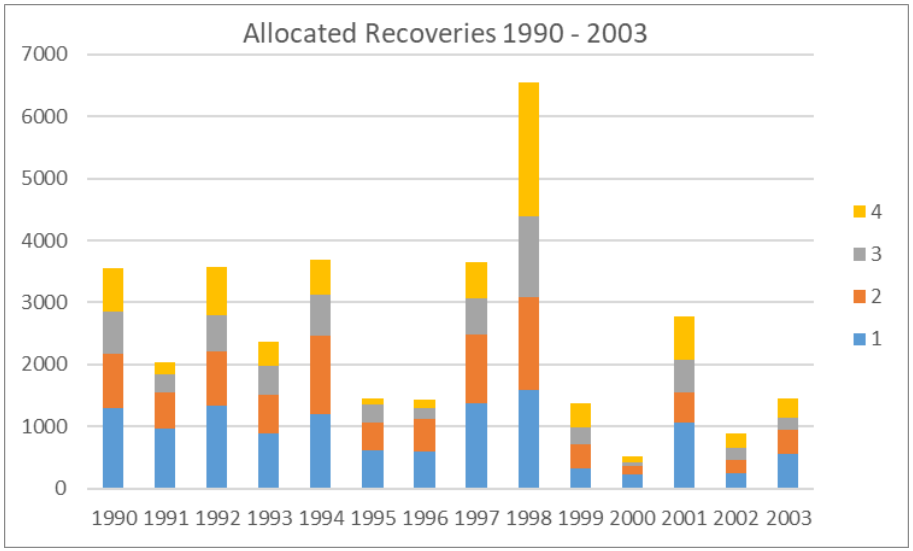
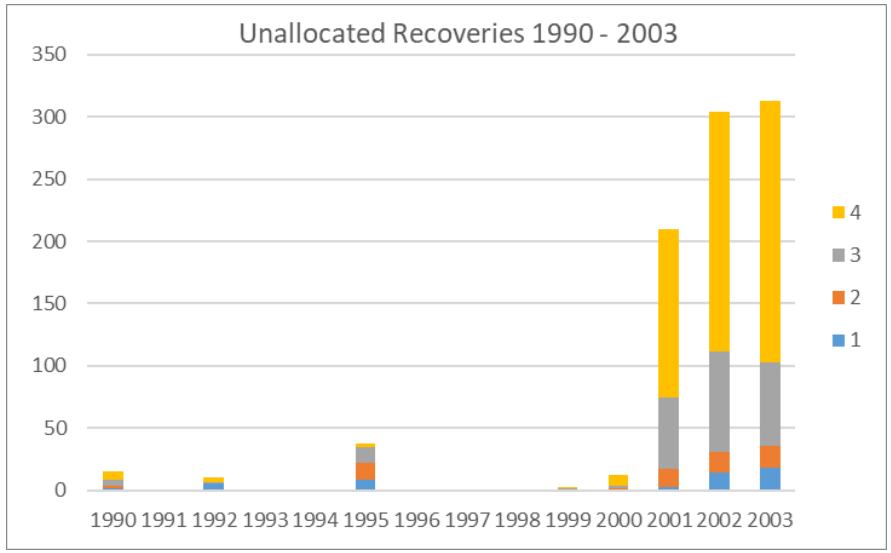
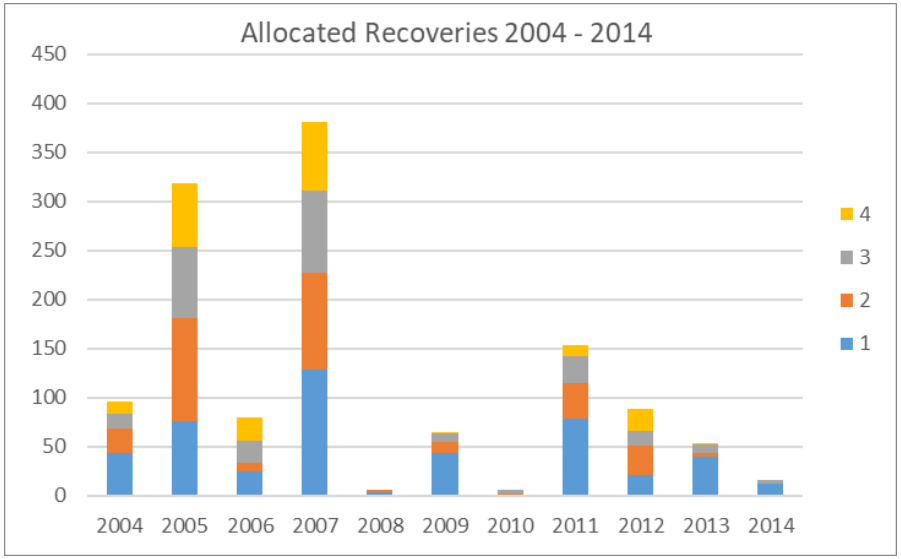


Figure 6 Fin Regeneration in Ventral Clips in Net Fisheries by Recovery Year for Allocated and Unallocated Recoveries

** Regeneration codes: 1 = no regeneration, 2 = 25%, 3 = 50%, 4 = 75%*







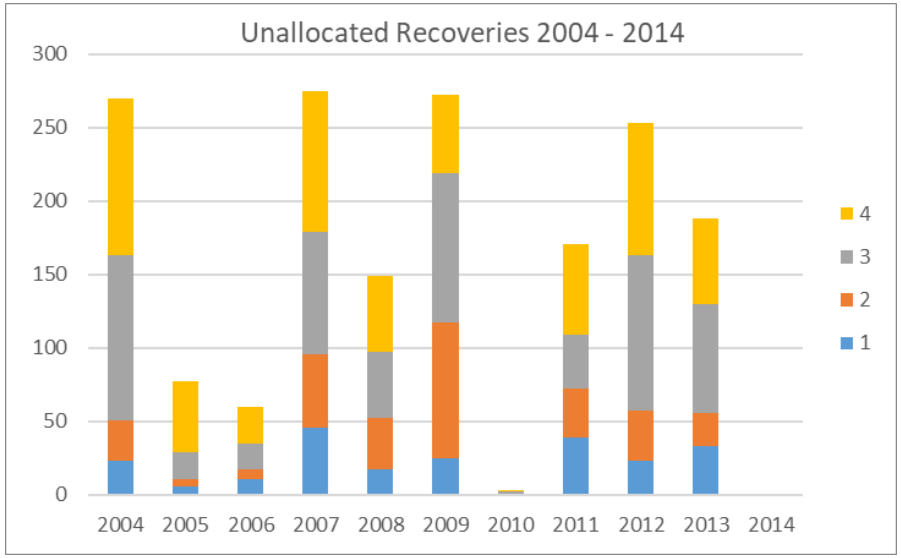
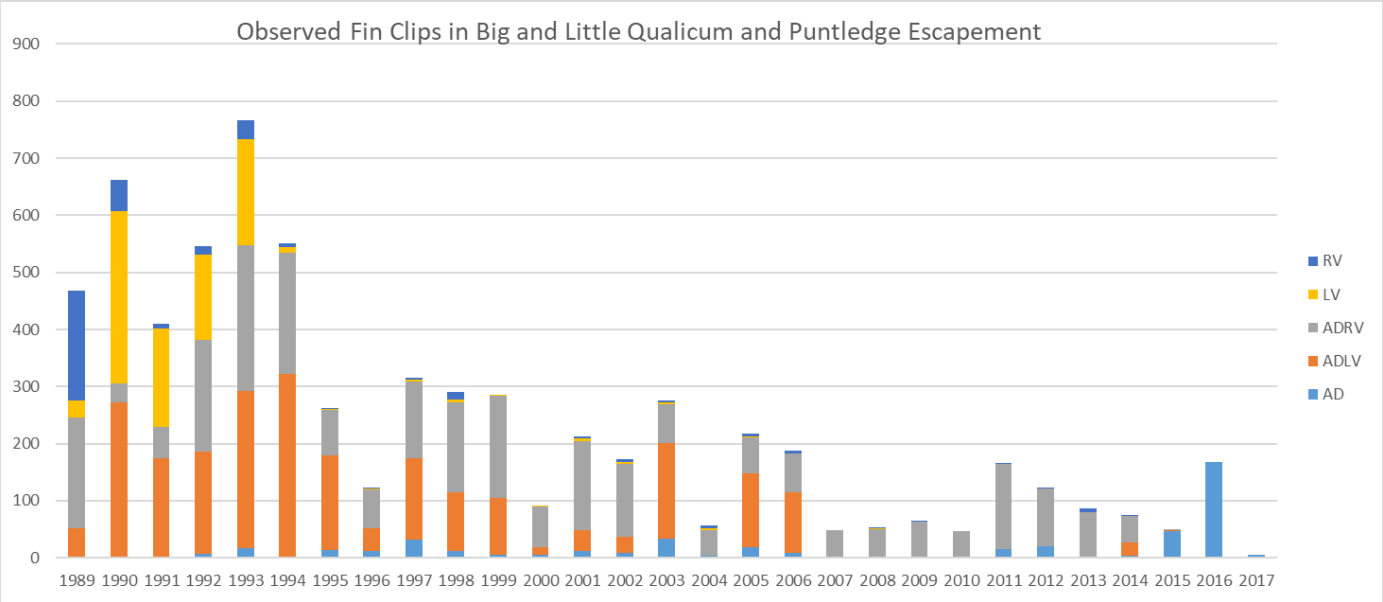


Figure 7 Number of Fin Clips in Area 14 Fisheries and in Escapement



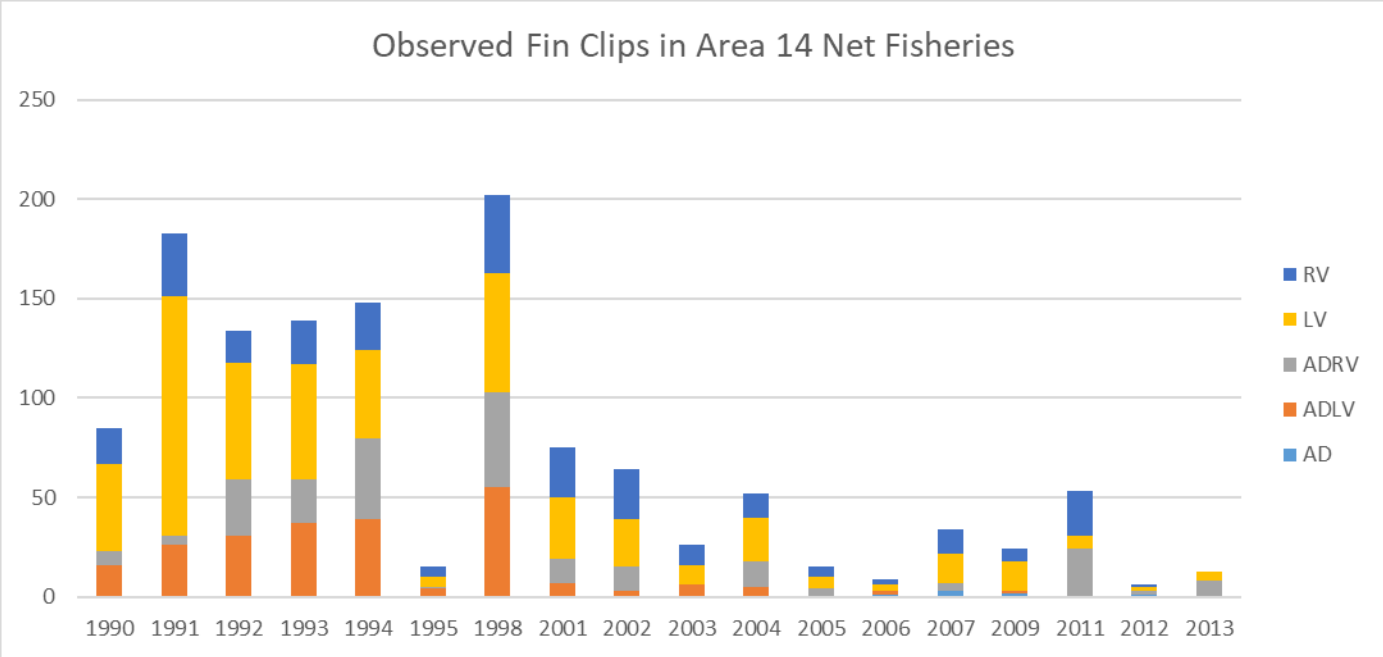


Figure 8 Average Annual Sampling Rates For Net Catch in Pieces, 1990-2018

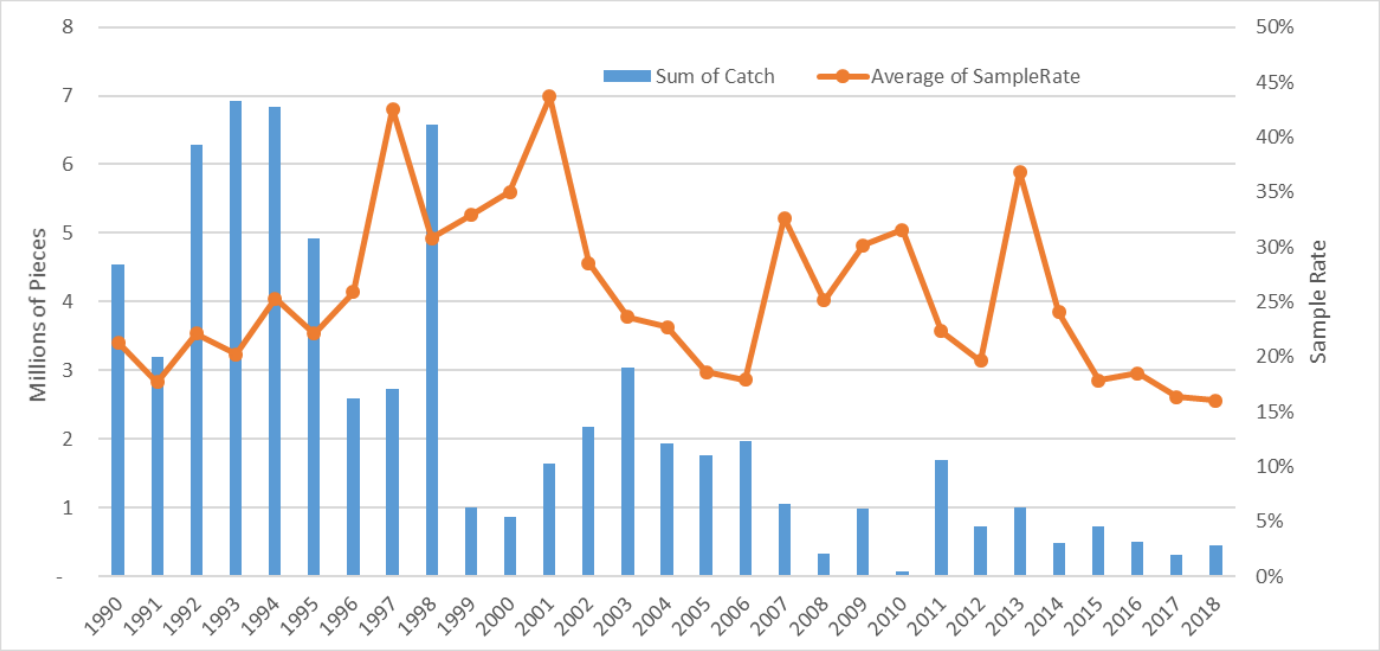
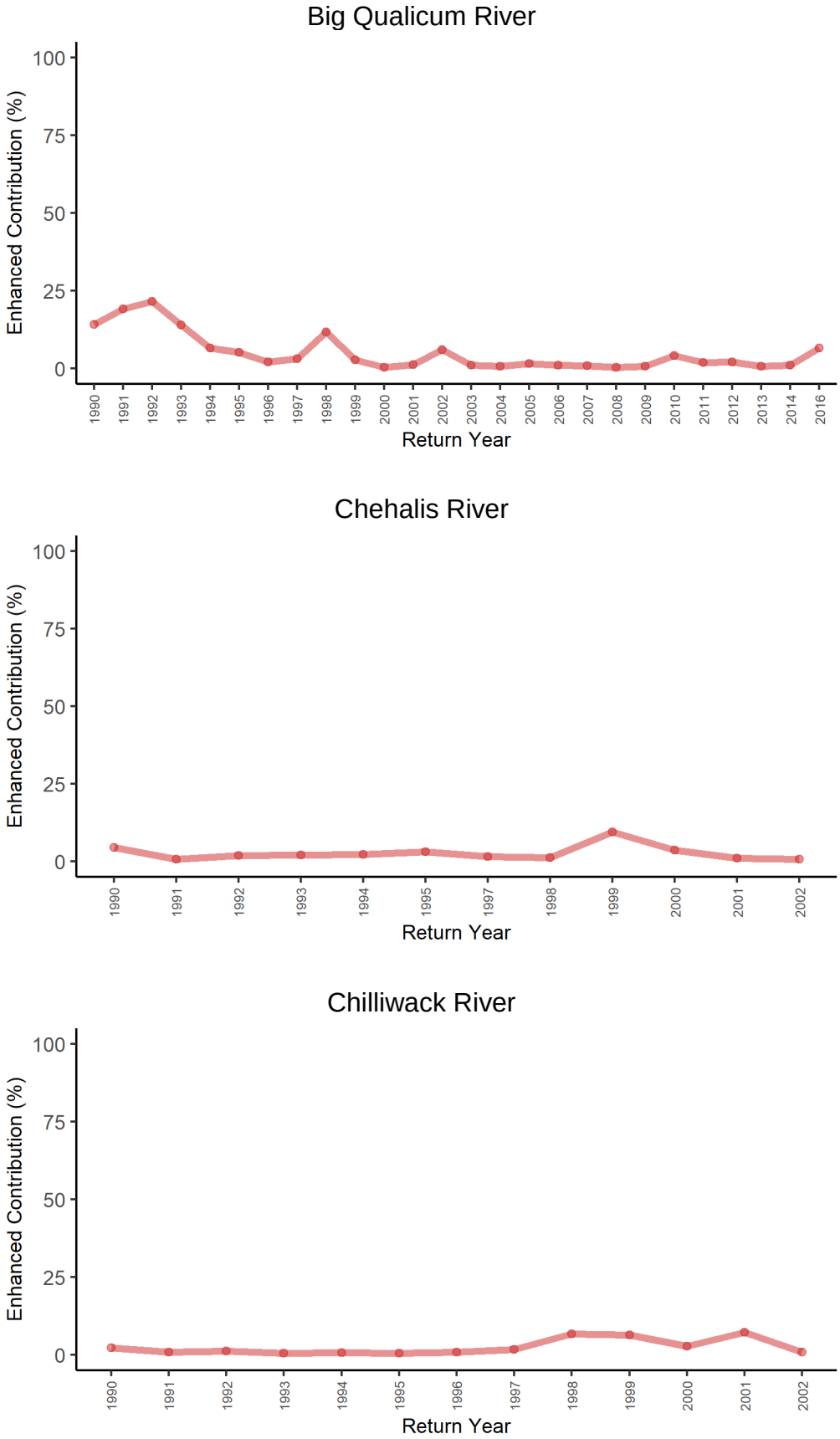
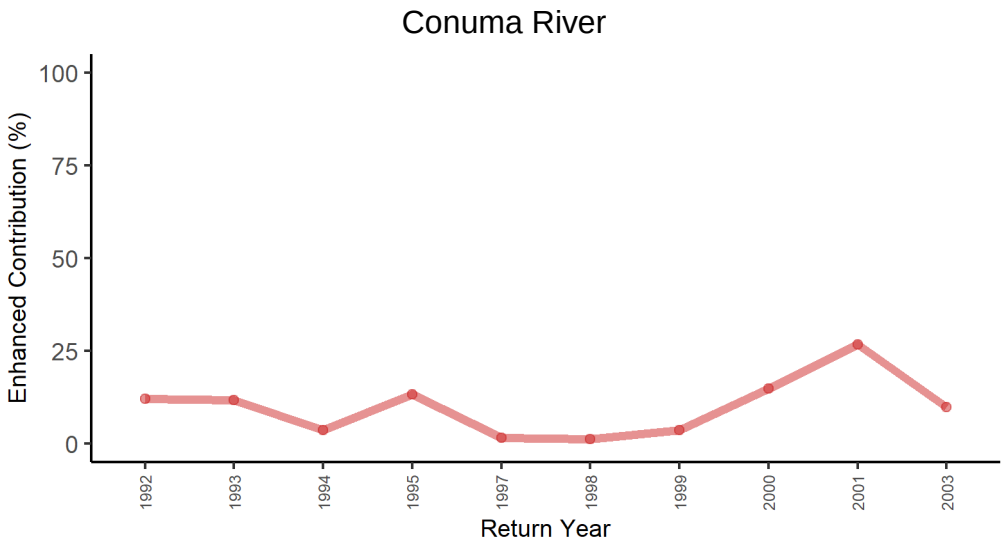
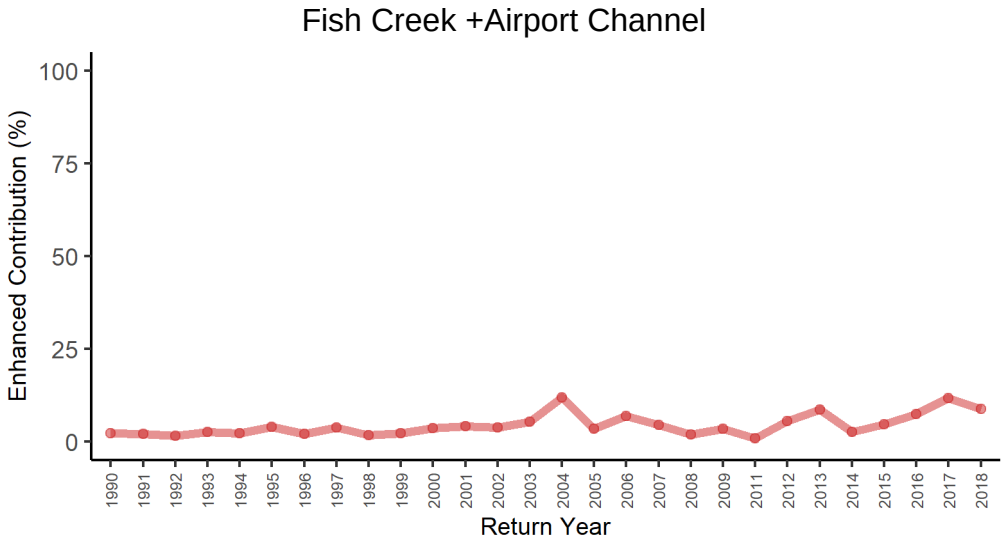
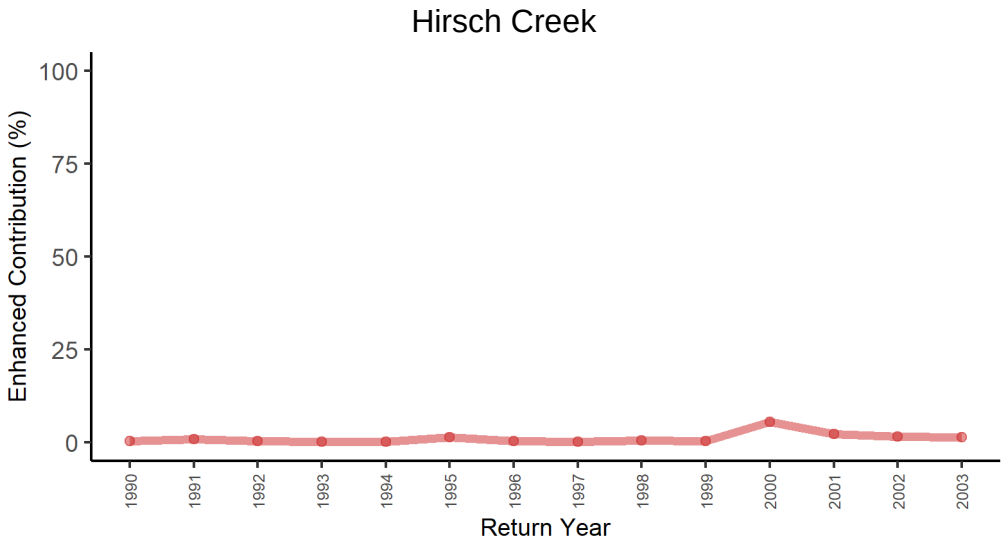


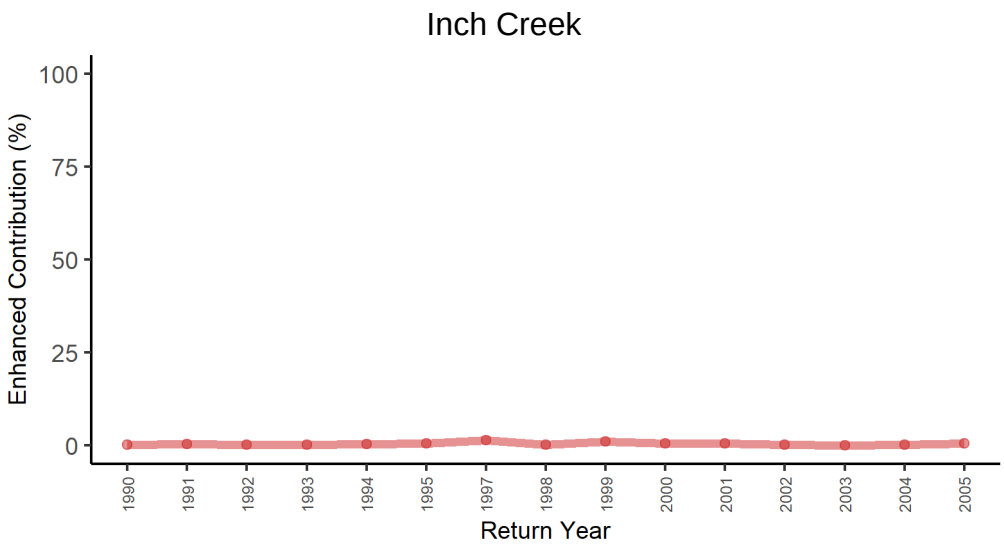
Figure 9 Trends in Enhanced Contribution to Catch By Stock and Return Year, 1990-2018

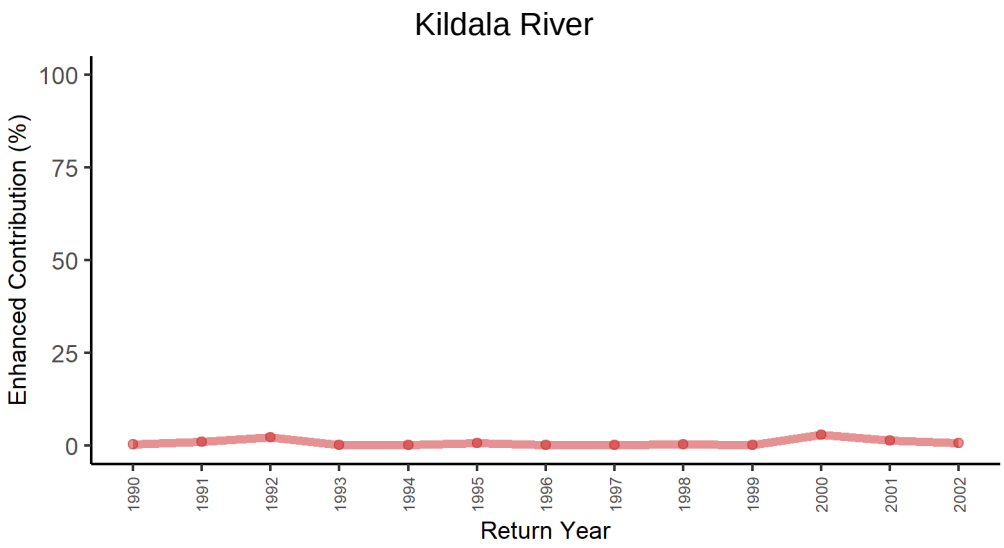


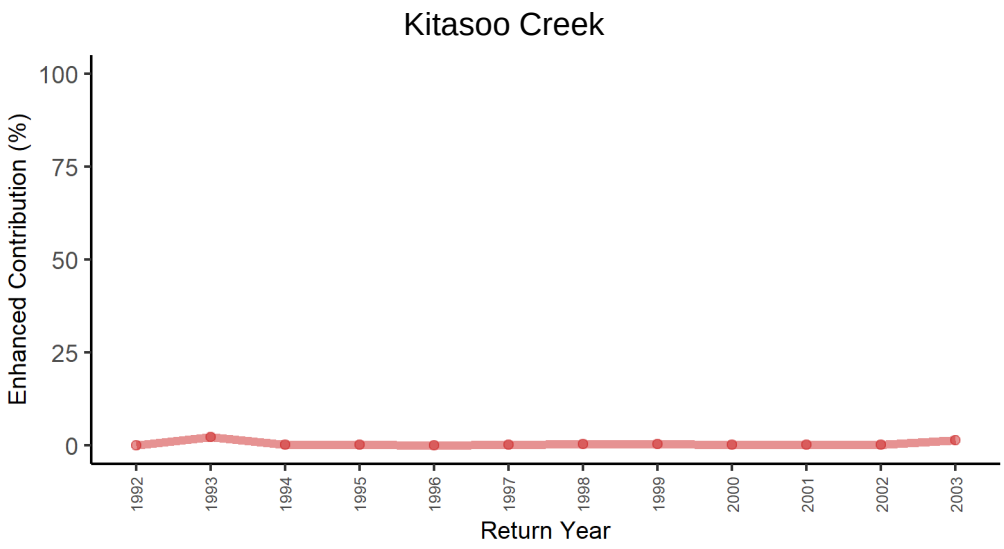

Conuma River
Enhanced Contribution (%)
100
75
50
25
0
1992
1993
1994
1995
1997
1998
1999
2000
2001
2003
Return Year

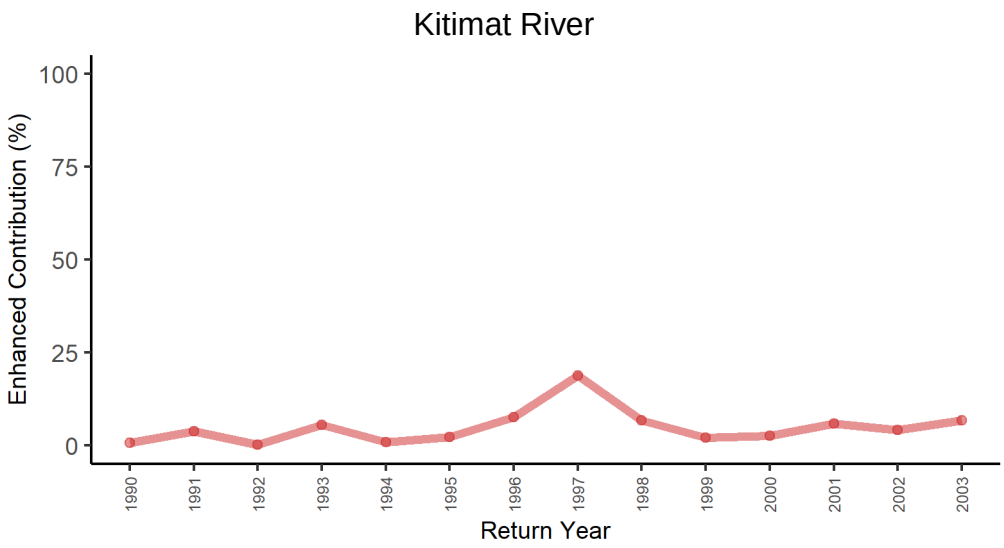

Fish Creek +Airport Channel
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2011
2012
2013
2014
2015
2016
2017
2018
Return Year

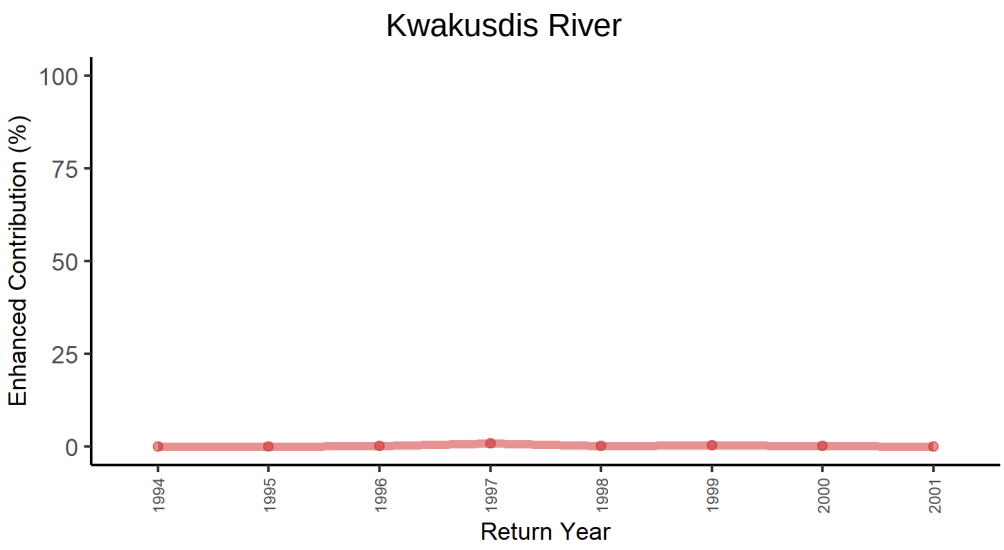

Hirsch Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Return Year

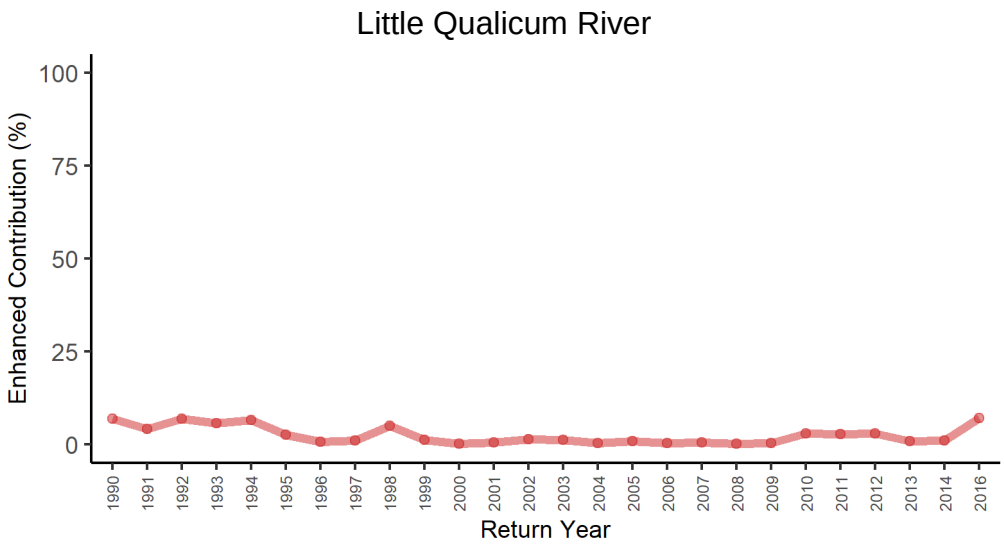

Inch Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1997
1998
1999
2000
2001
2002
2003
2004
2005
Return Year

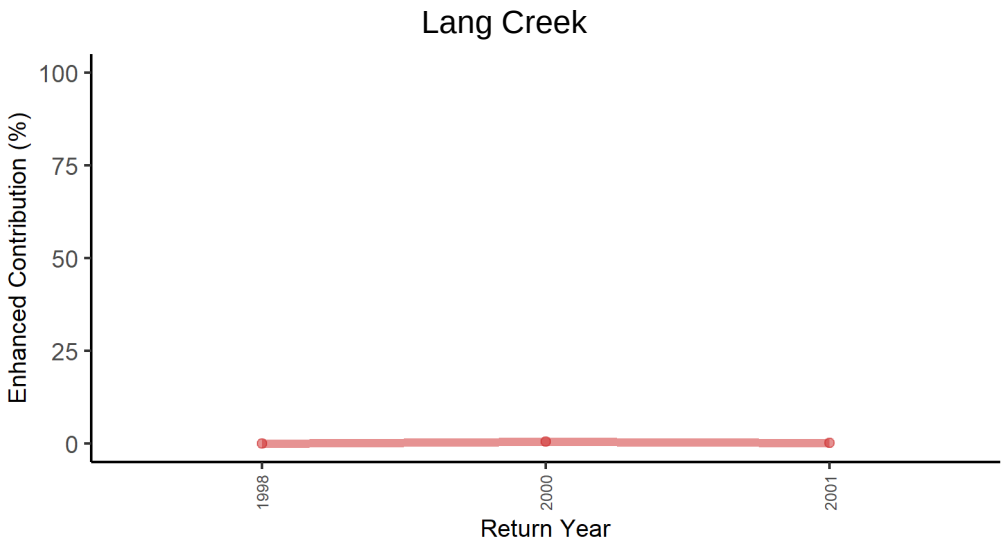

Kildala River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Return Year

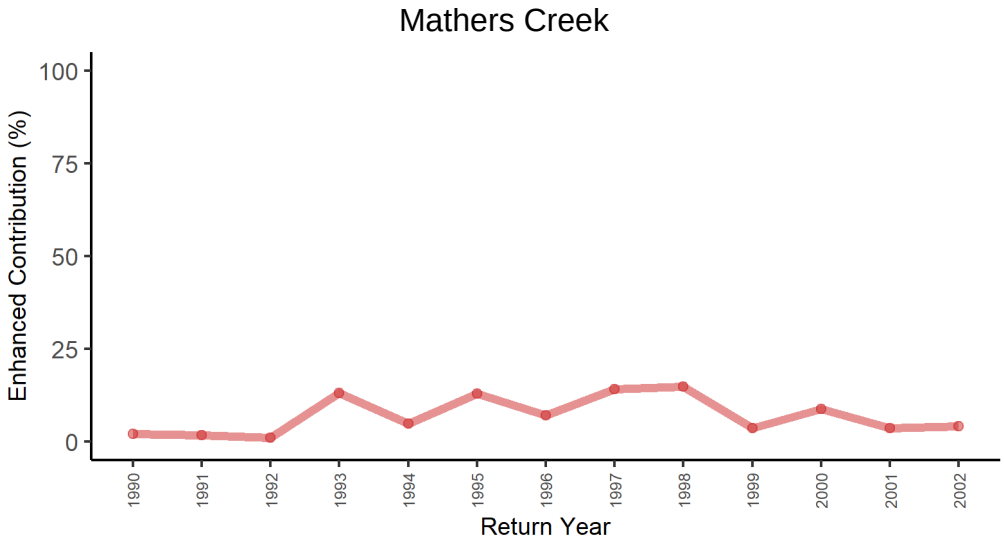

Kitasoo Creek
Enhanced Contribution (%)
100
75
50
25
0
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Return Year

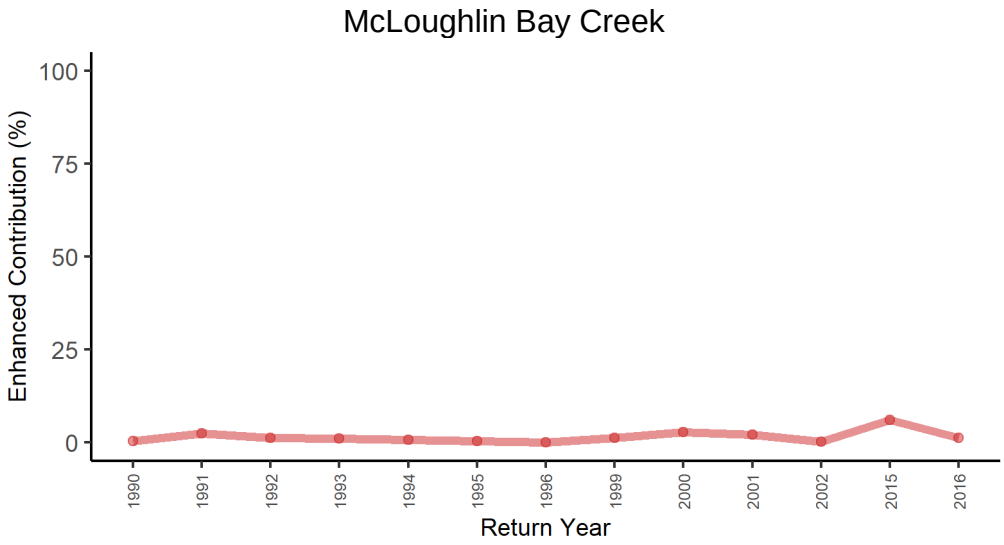

Kitimat River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Return Year

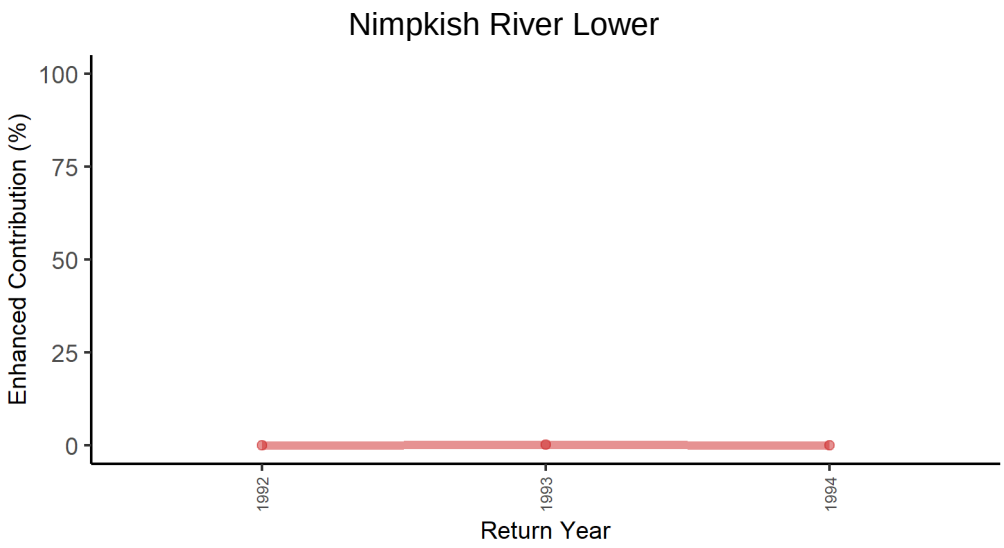

Kwakusdis River
Enhanced Contribution (%)
100
75
50
25
0
1994
1995
1996
1997
1998
1999
2000
2001
Return Year

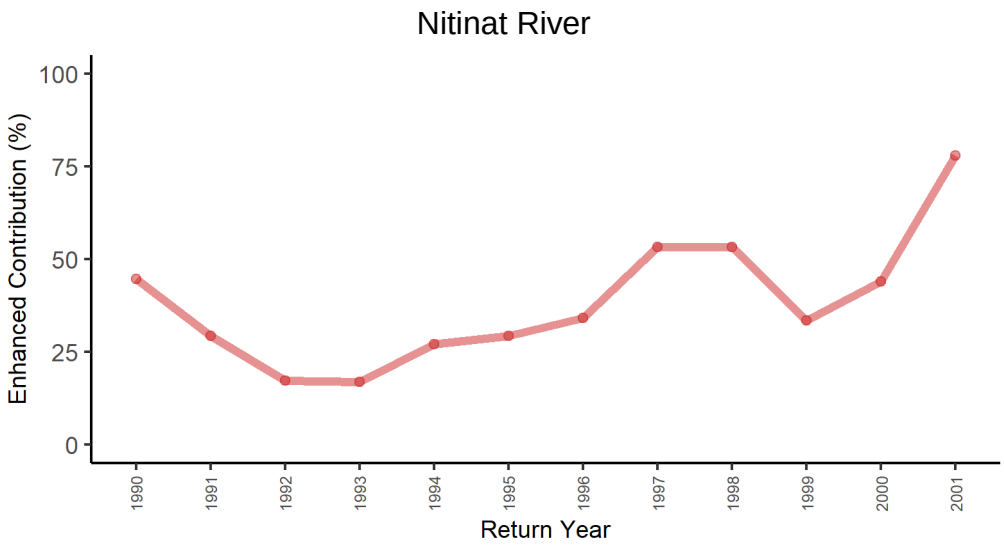

Little Qualicum River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2016
Return Year

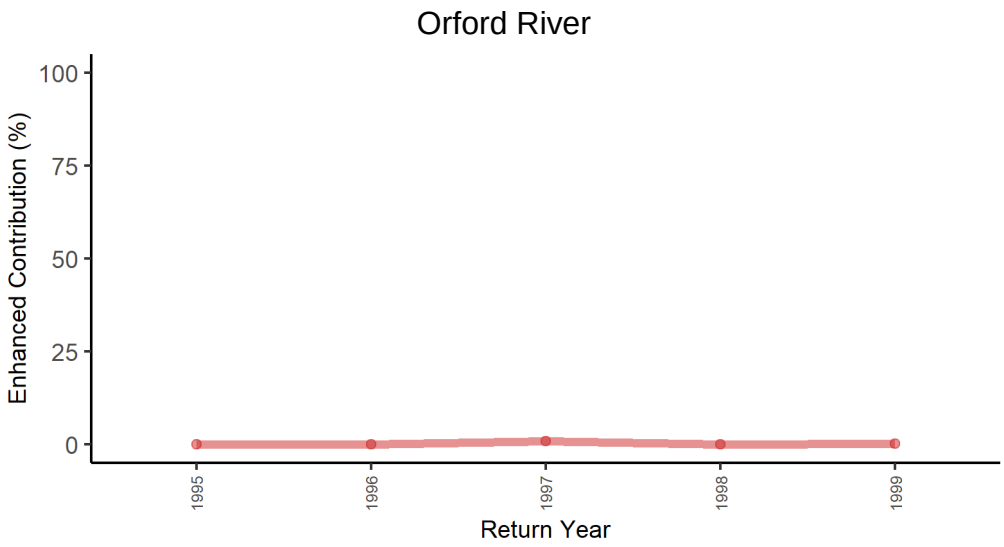

Lang Creek
Enhanced Contribution (%)
100
75
50
25
0
1998
2000
2001
Return Year

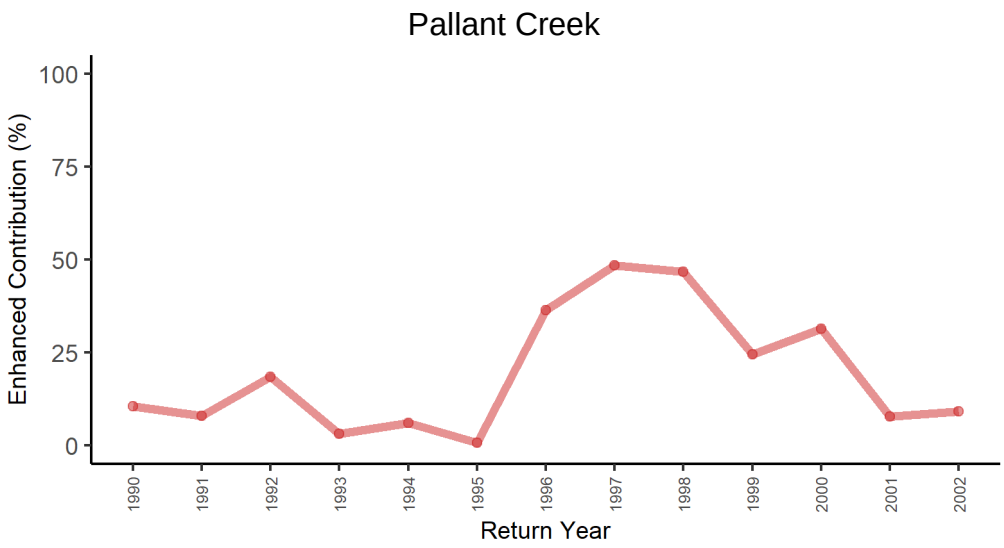

Mathers Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Return Year

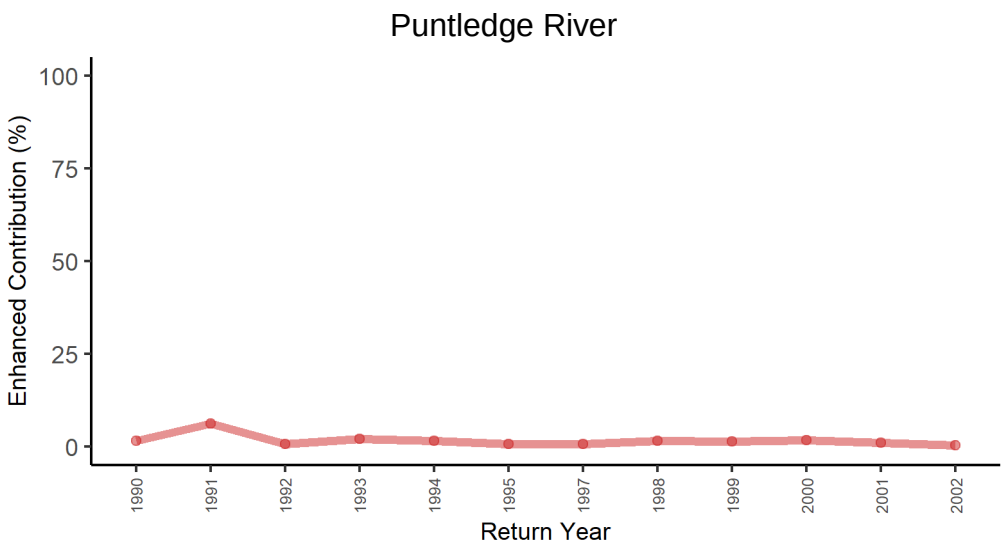

McLoughlin Bay Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1999
2000
2001
2002
2015
2016
Return Year

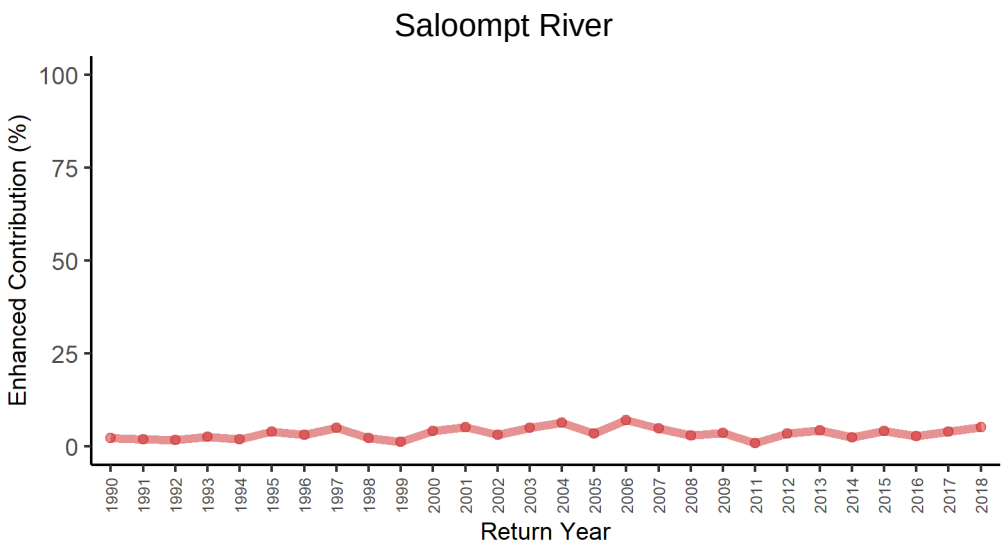

Nimpkish River Lower
Enhanced Contribution (%)
100
75
50
25
0
1992
1993
1994
Return Year

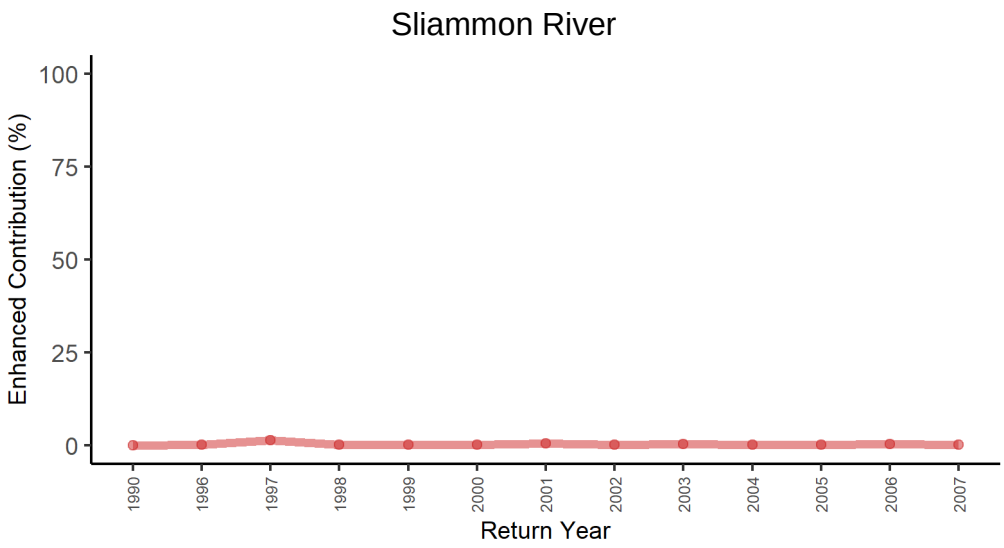

Nitinat River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Return Year

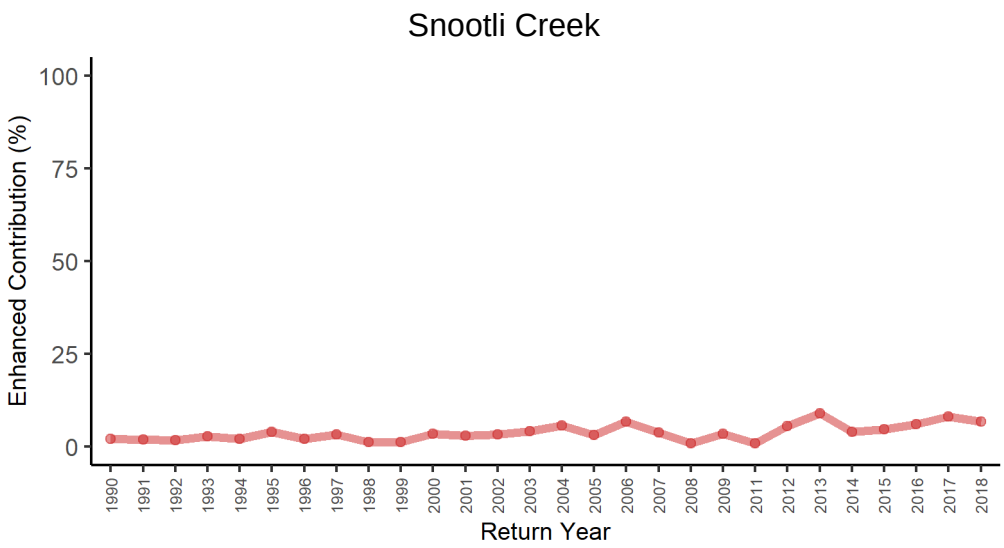

Orford River
Enhanced Contribution (%)
100
75
50
25
0
1995
1996
1997
1998
1999
Return Year

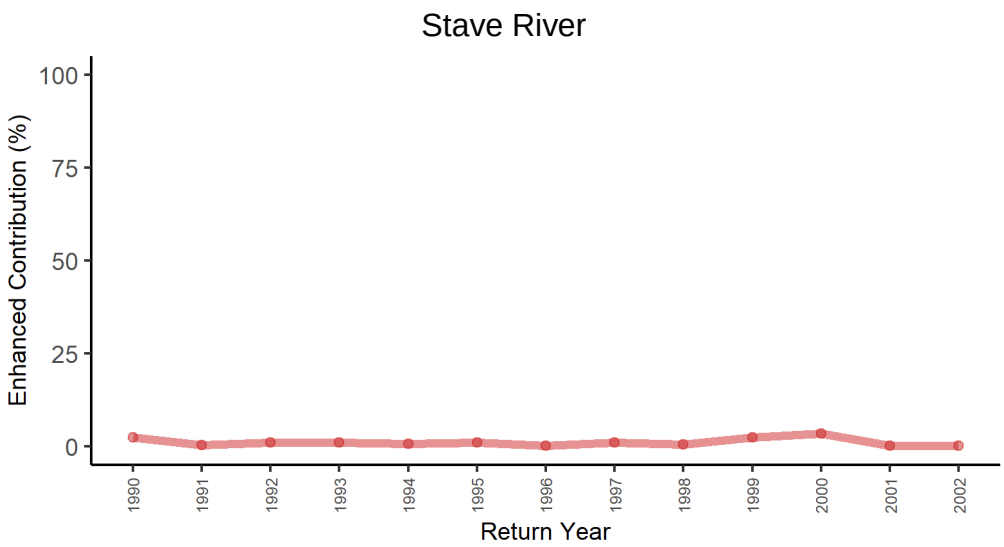

Pallant Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Return Year


Puntledge River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1997
1998
1999
2000
2001
2002
Return Year

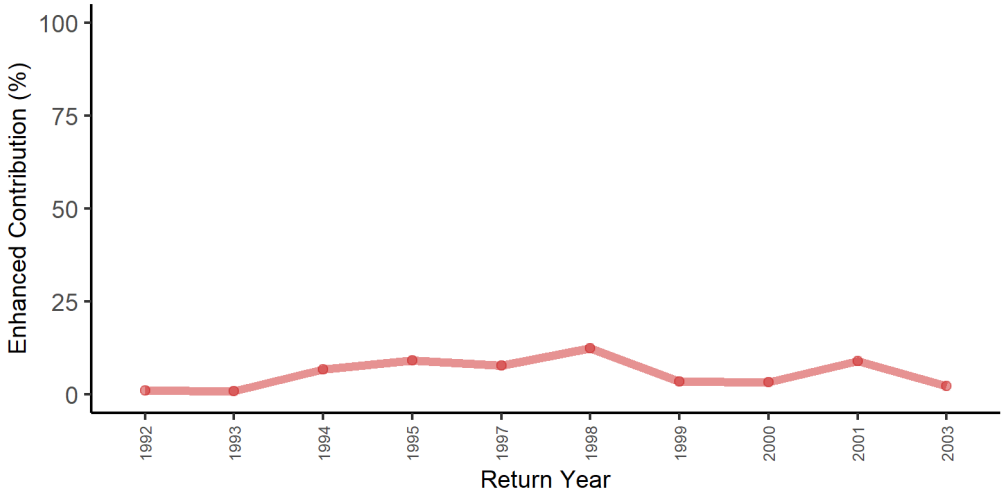

Saloompt River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2011
2012
2013
2014
2015
2016
2017
2018
Return Year


Sliammon River
Enhanced Contribution (%)
100
75
50
25
0
1990
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Return Year

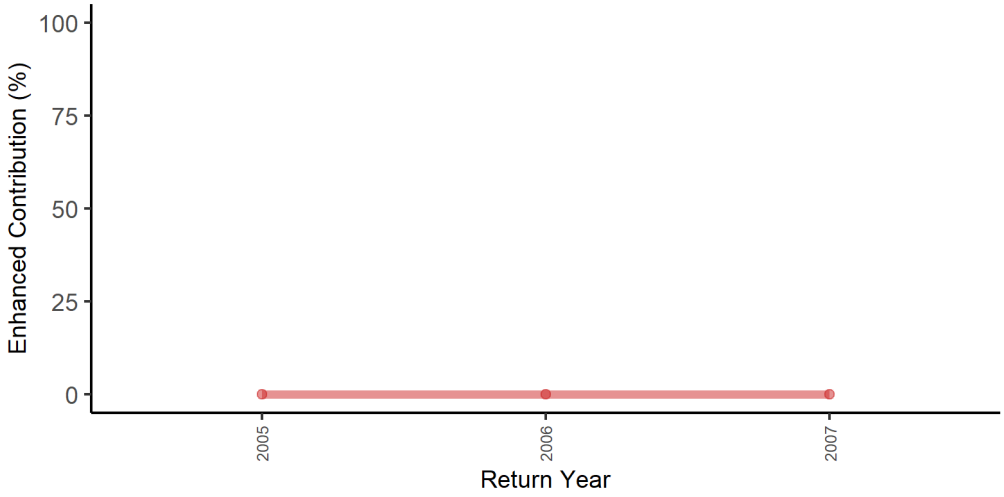

Snootli Creek
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2011
2012
2013
2014
2015
2016
2017
2018
Return Year


Stave River
Enhanced Contribution (%)
100
75
50
25
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Return Year

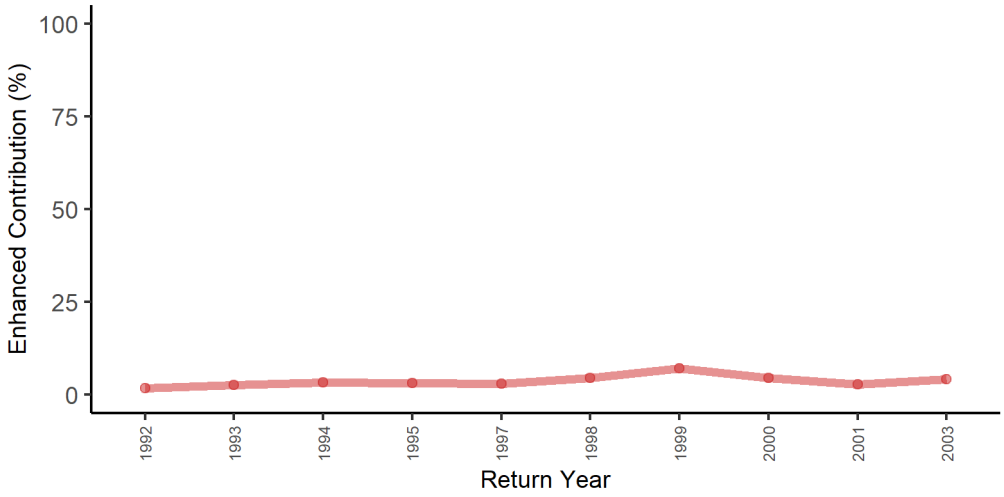
Sucwoa River



Theodosia Creek



Thorsen Creek



Tlupana River

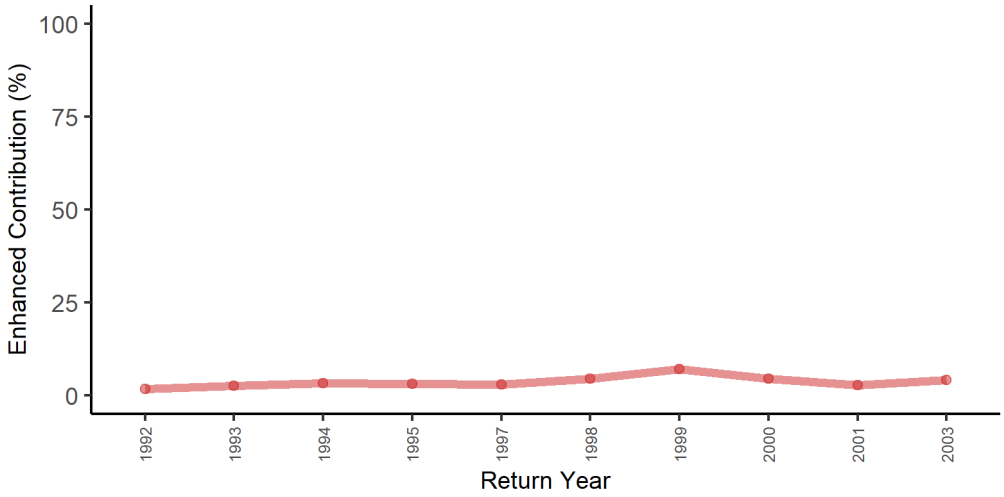
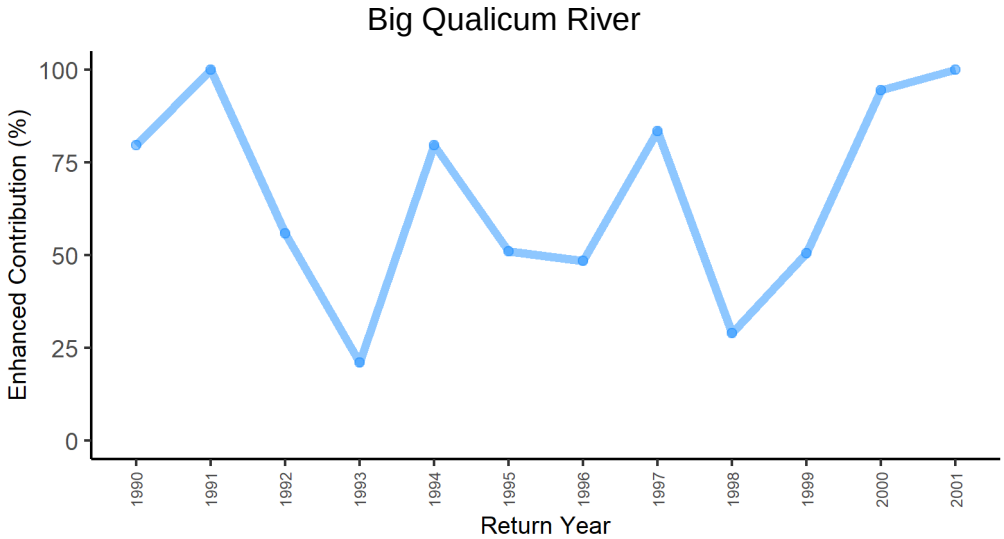
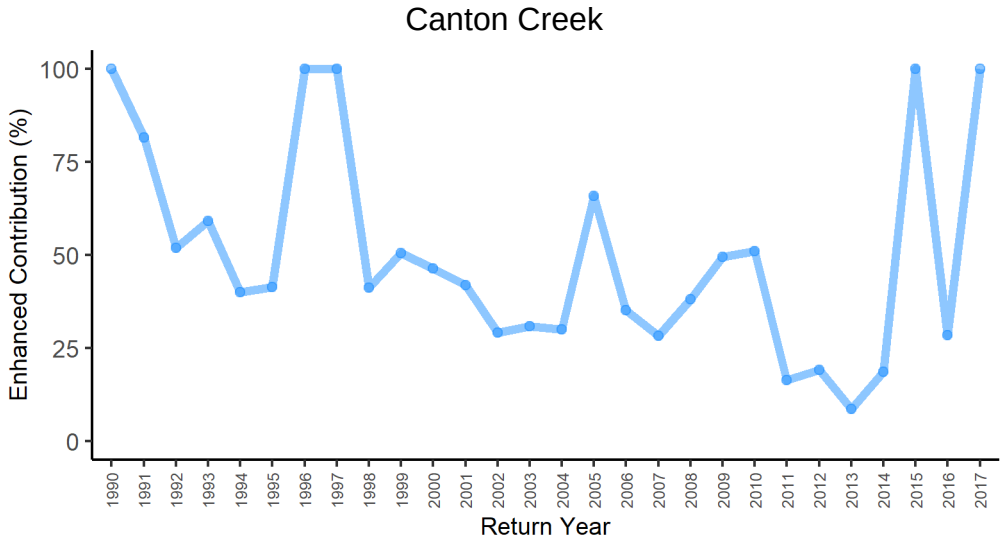
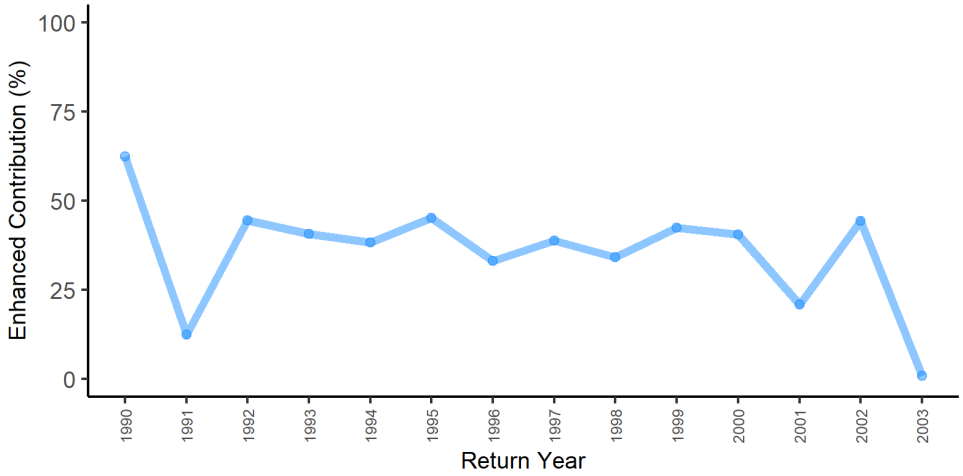


Figure 10 Trends in Enhanced Contribution to Escapement By Stock and Return Year, 1990-2017

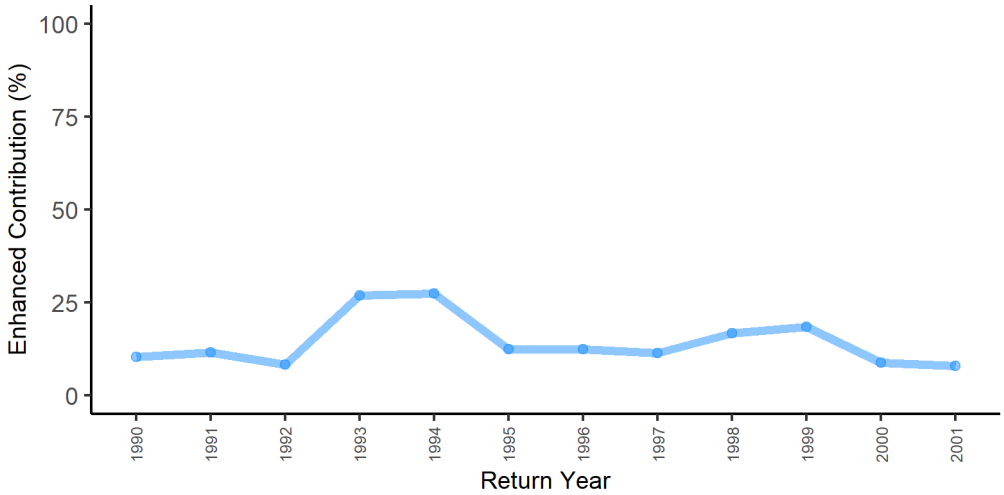




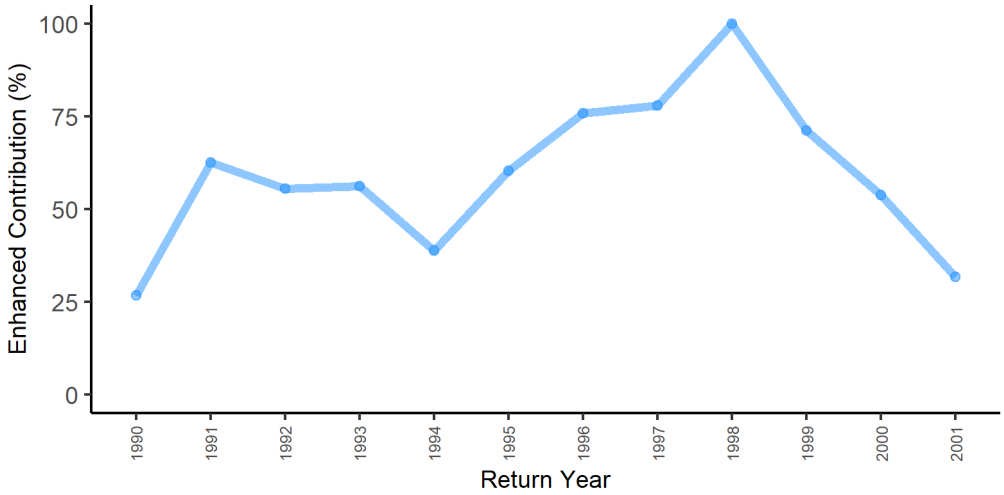
Chehalis River



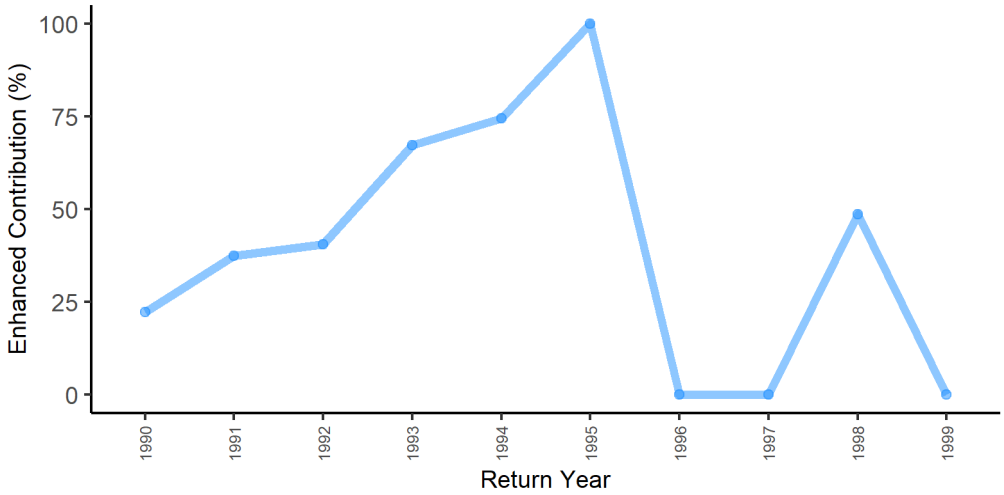
Chilliwack River



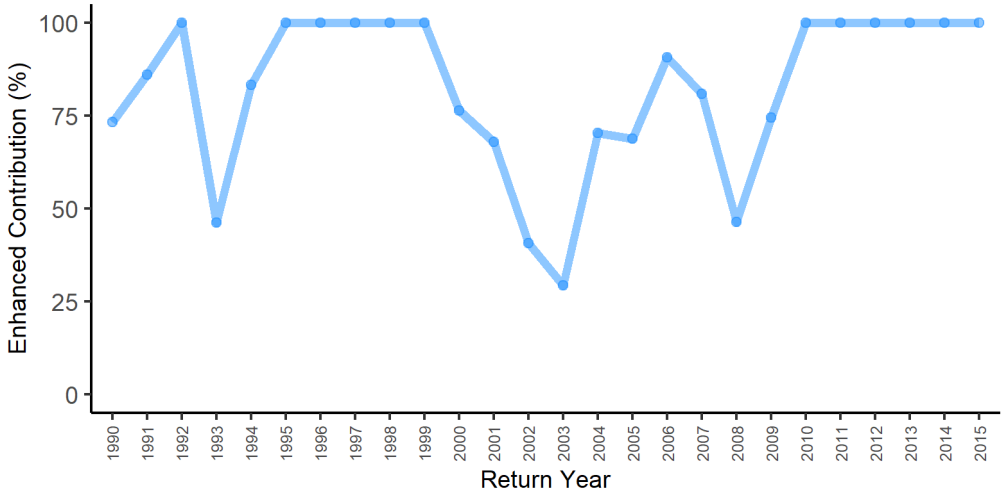
Conuma River



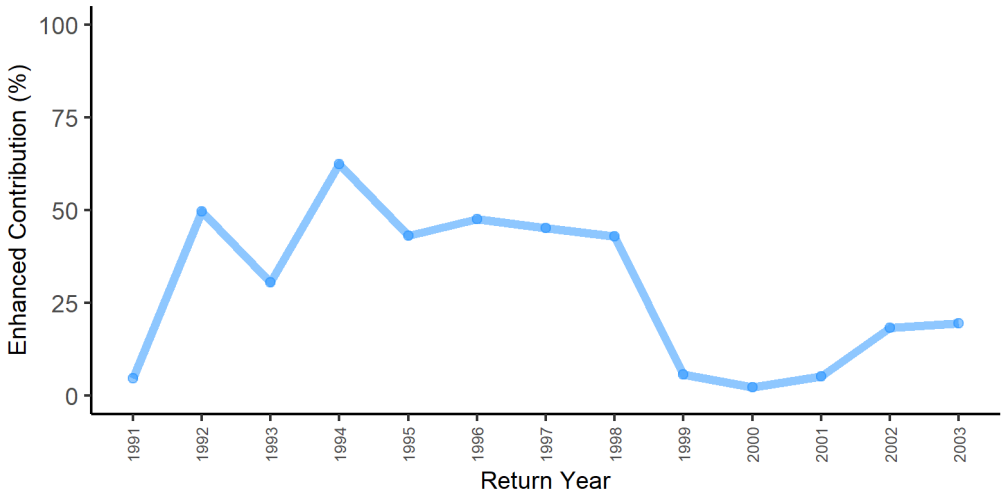
Deserted River



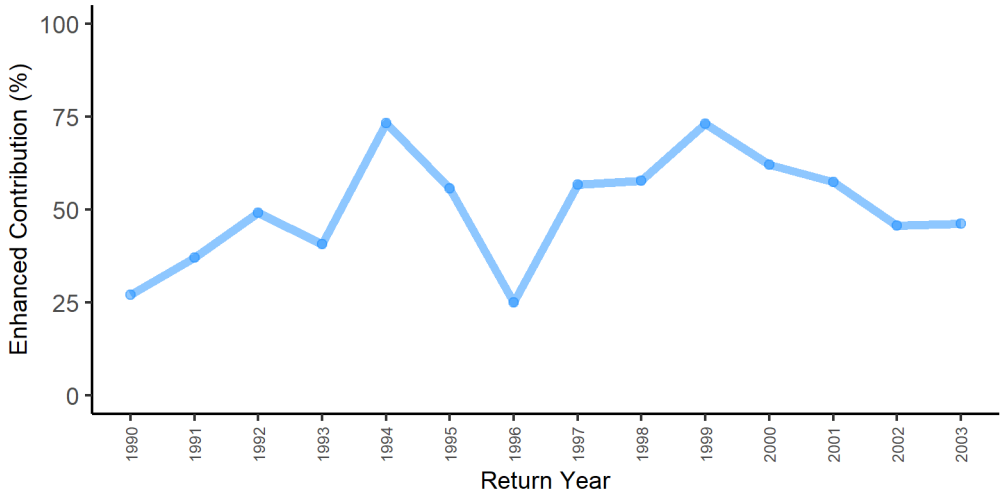
Fish Creek +Airport Channel



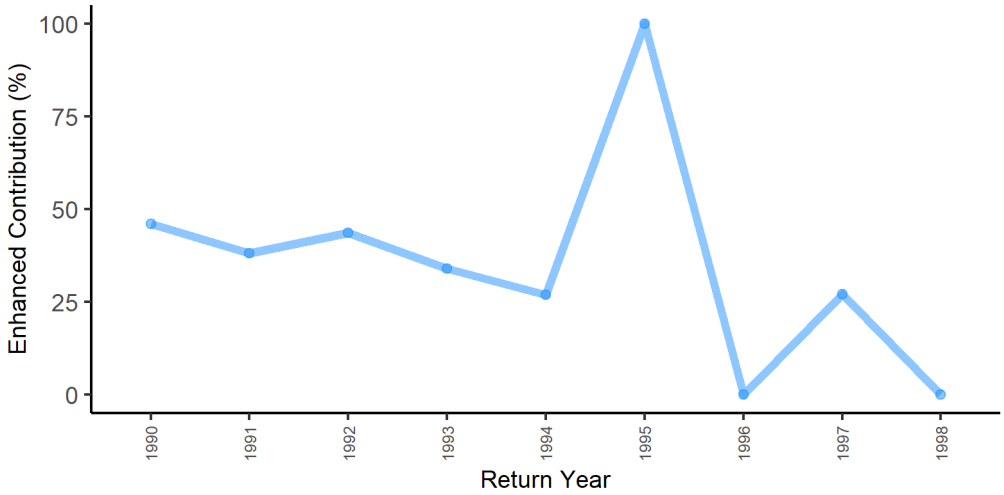
Hirsch Creek



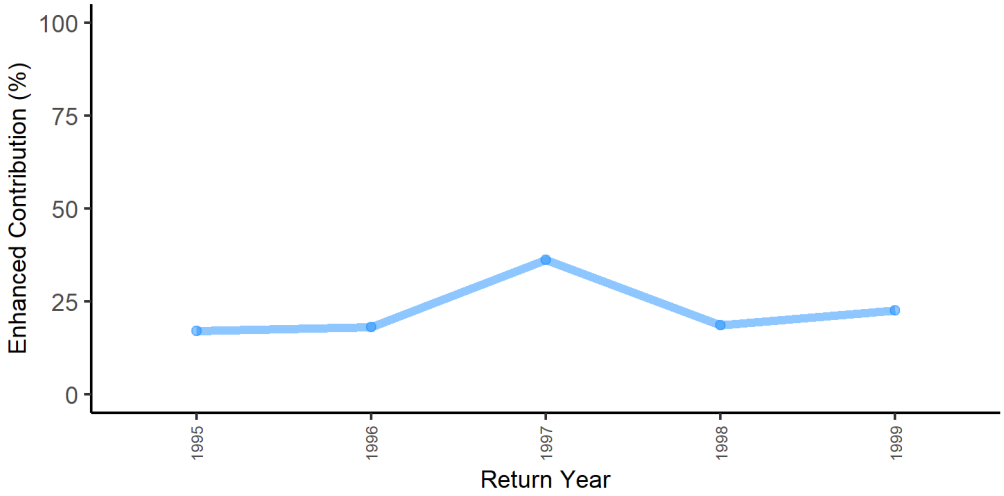
Inch Creek



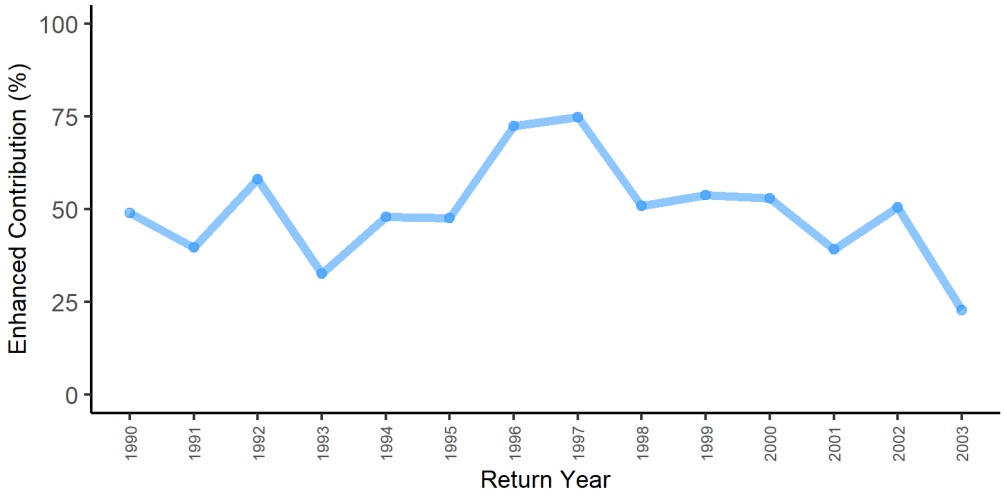
Kildala River



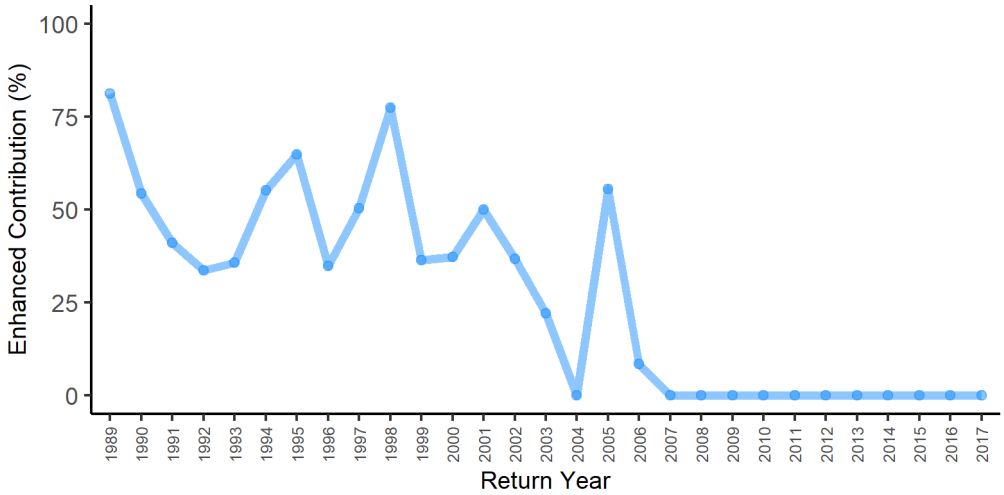
Kitasoo Creek



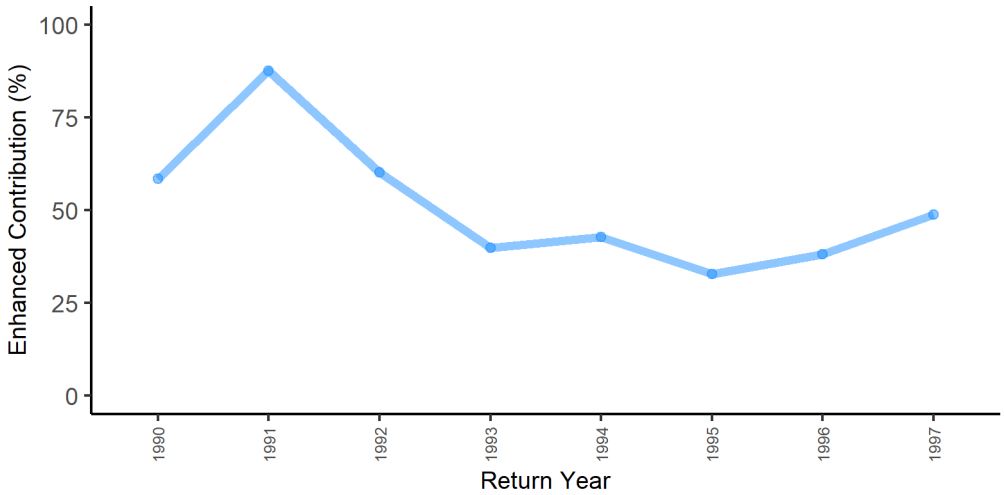
Kitimat River



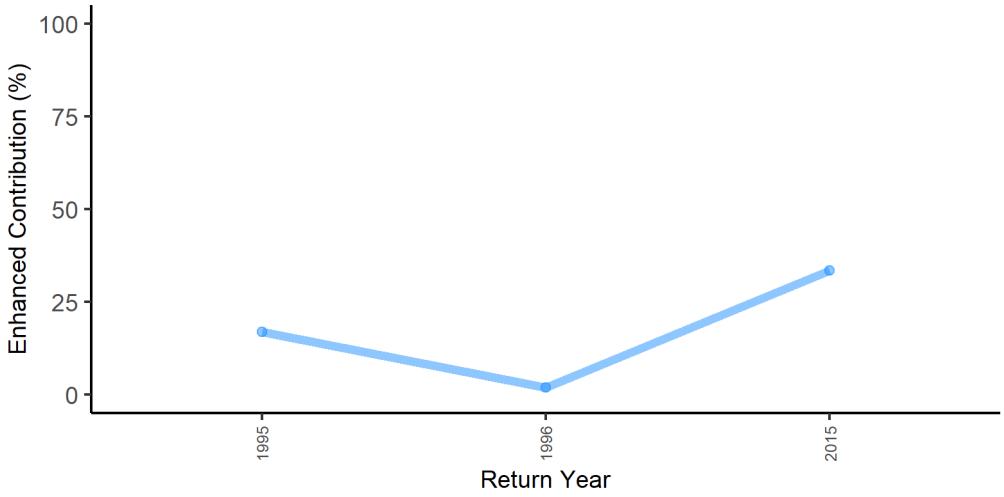
Little Qualicum River



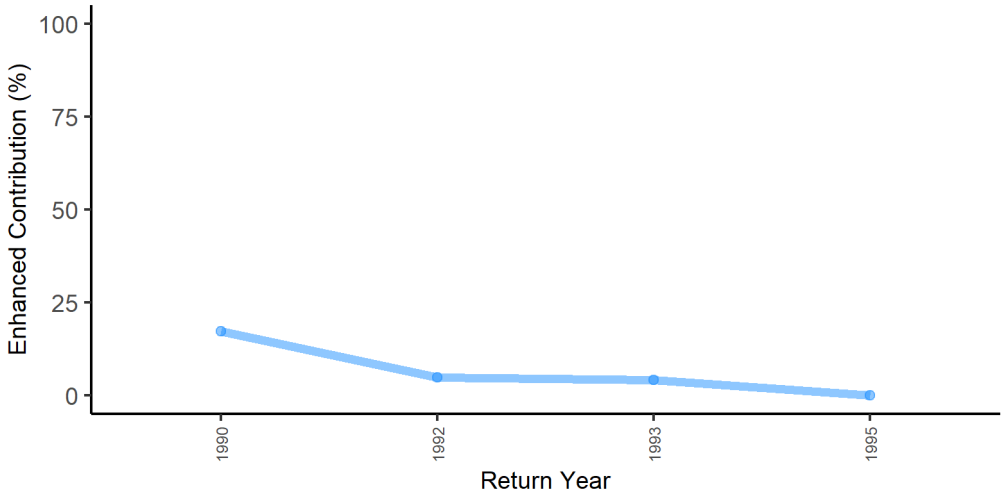
Mathers Creek



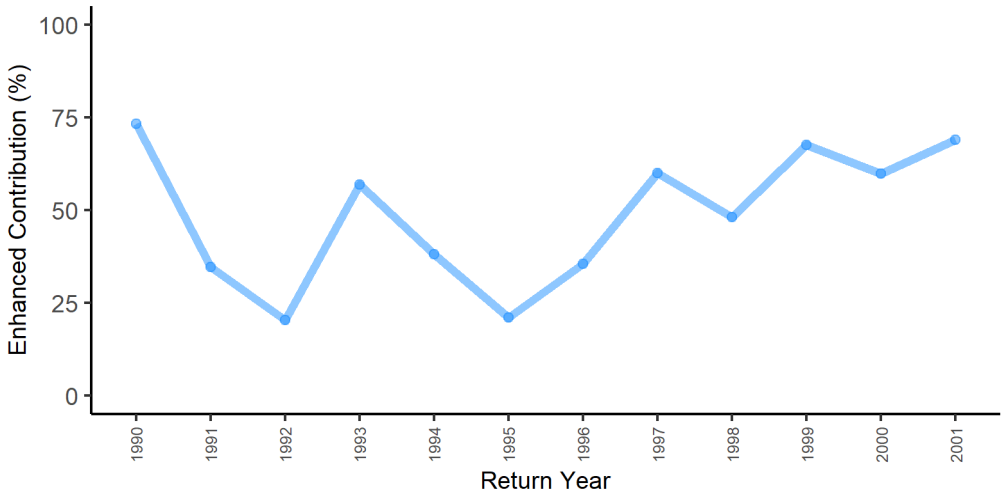
McLoughlin Bay Creek



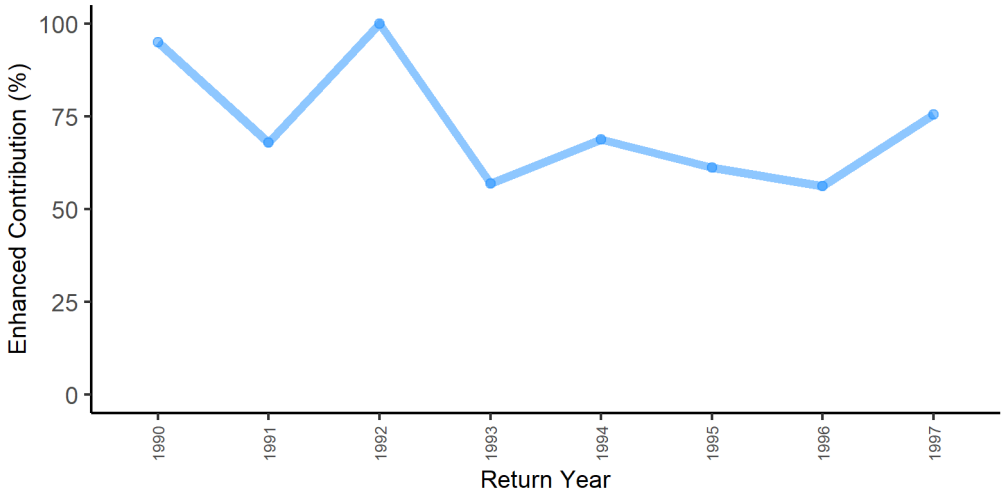
Necleetsconnay River



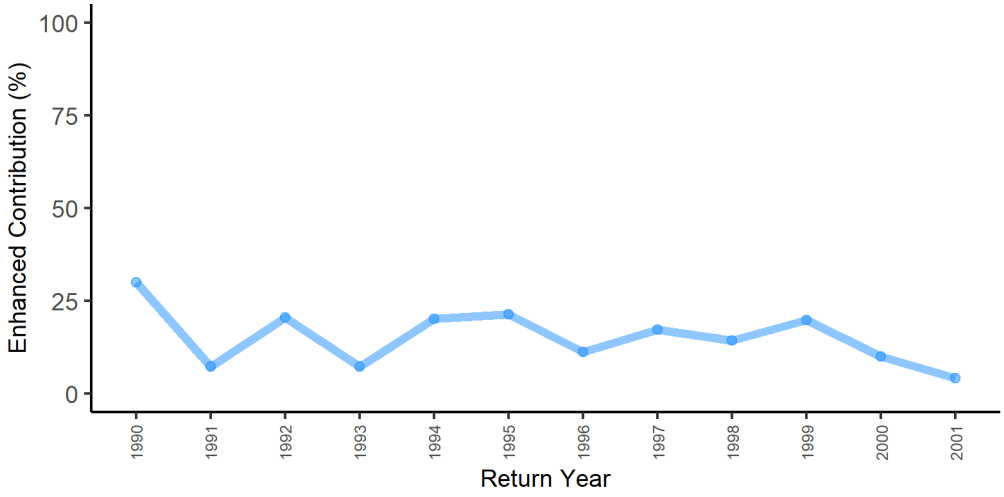
Nitinat River



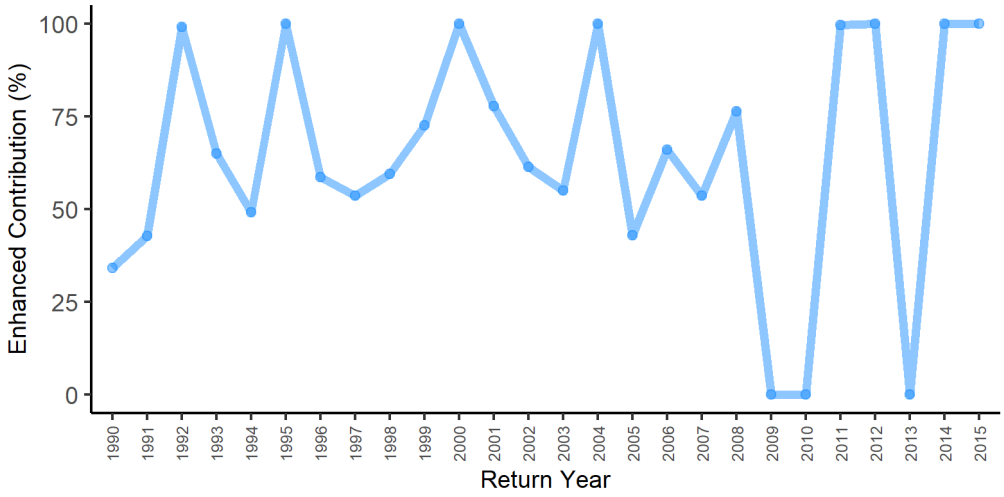
Pallant Creek



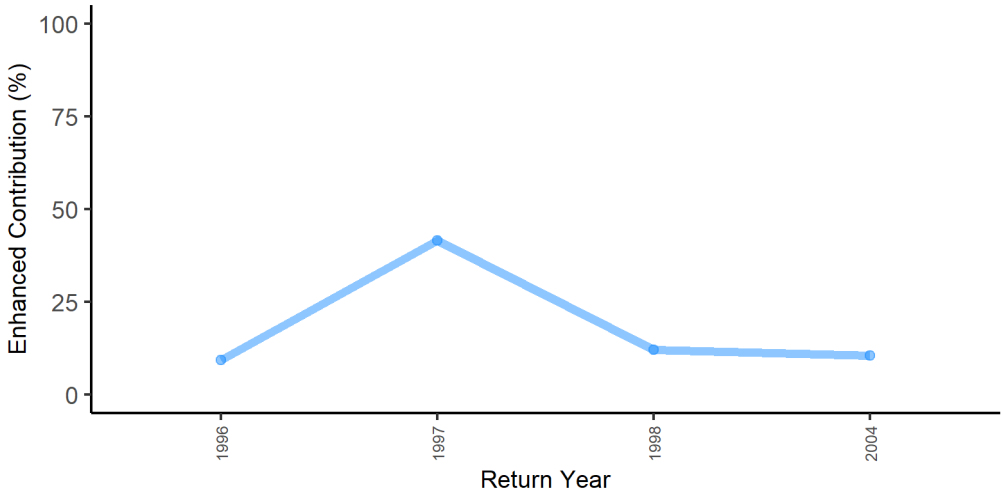
Puntledge River



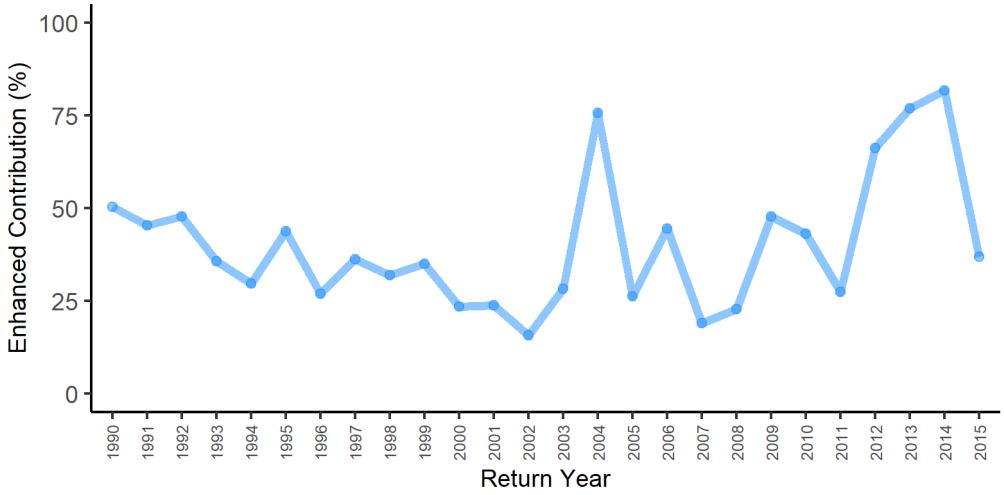
Saloompt River



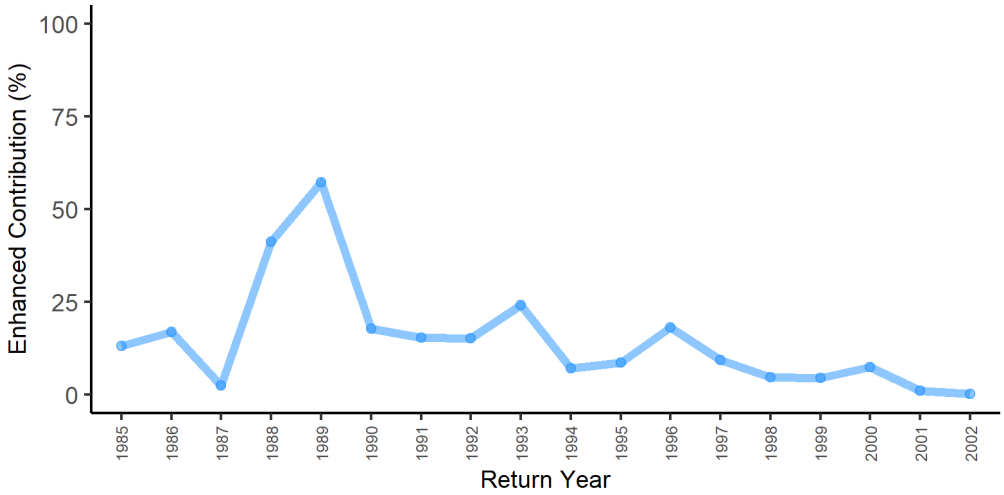
Sliammon River



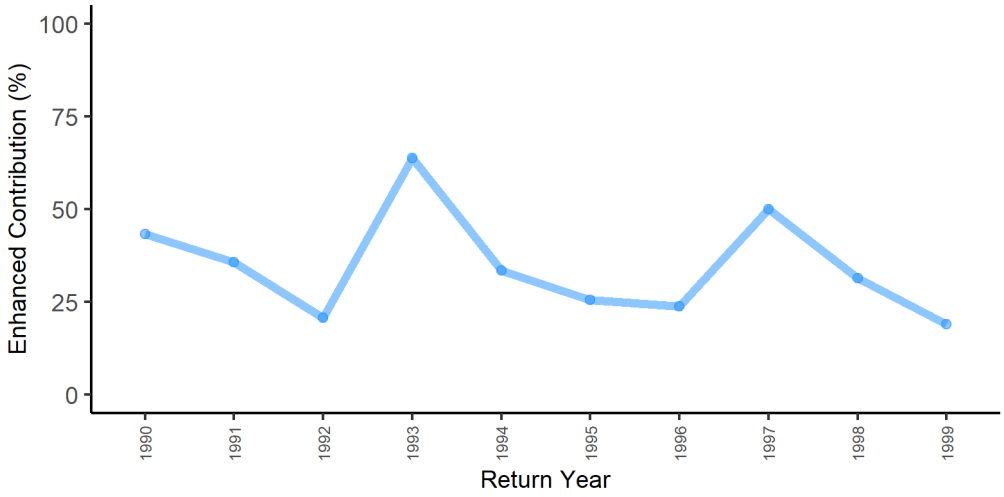
Snootli Creek



Stave River



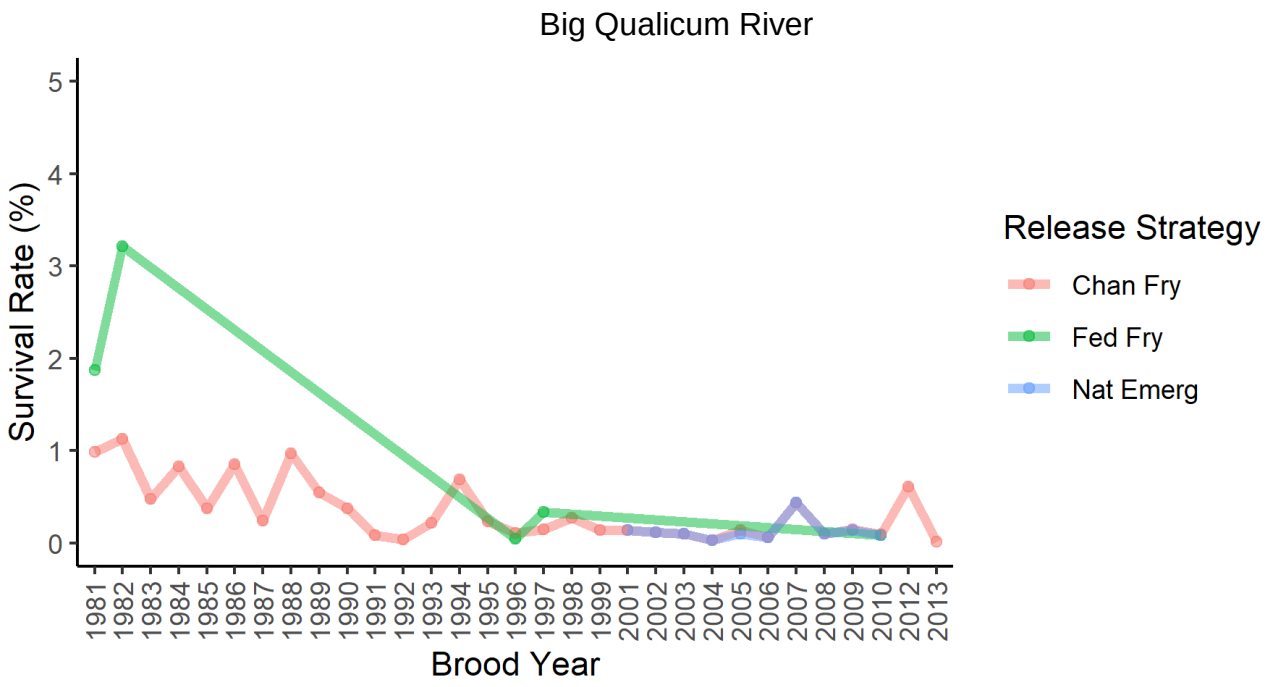
Sucwoa River

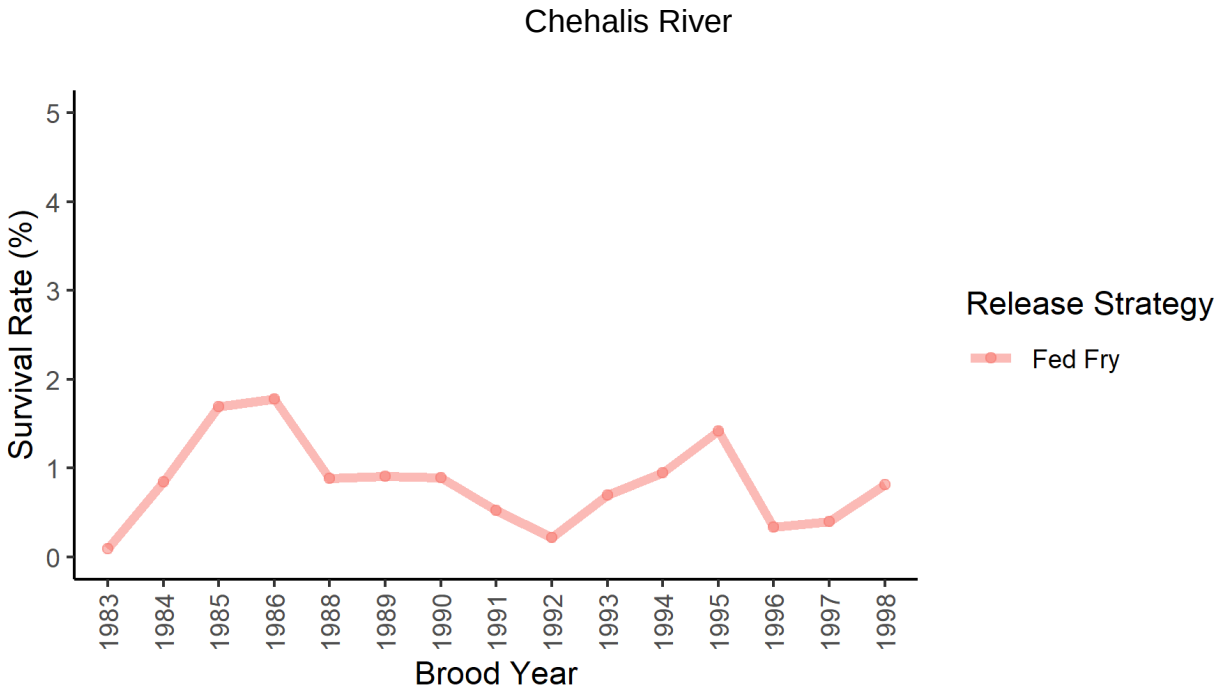


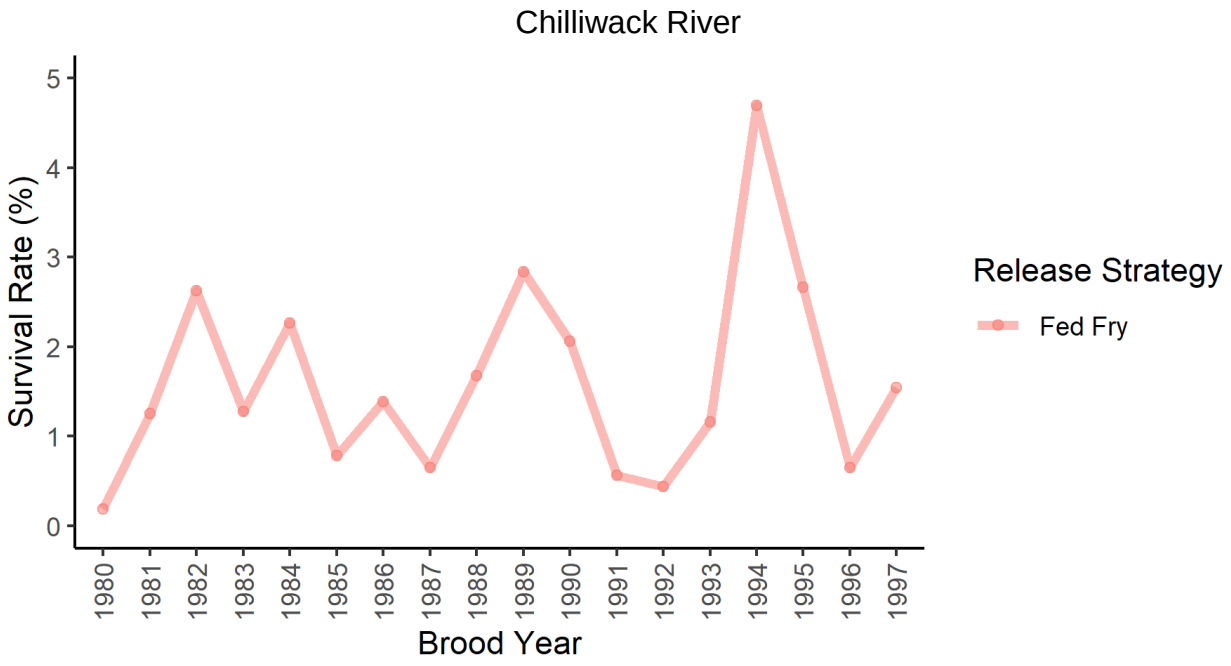
Thorsen Creek

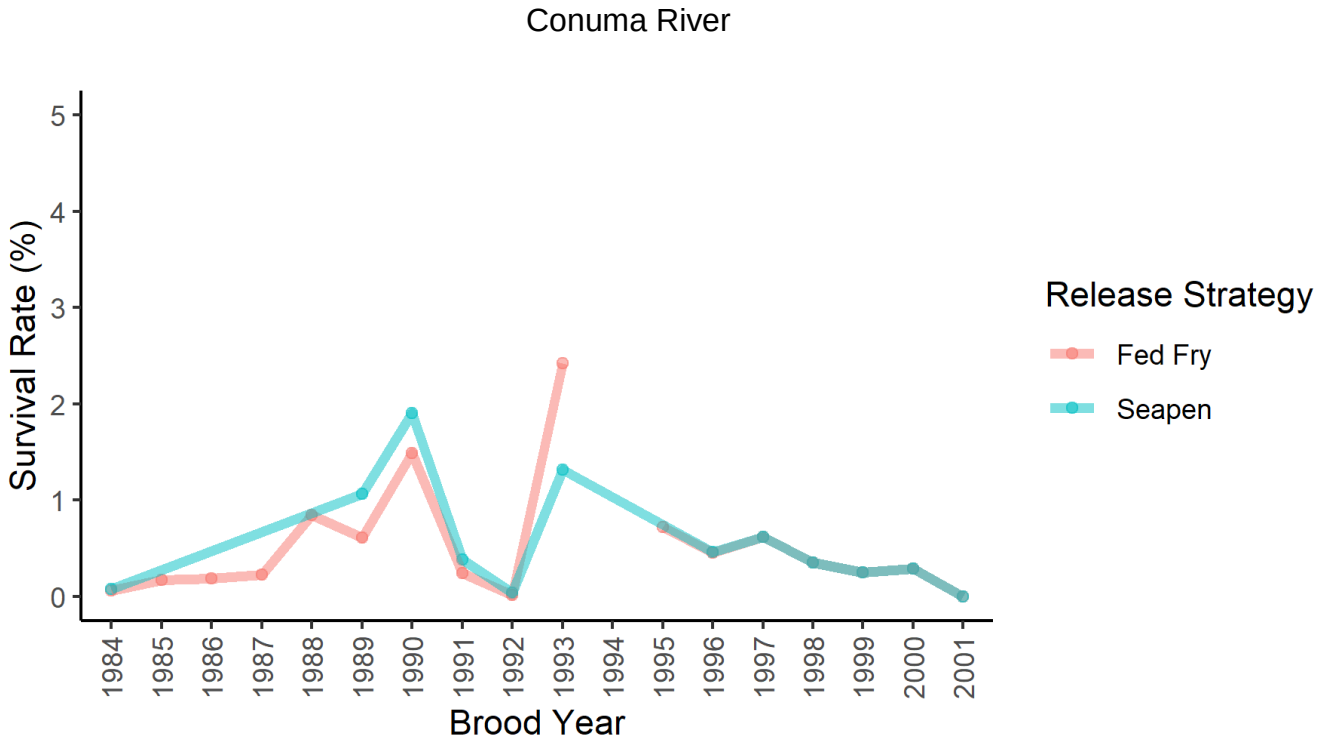
Tlupana River

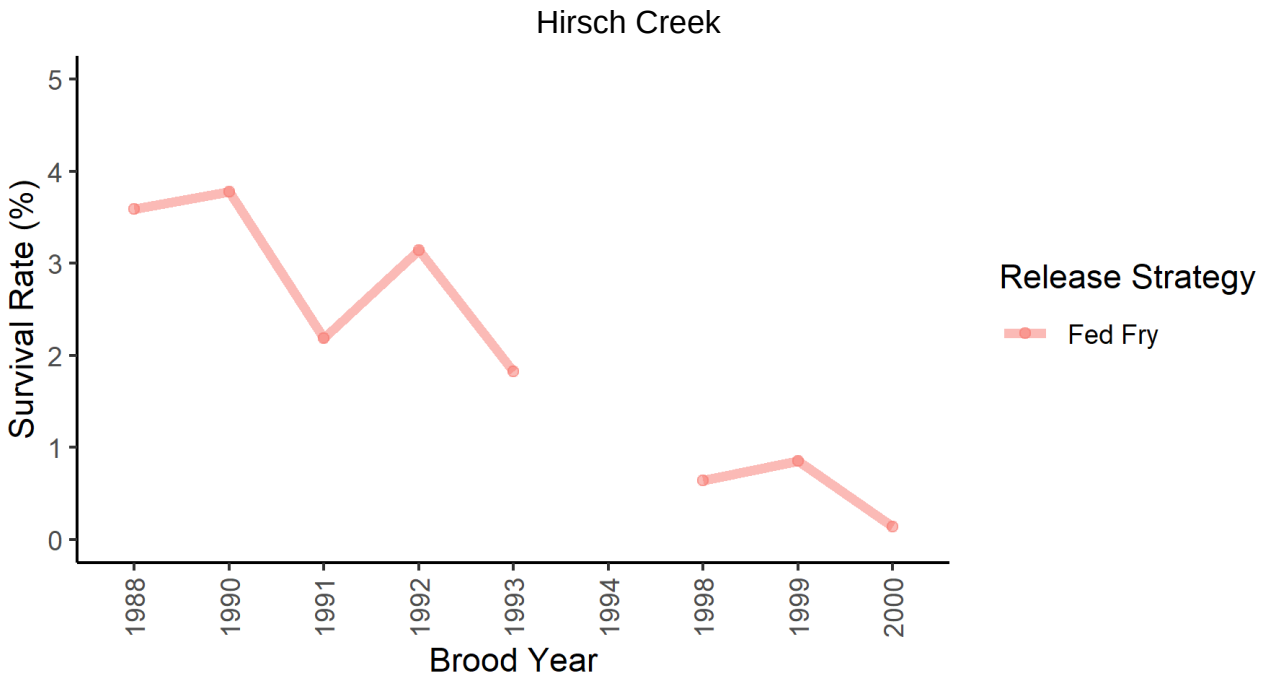
Figure 11 Trends in Marine Survival By Stock and Brood Year

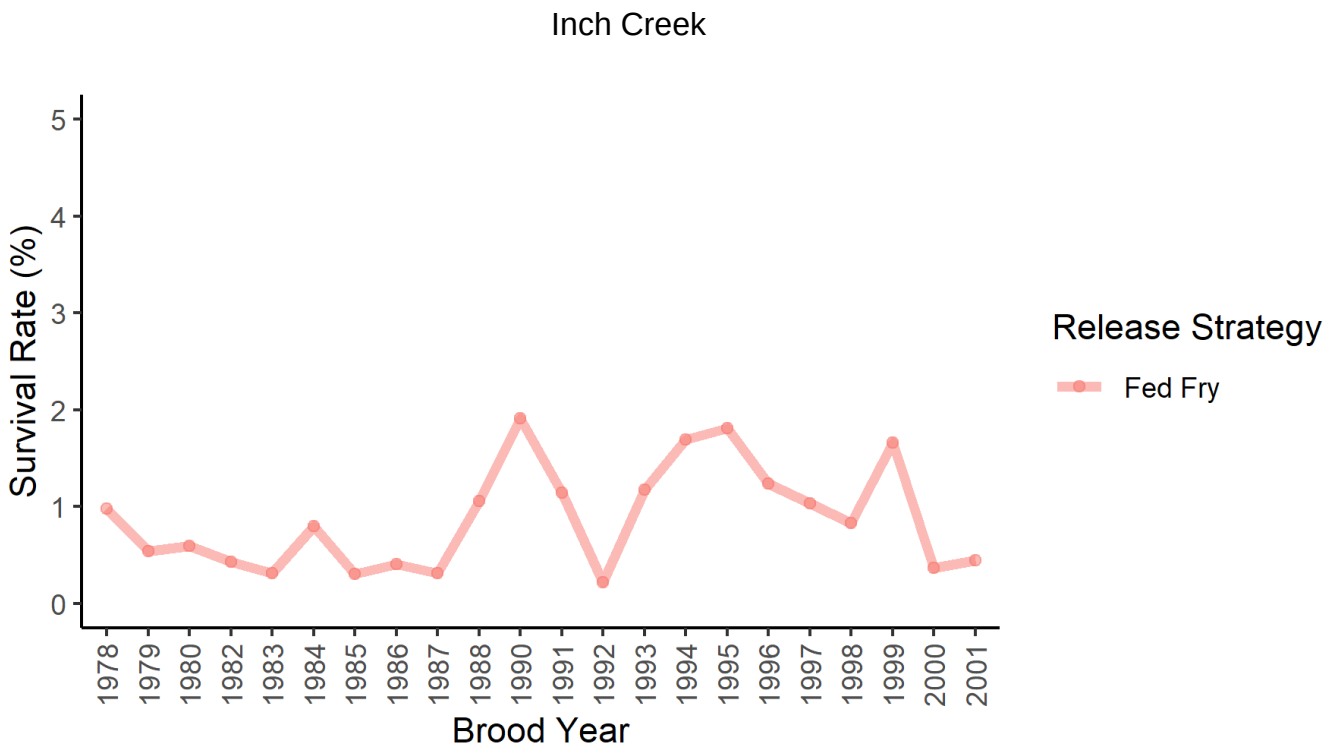


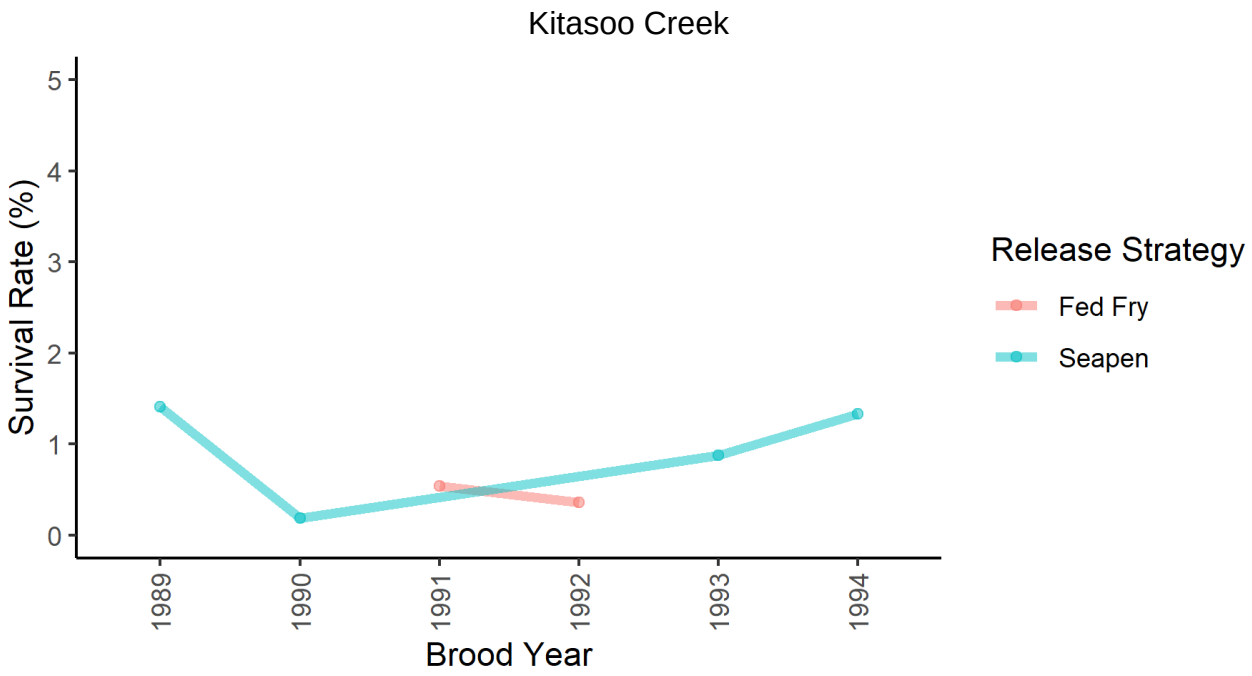


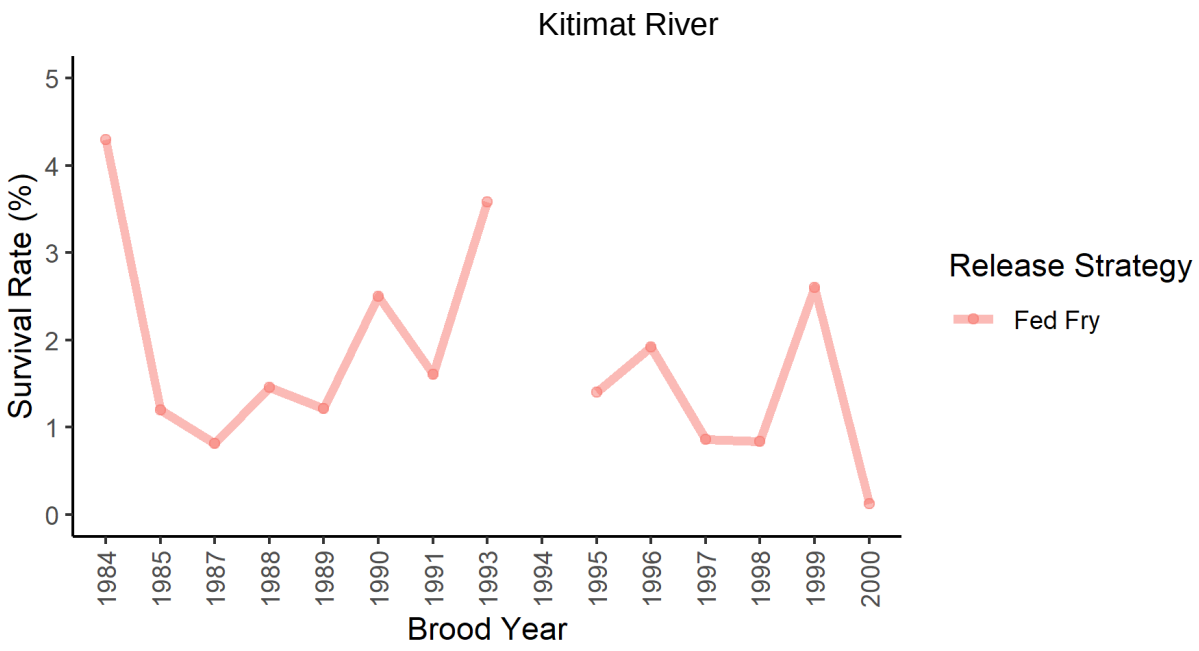

Chilliwack River
Survival Rate (%)
0
1
2
3
4
5
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Fed Fry

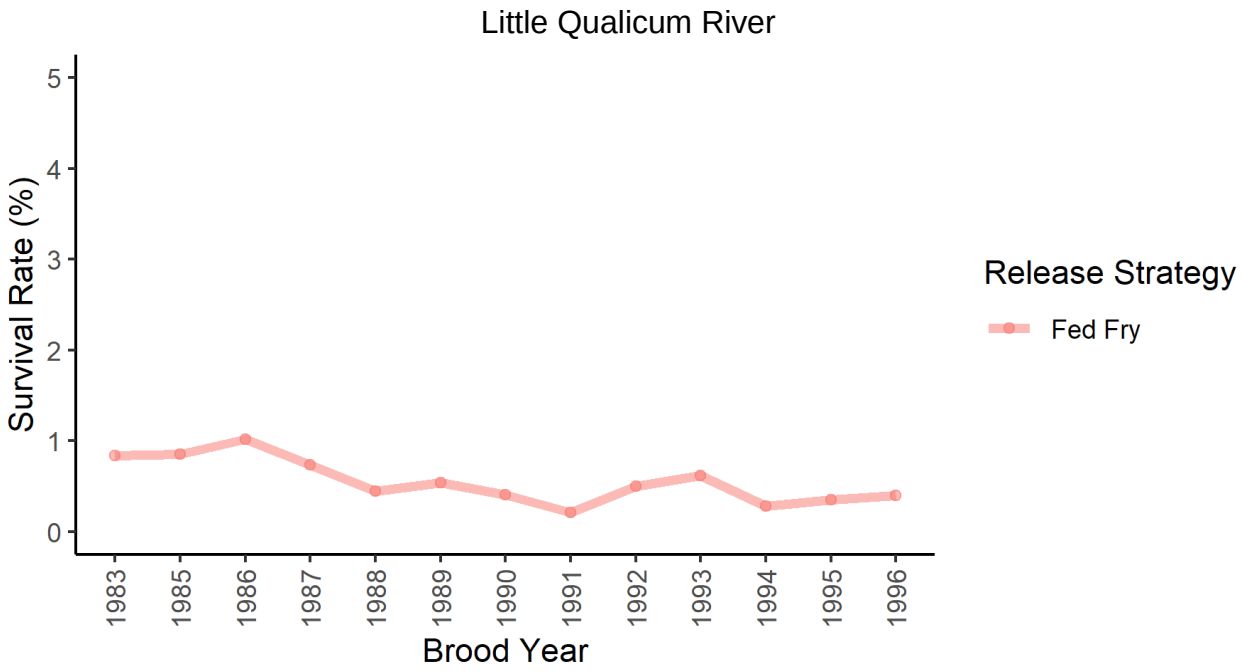

Conuma River
Survival Rate (%)
0
1
2
3
4
5
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry
Seapen

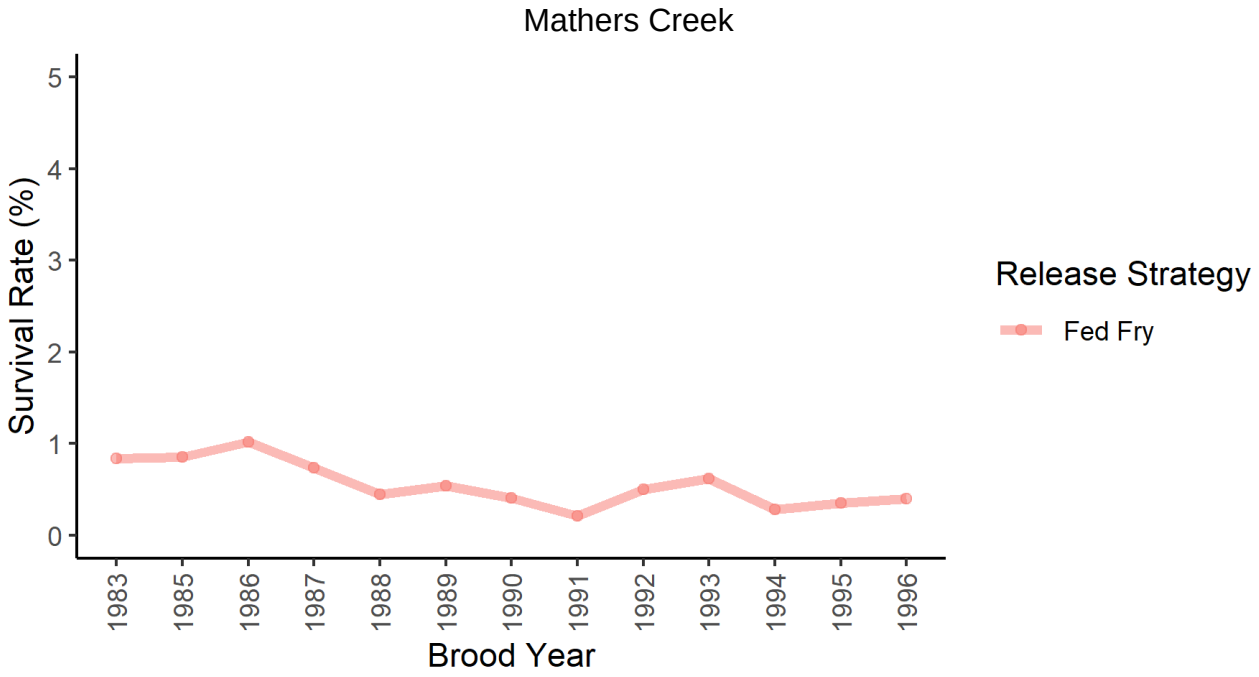

Hirsch Creek
Survival Rate (%)
0
1
2
3
4
5
1988
1990
1991
1992
1993
1994
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

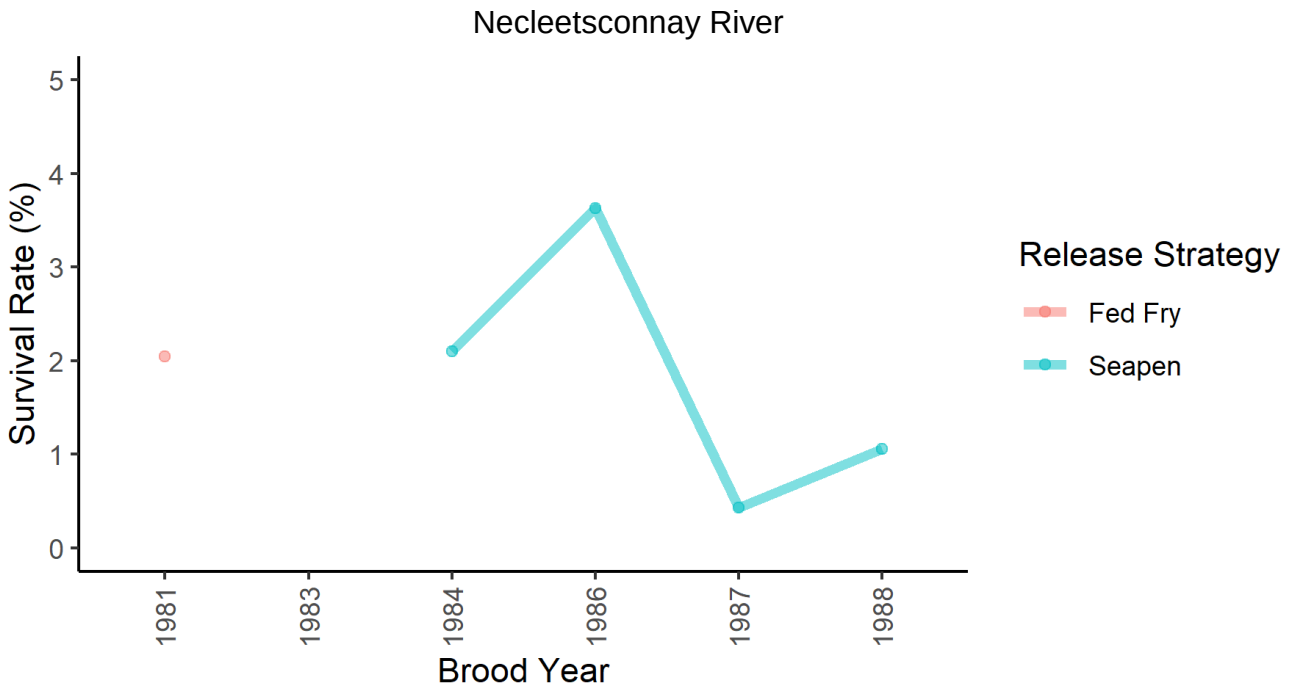

Inch Creek
Survival Rate (%)
0
1
2
3
4
5
1978
1979
1980
1982
1983
1984
1985
1986
1987
1988
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry

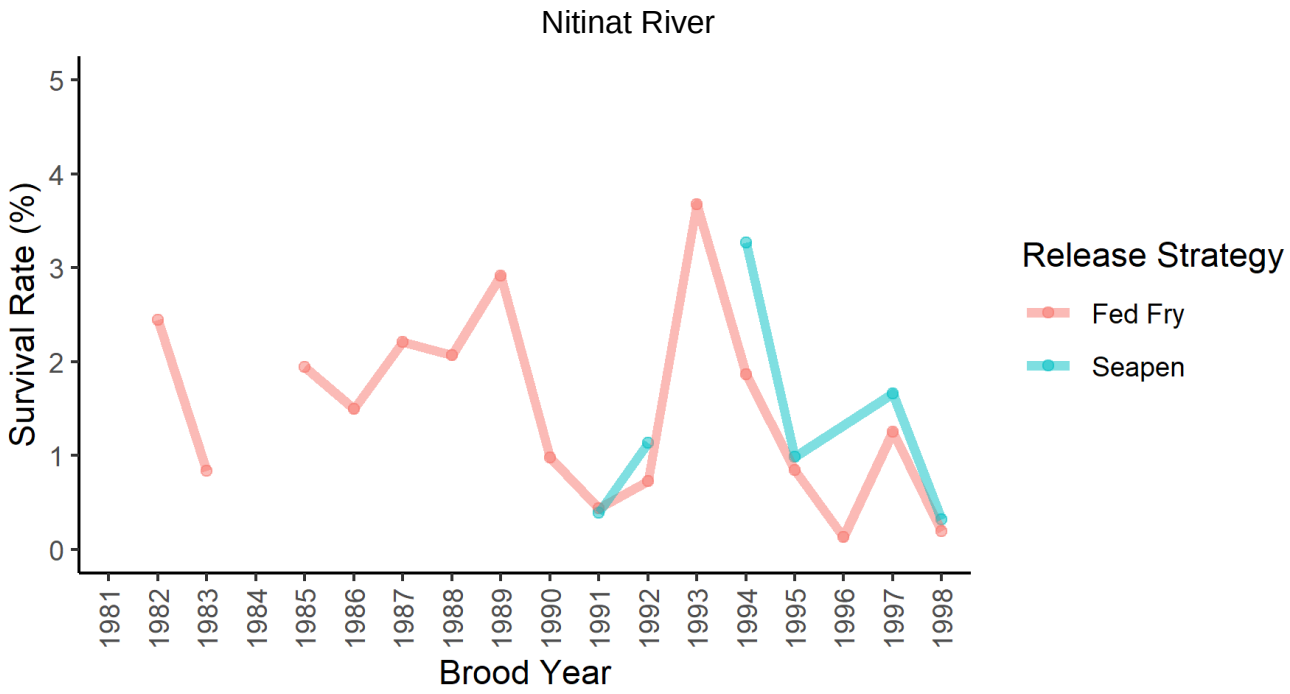

Kitasoo Creek
Survival Rate (%)
0
1
2
3
4
5
1989
1990
1991
1992
1993
1994
Brood Year
Release Strategy
Fed Fry
Seapen

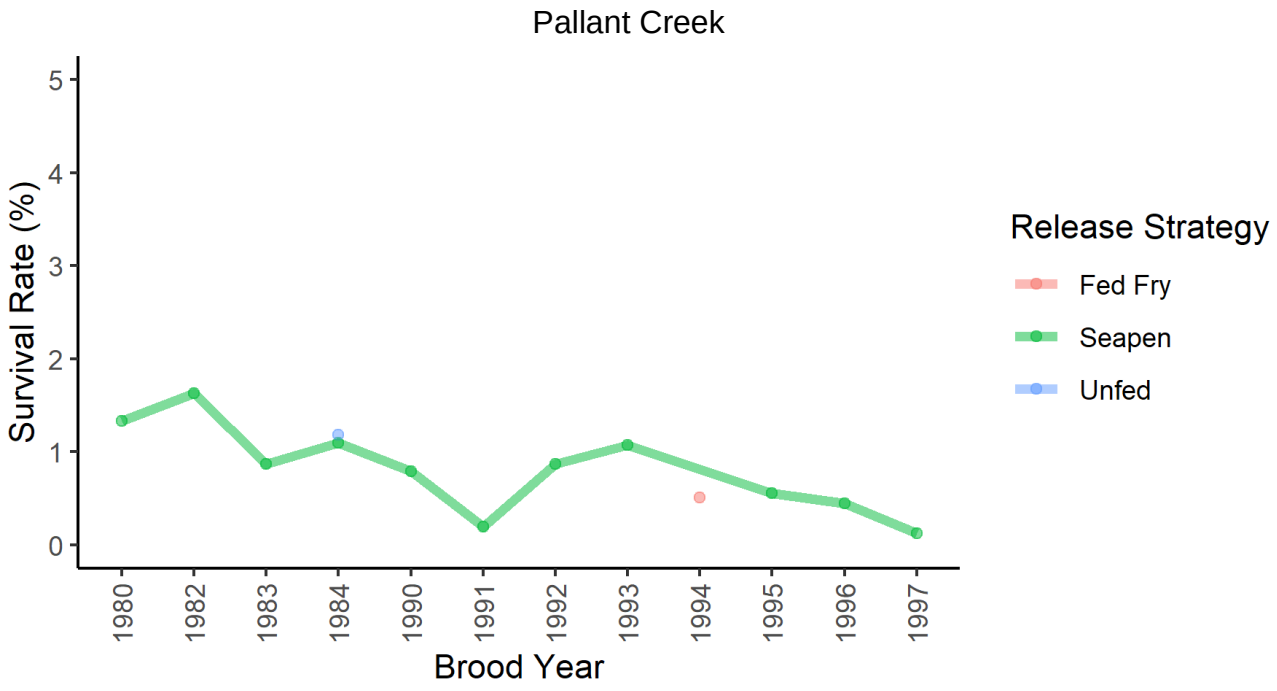

Kitimat River
Survival Rate (%)
0
1
2
3
4
5
1984
1985
1987
1988
1989
1990
1991
1993
1994
1995
1996
1997
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

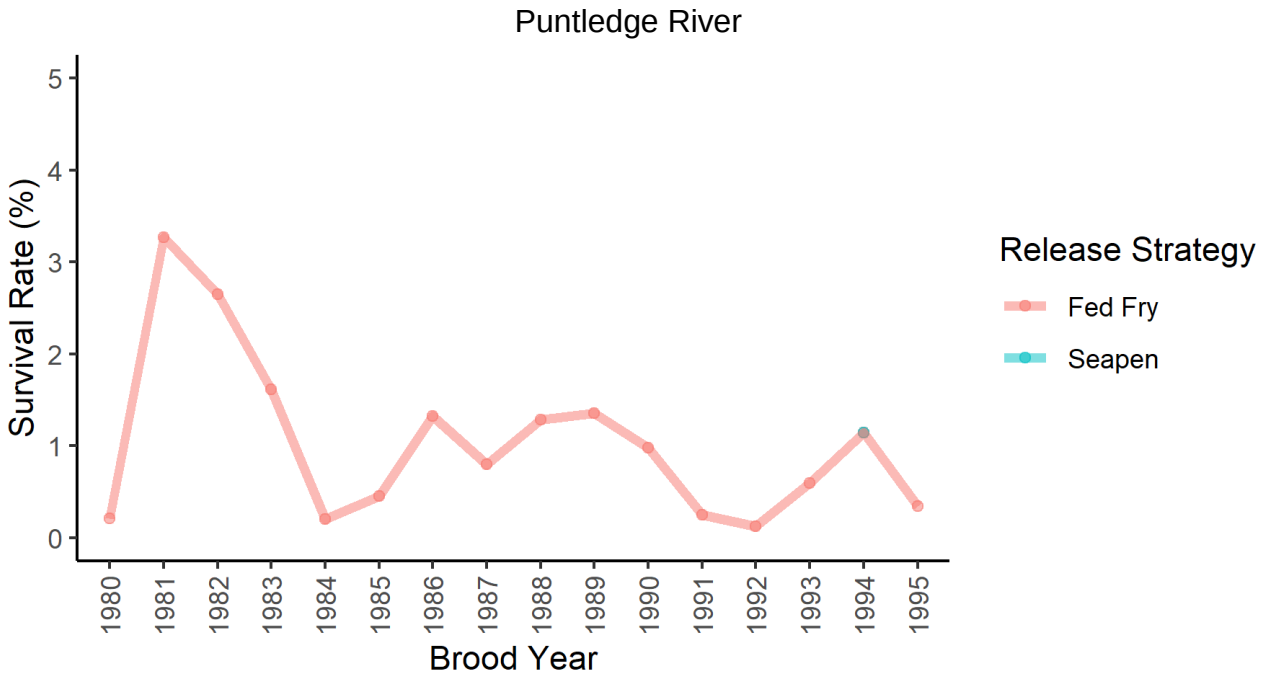

Little Qualicum River
Survival Rate (%)
0
1
2
3
4
5
1983
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Brood Year
Release Strategy
Fed Fry

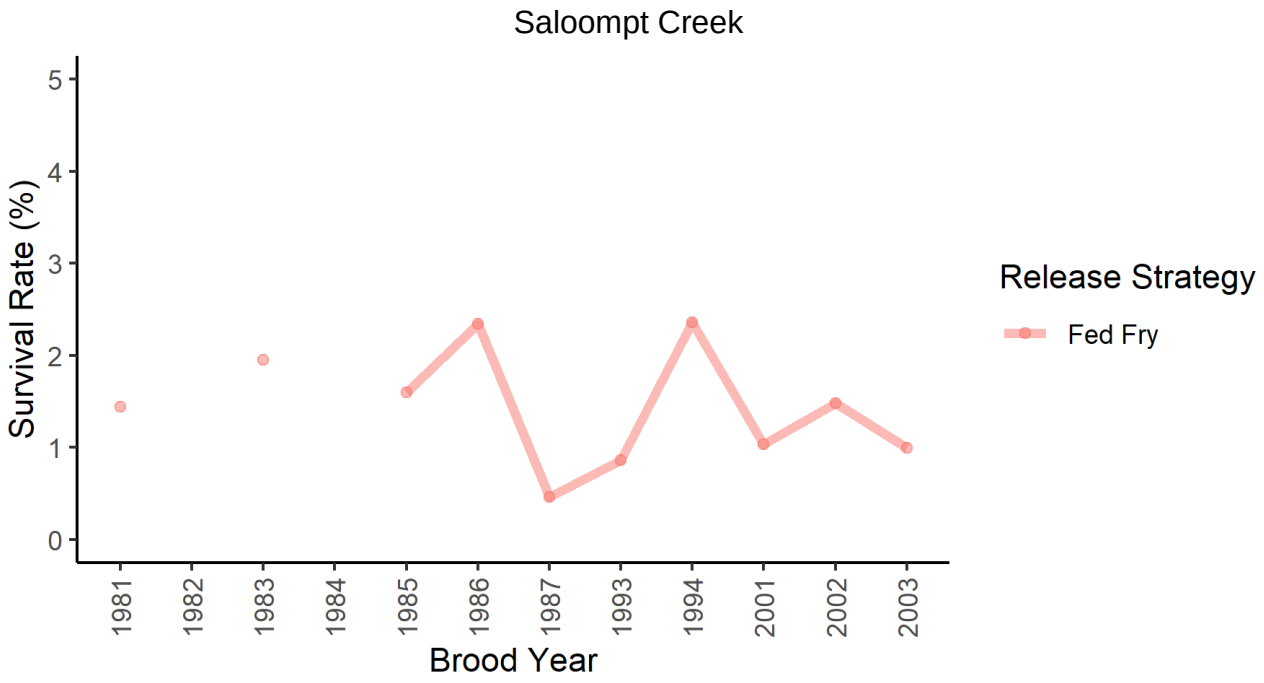

Mathers Creek
Survival Rate (%)
0
1
2
3
4
5
1983
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Brood Year
Release Strategy
Fed Fry

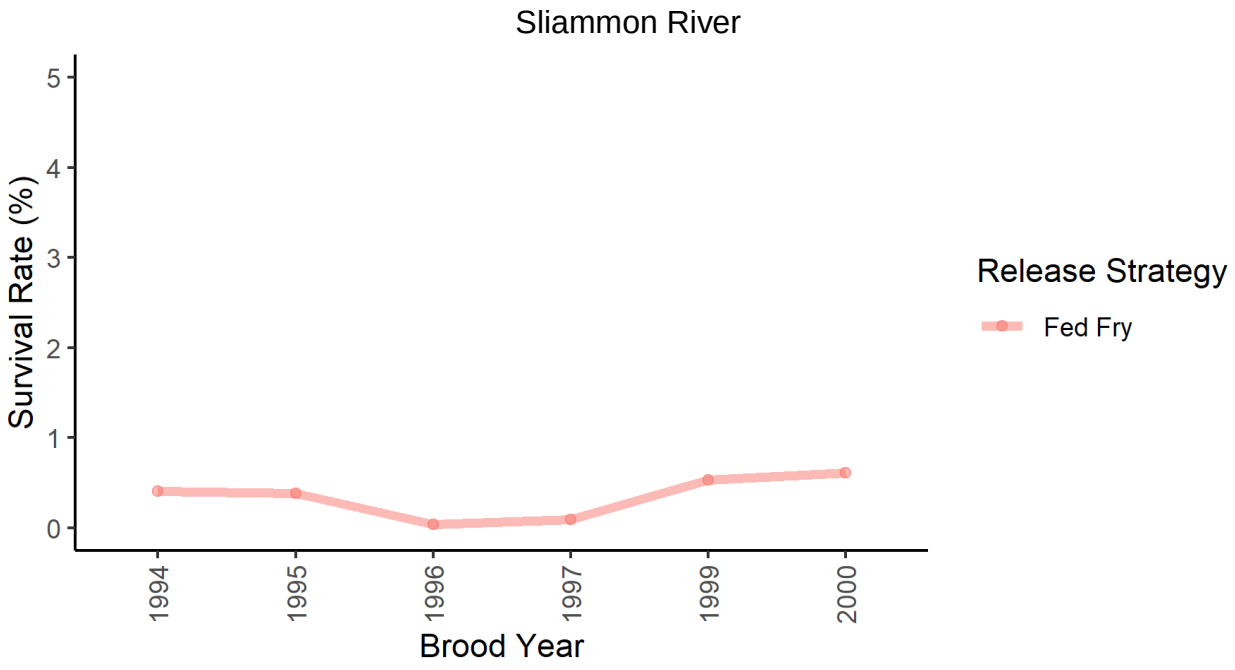

Necleetsconnay River
Survival Rate (%)
0
1
2
3
4
5
1981
1983
1984
1986
1987
1988
Brood Year
Release Strategy
Fed Fry
Seapen

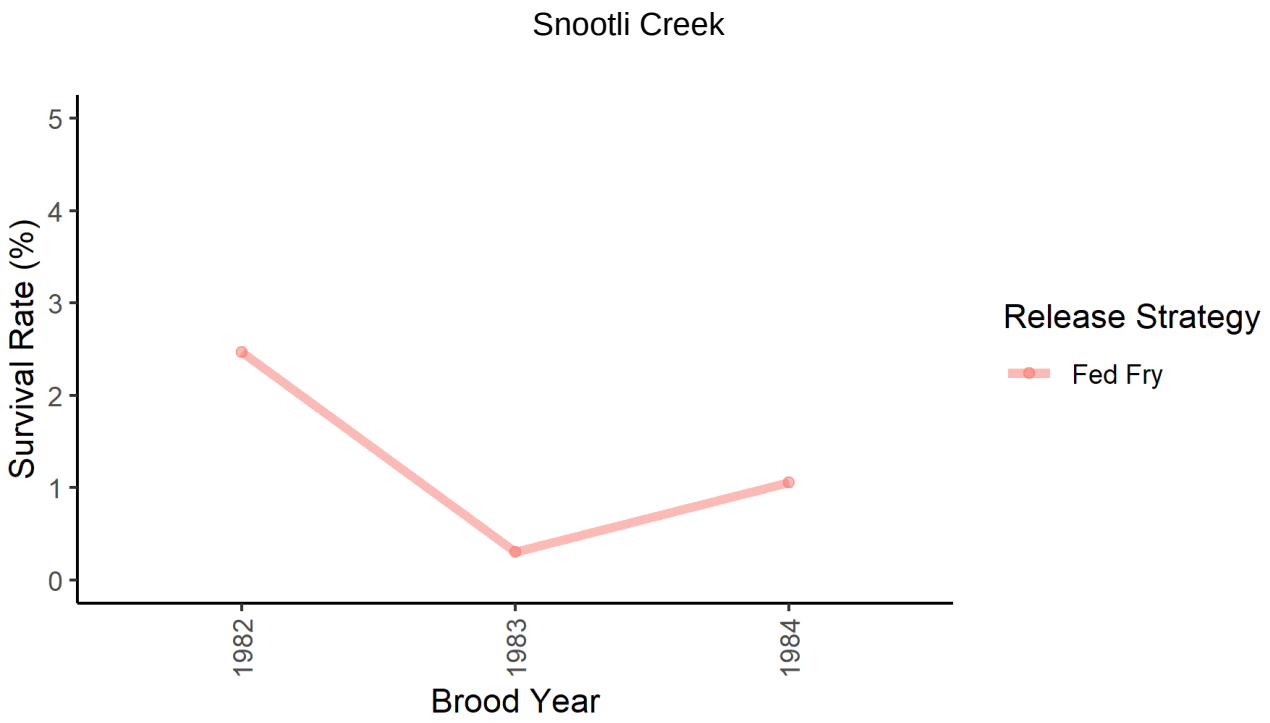

Nitinat River
Survival Rate (%)
0
1
2
3
4
5
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Brood Year
Release Strategy
Fed Fry
Seapen

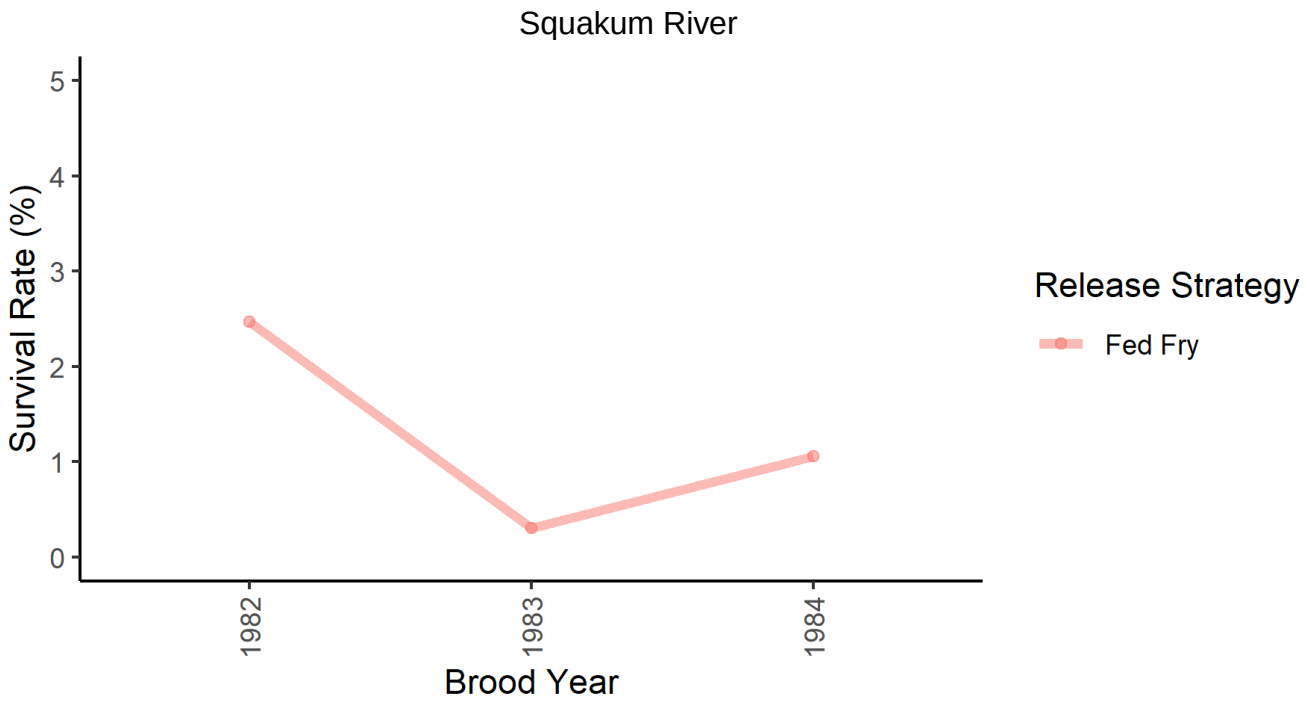

Pallant Creek
Survival Rate (%)
0
1
2
3
4
5
1980
1982
1983
1984
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Fed Fry
Seapen
Unfed

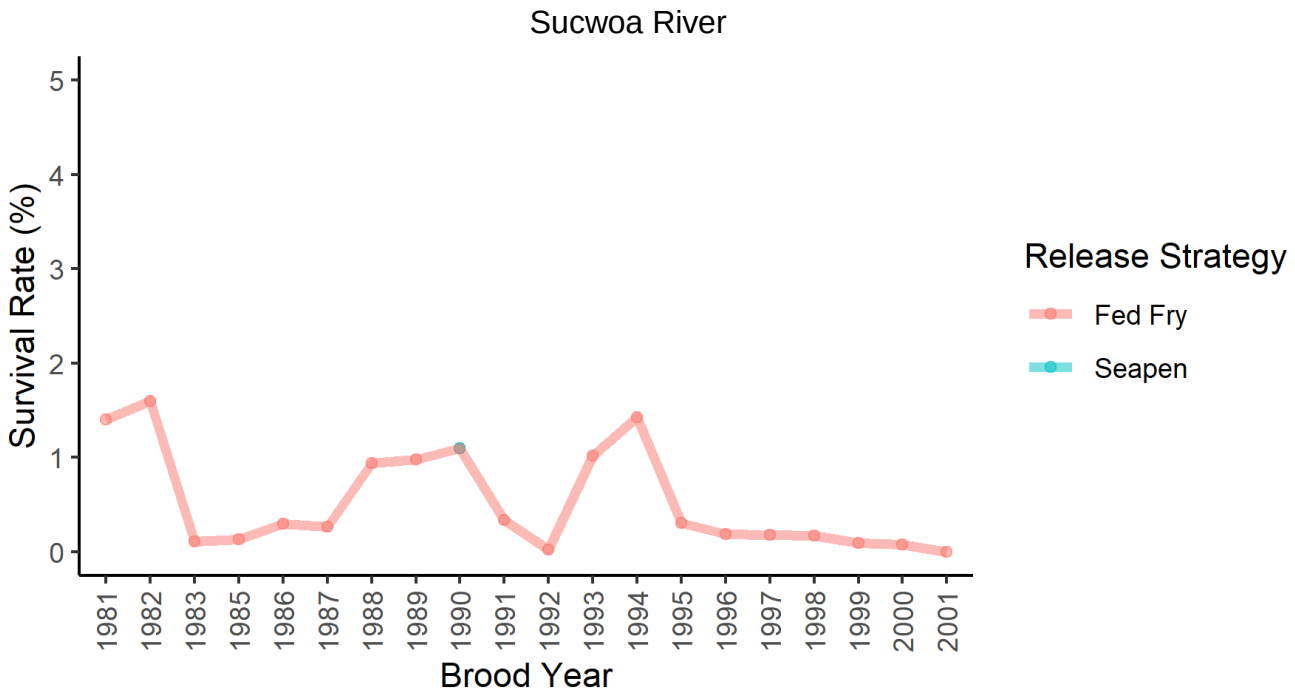

Puntledge River
Survival Rate (%)
0
1
2
3
4
5
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
Brood Year
Release Strategy
Fed Fry
Seapen

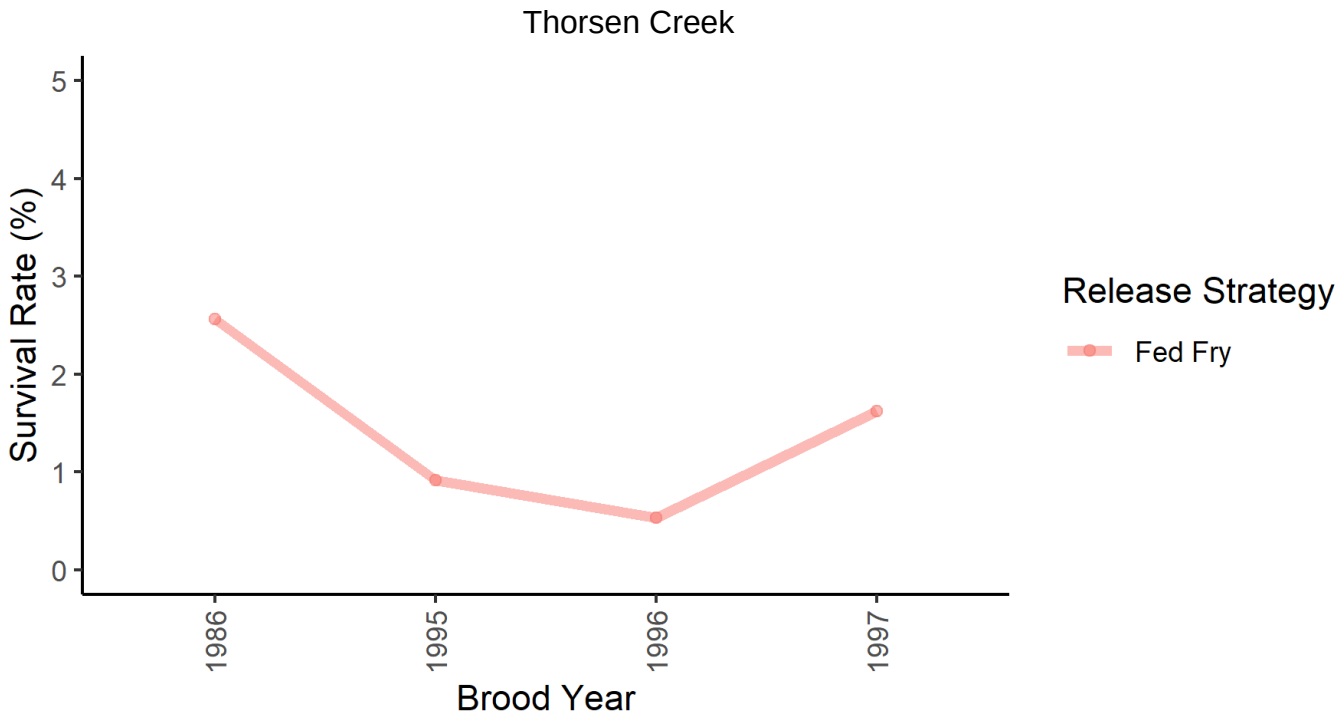

Saloompt Creek
Survival Rate (%)
0
1
2
3
4
5
1981
1982
1983
1984
1985
1986
1987
1993
1994
2001
2002
2003
Brood Year
Release Strategy
Fed Fry


Sliammon River
Survival Rate (%)
0
1
2
3
4
5
1994
1995
1996
1997
1999
2000
Brood Year
Release Strategy
Fed Fry


Snootli Creek
Survival Rate (%)
5
4
3
2
1
0
1982
1983
1984
Brood Year
Release Strategy
Fed Fry


Squakum River
Survival Rate (%)
5
4
3
2
1
0
1982
1983
1984
Brood Year
Release Strategy
Fed Fry


Sucwoa River
Survival Rate (%)
0
1
2
3
4
5
1981
1982
1983
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry
Seapen


Thorsen Creek
Survival Rate (%)
0
1
2
3
4
5
1986
1995
1996
1997
Brood Year
Release Strategy
Fed Fry

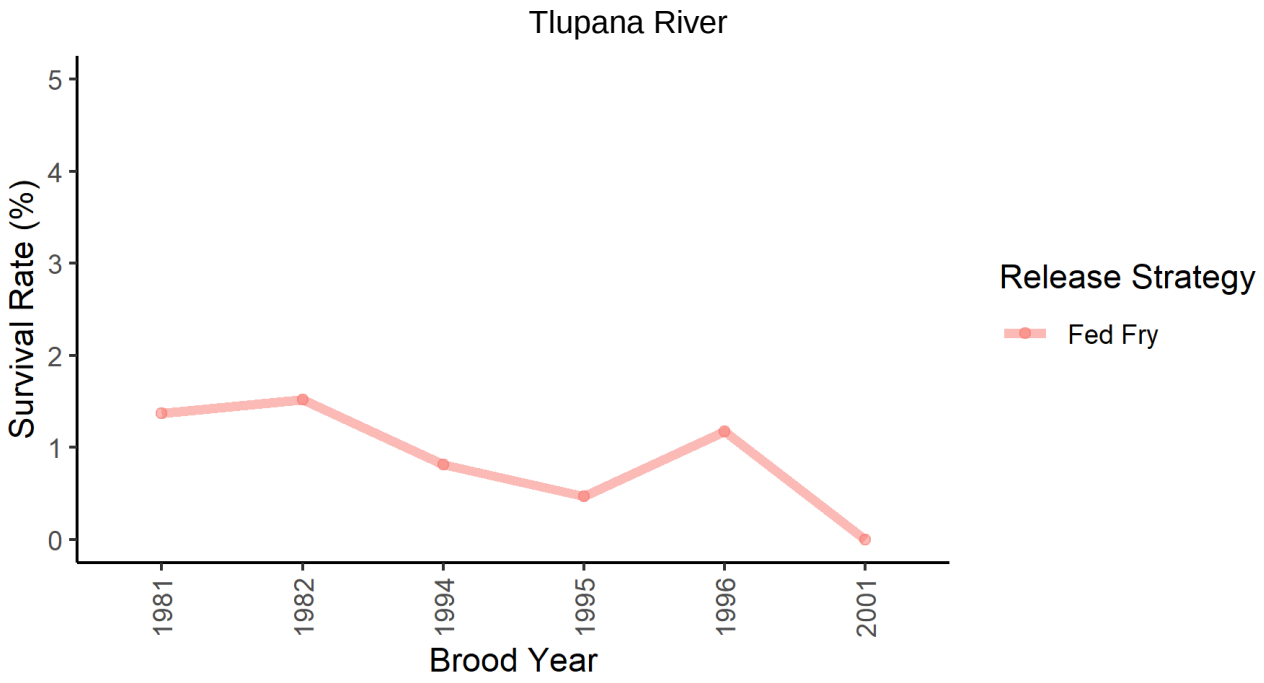
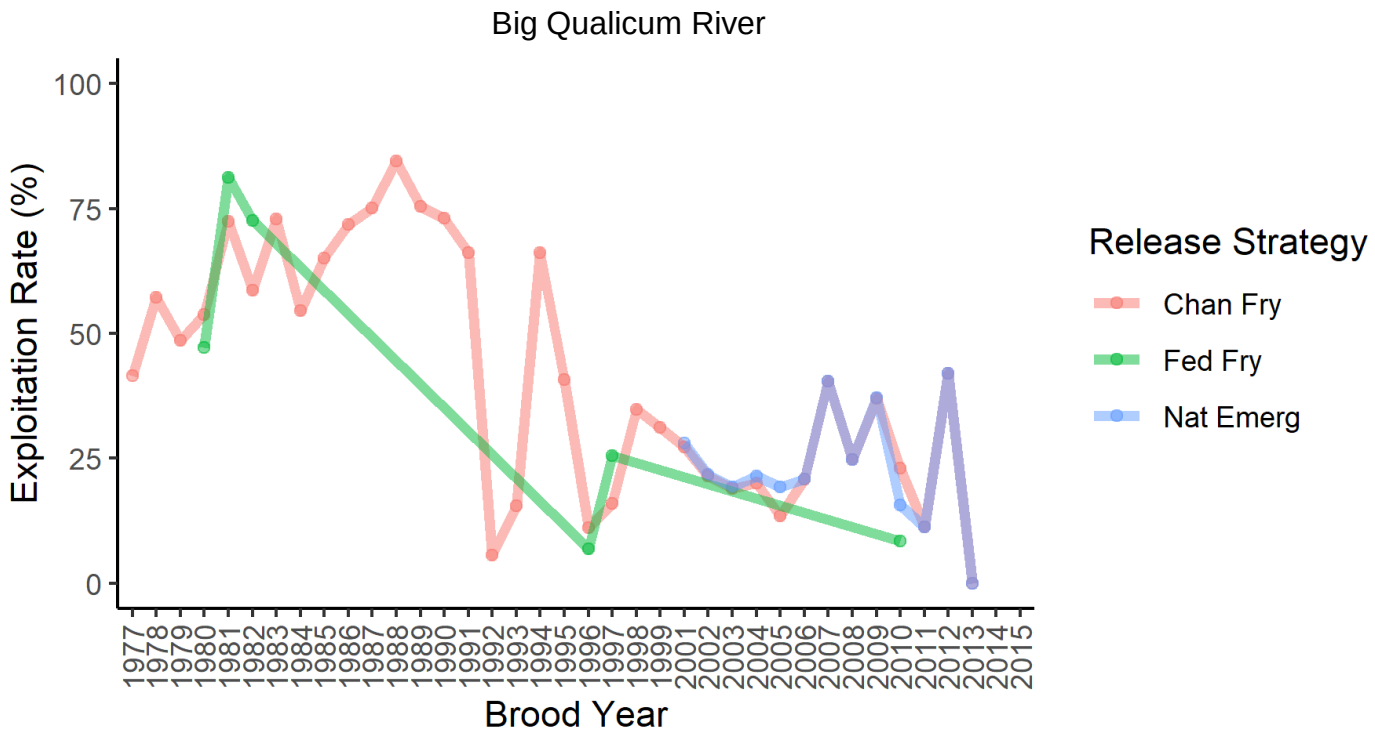
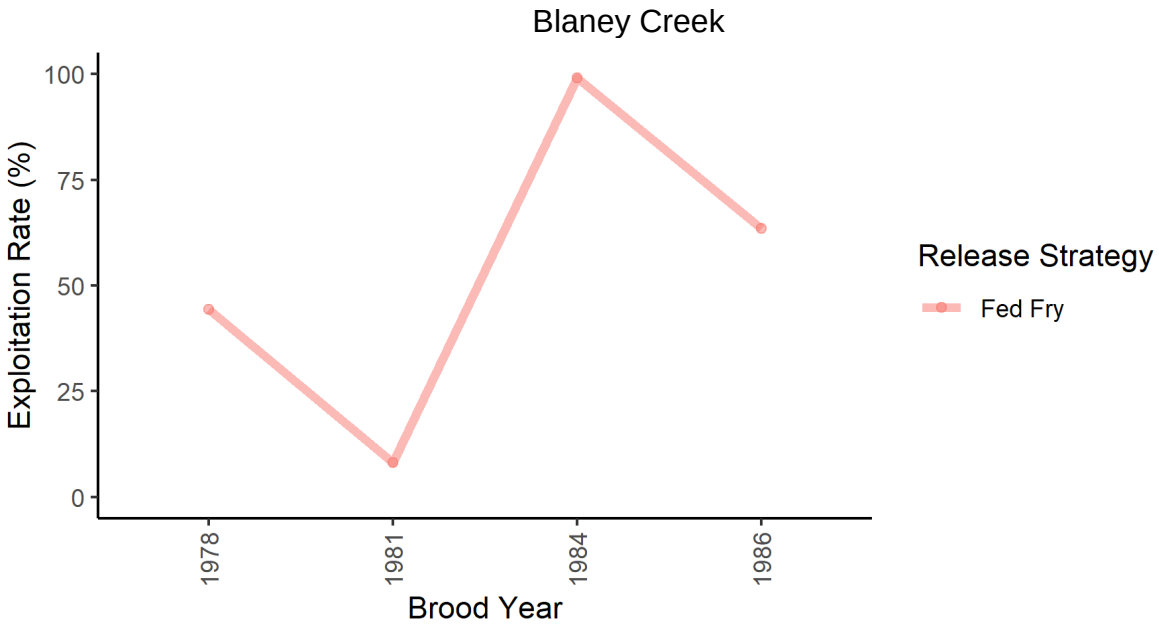
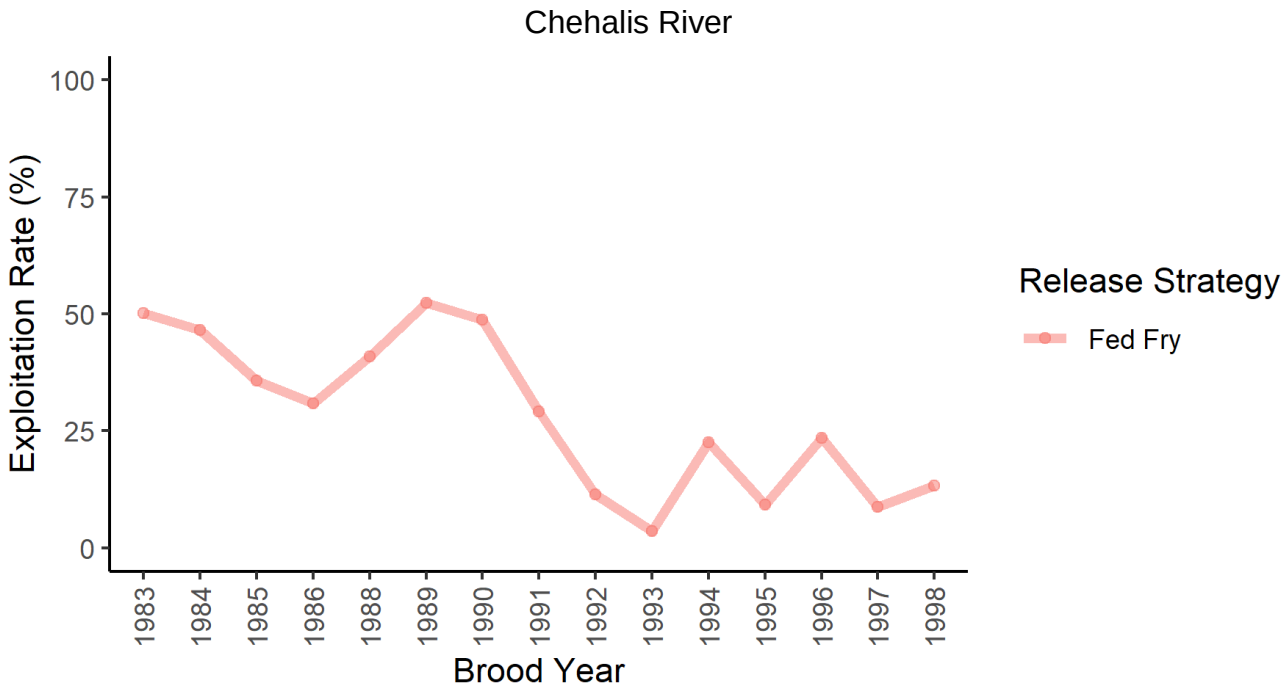
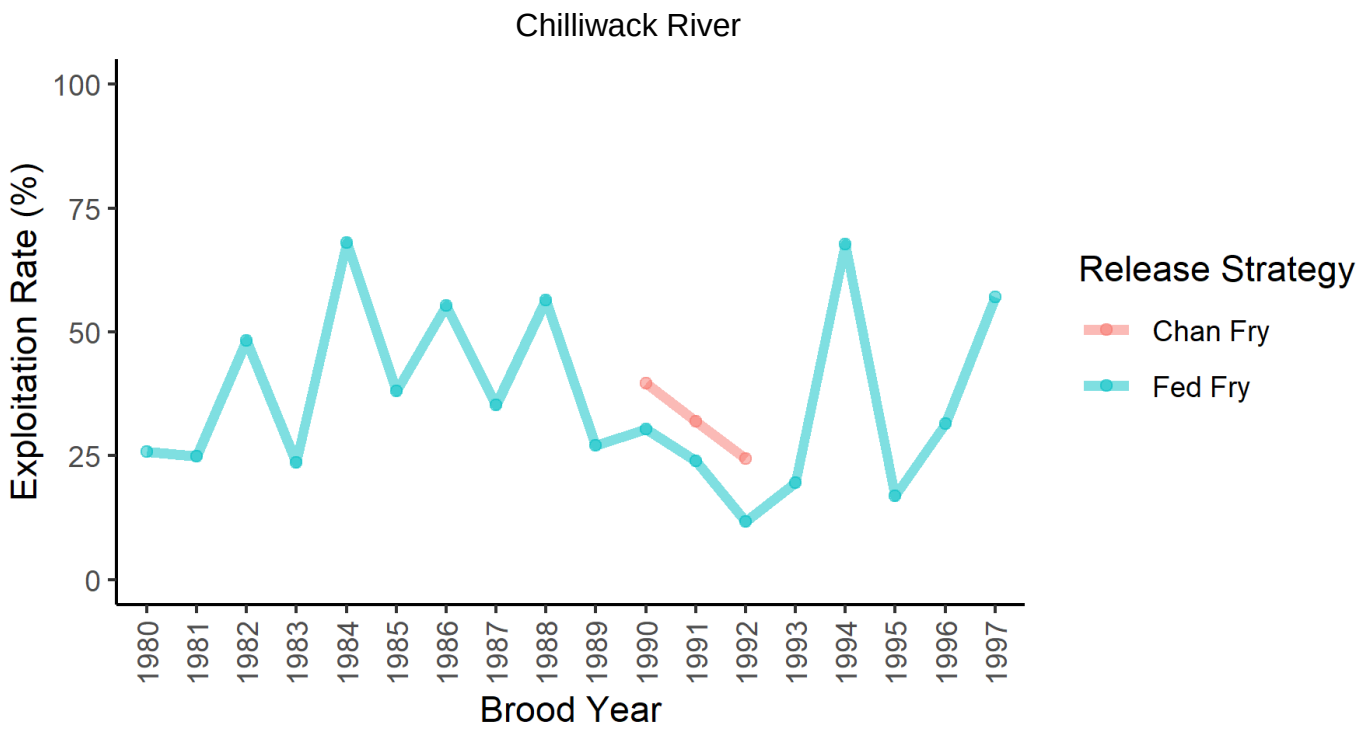

Tlupana River
Survival Rate (%)
5
4
3
2
1
0
1981
1982
1994
1995
1996
2001
Brood Year
Release Strategy
Fed Fry

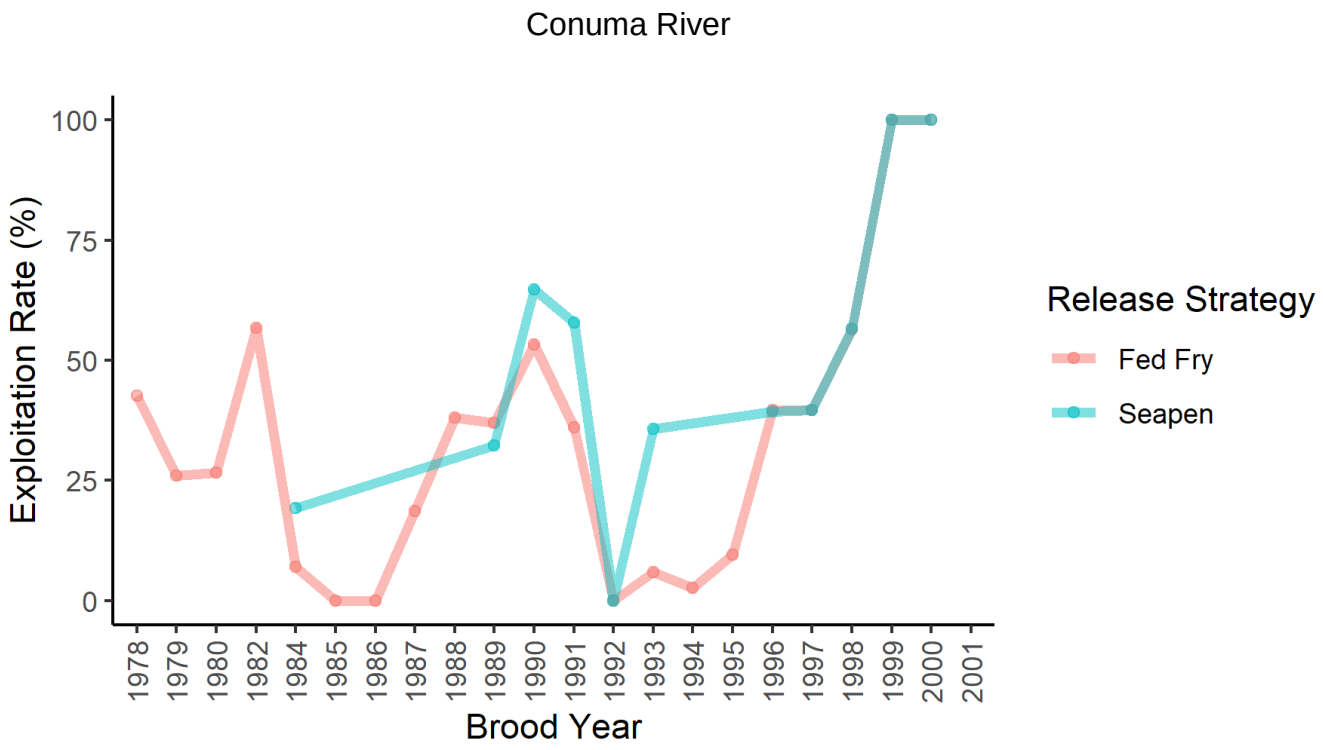
Figure 12 Trends in Exploitation Rate By Stock and Brood Year

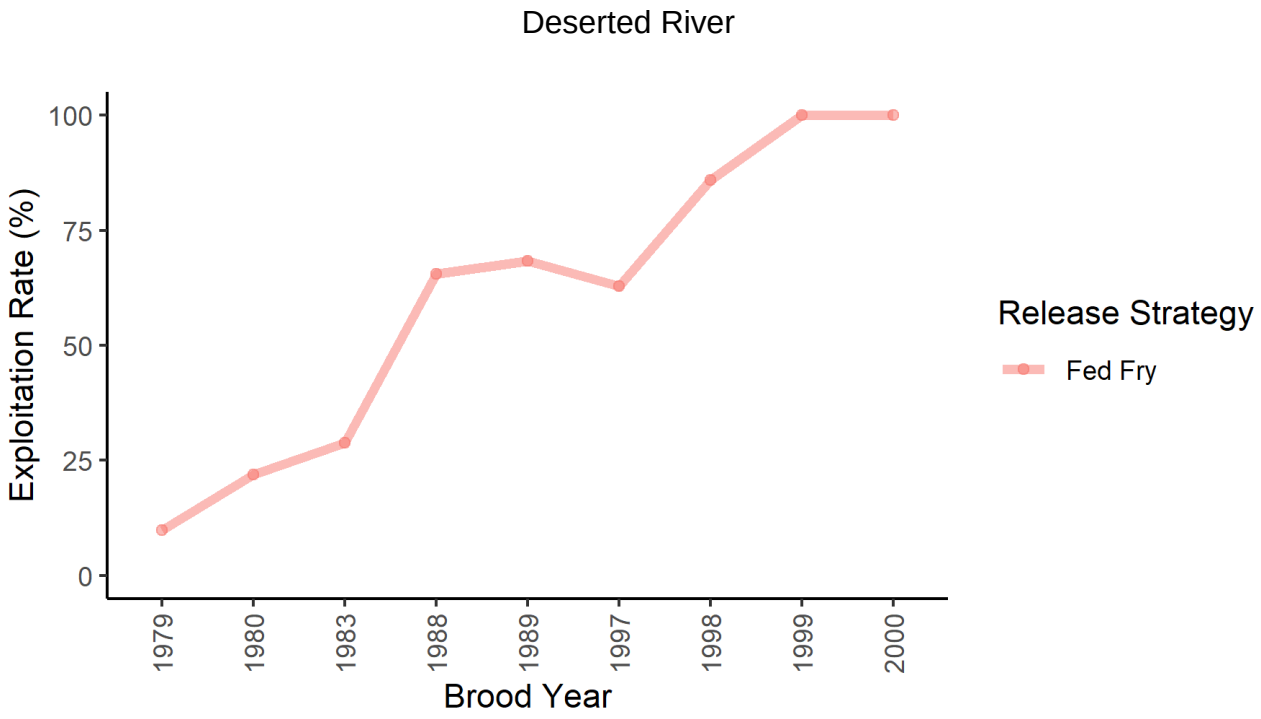


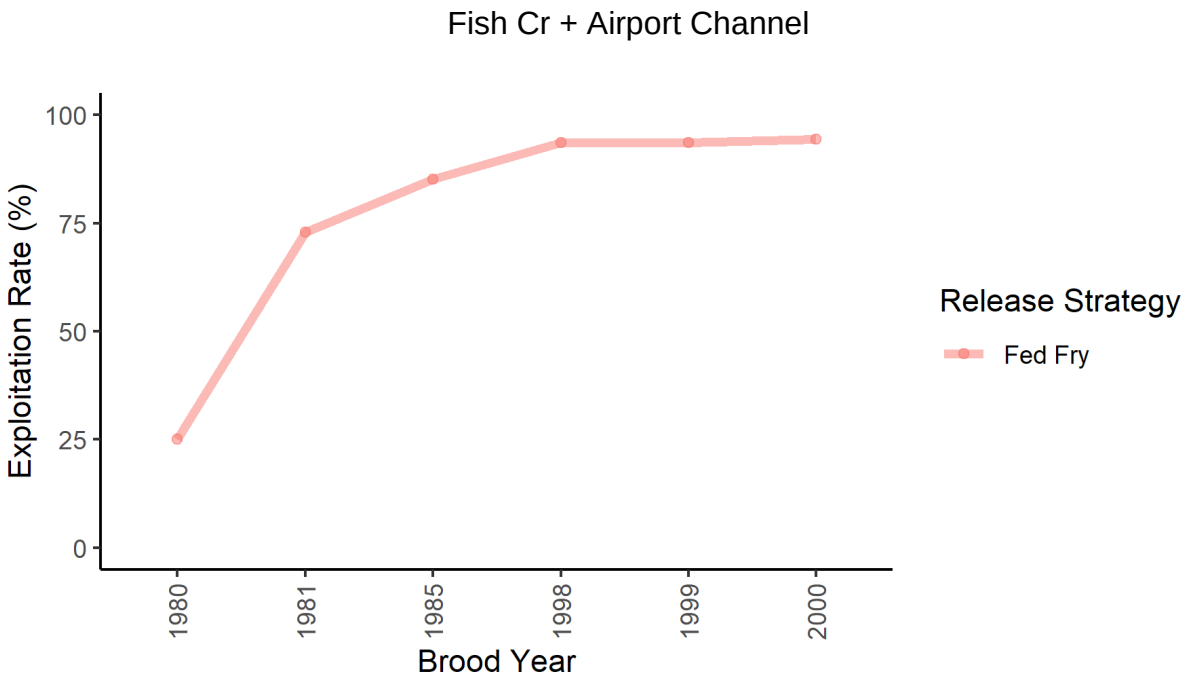


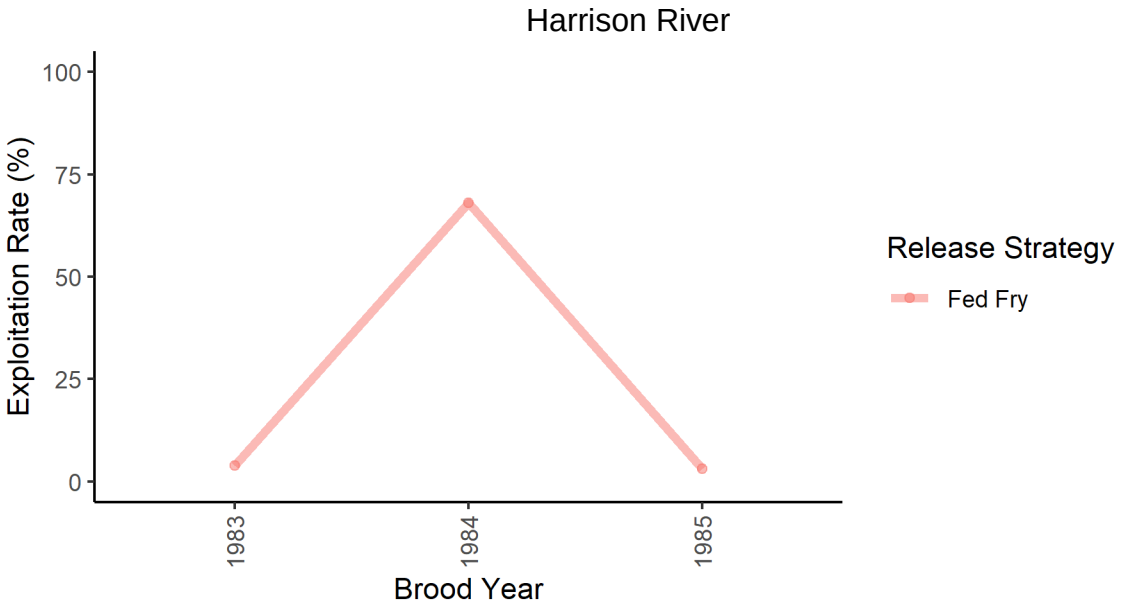

Chehalis River
Exploitation Rate (%)
100
75
50
25
0
1983
1984
1985
1986
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Brood Year
Release Strategy
Fed Fry

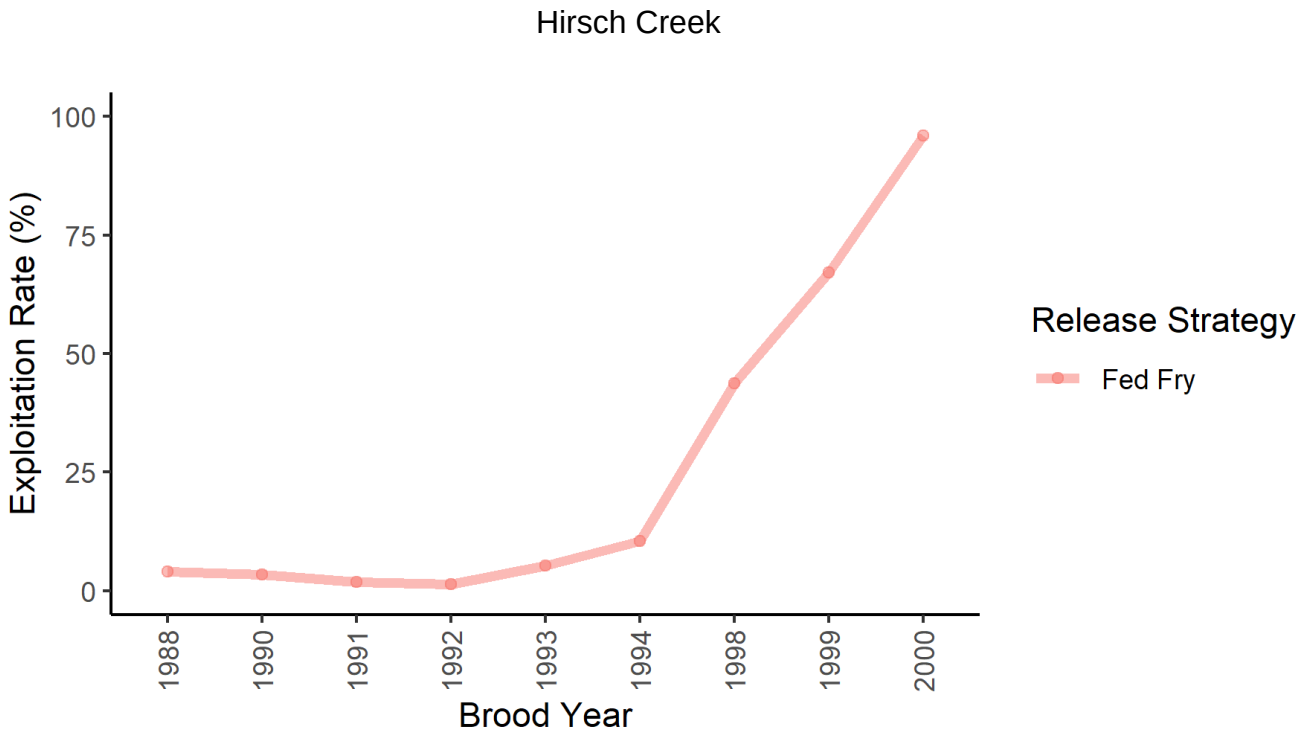

Chilliwack River
Exploitation Rate (%)
100
75
50
25
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Chan Fry
Fed Fry

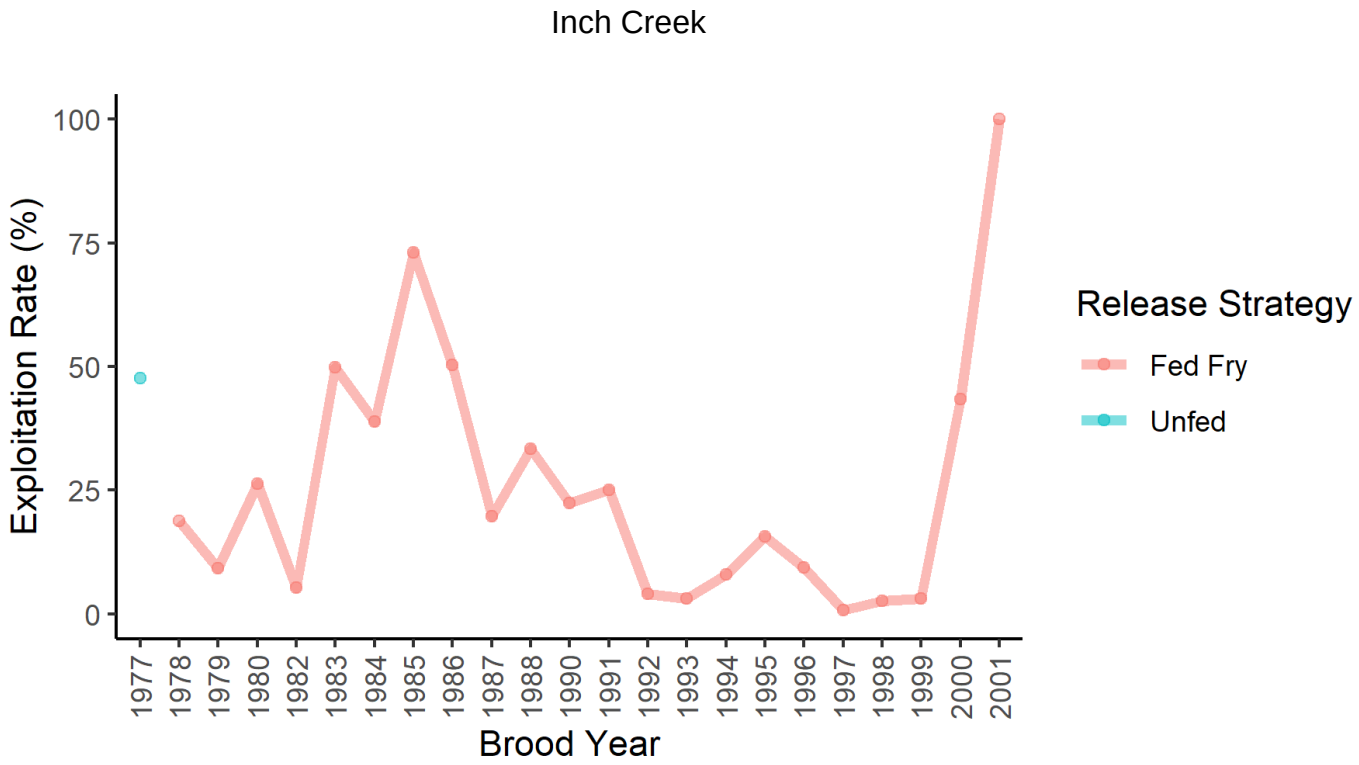

Conuma River
Exploitation Rate (%)
100
75
50
25
0
1978
1979
1980
1982
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry
Seapen

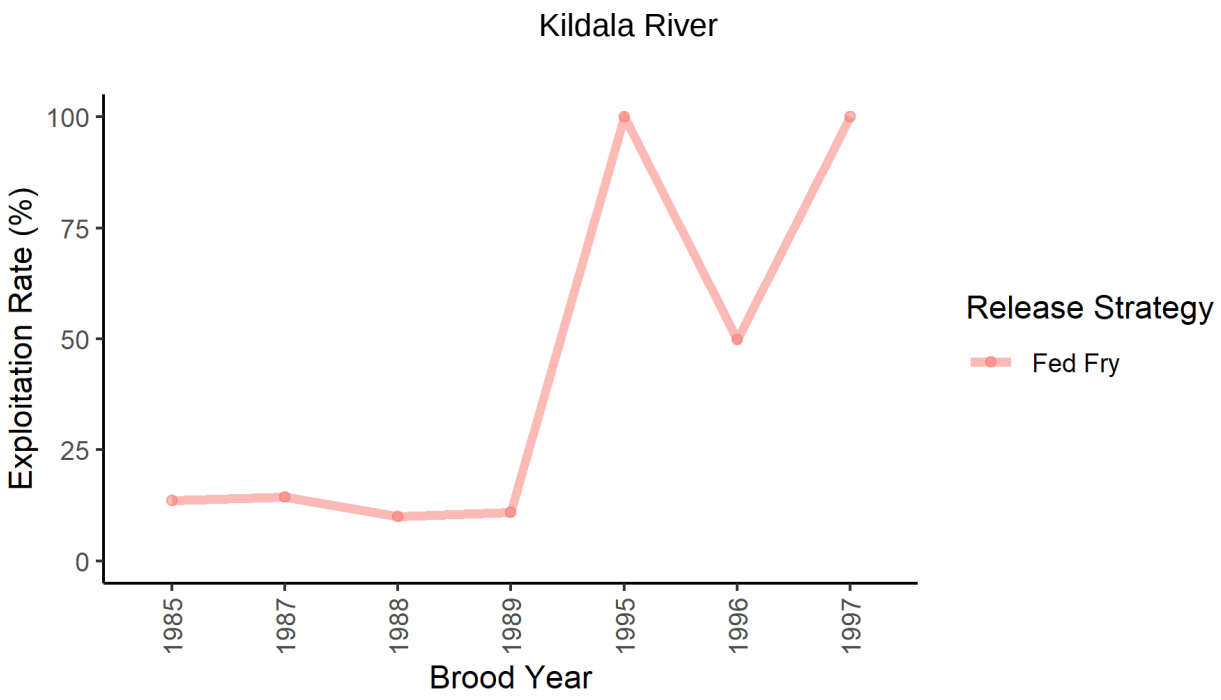

Deserted River
Exploitation Rate (%)
100
75
50
25
0
1979
1980
1983
1988
1989
1997
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

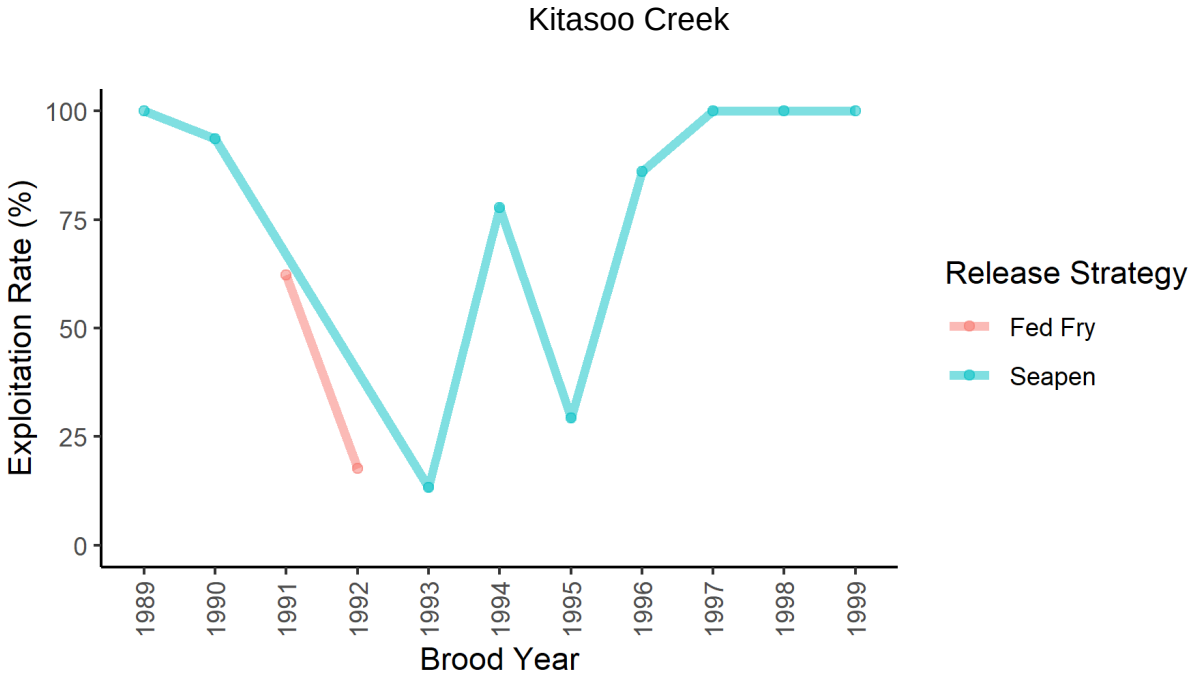

Fish Cr + Airport Channel
Exploitation Rate (%)
100
75
50
25
0
1980
1981
1985
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

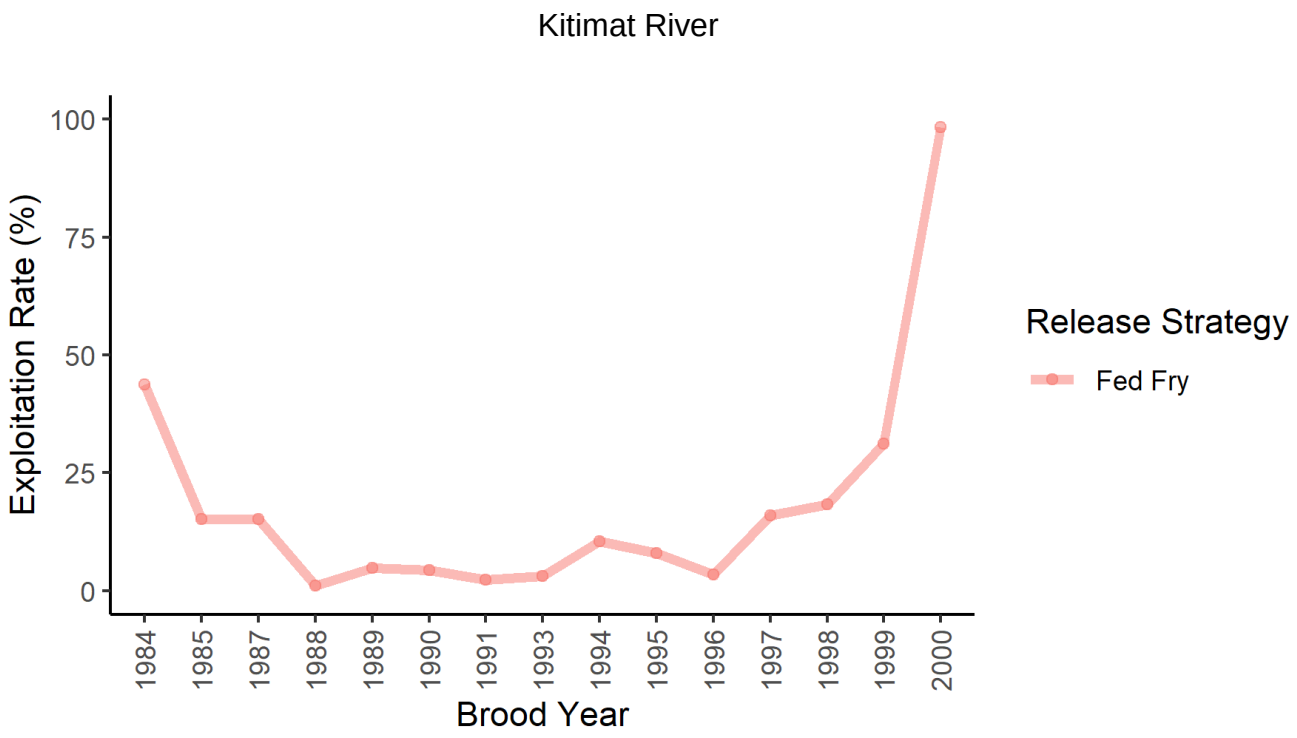

Harrison River
Exploitation Rate (%)
100
75
50
25
0
1983
1984
1985
Brood Year
Release Strategy
Fed Fry

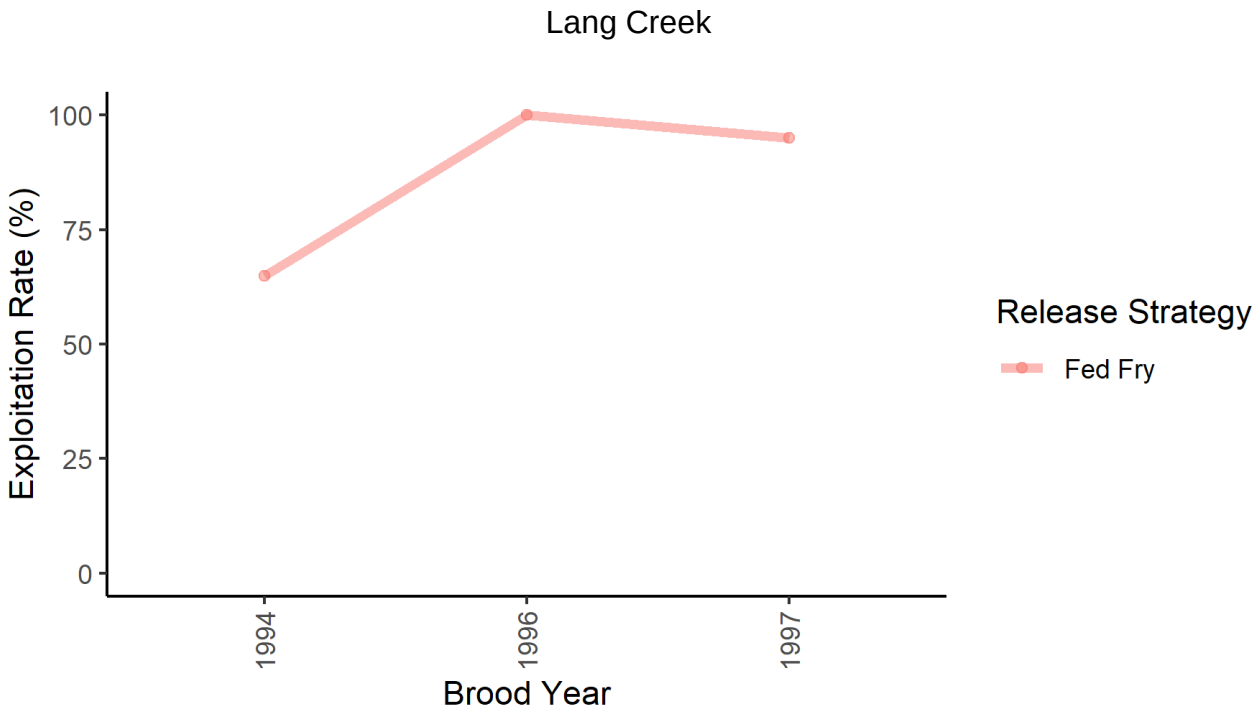

Hirsch Creek
Exploitation Rate (%)
100
75
50
25
0
1988
1990
1991
1992
1993
1994
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

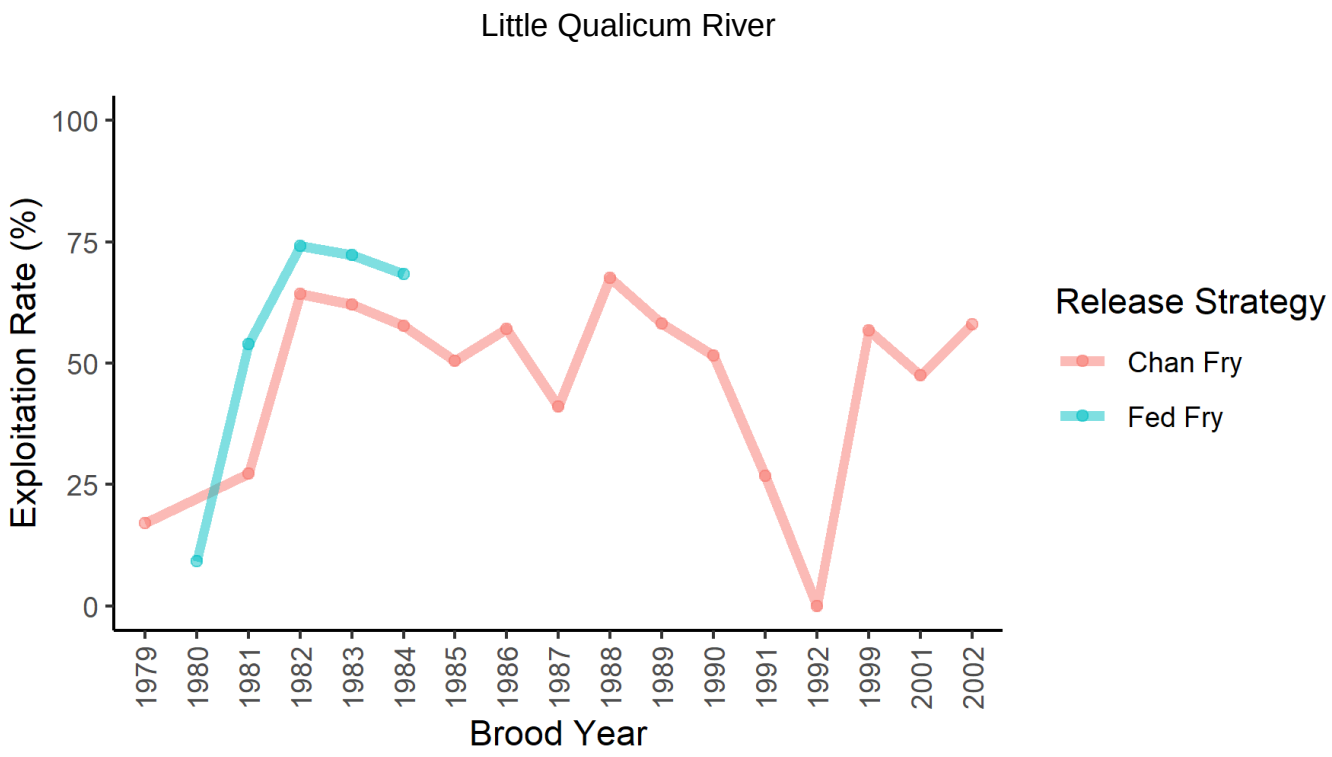

Inch Creek
Exploitation Rate (%)
100
75
50
25
0
1977
1978
1979
1980
1982
1983
1984
1985
1986
1987
1988
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry
Unfed

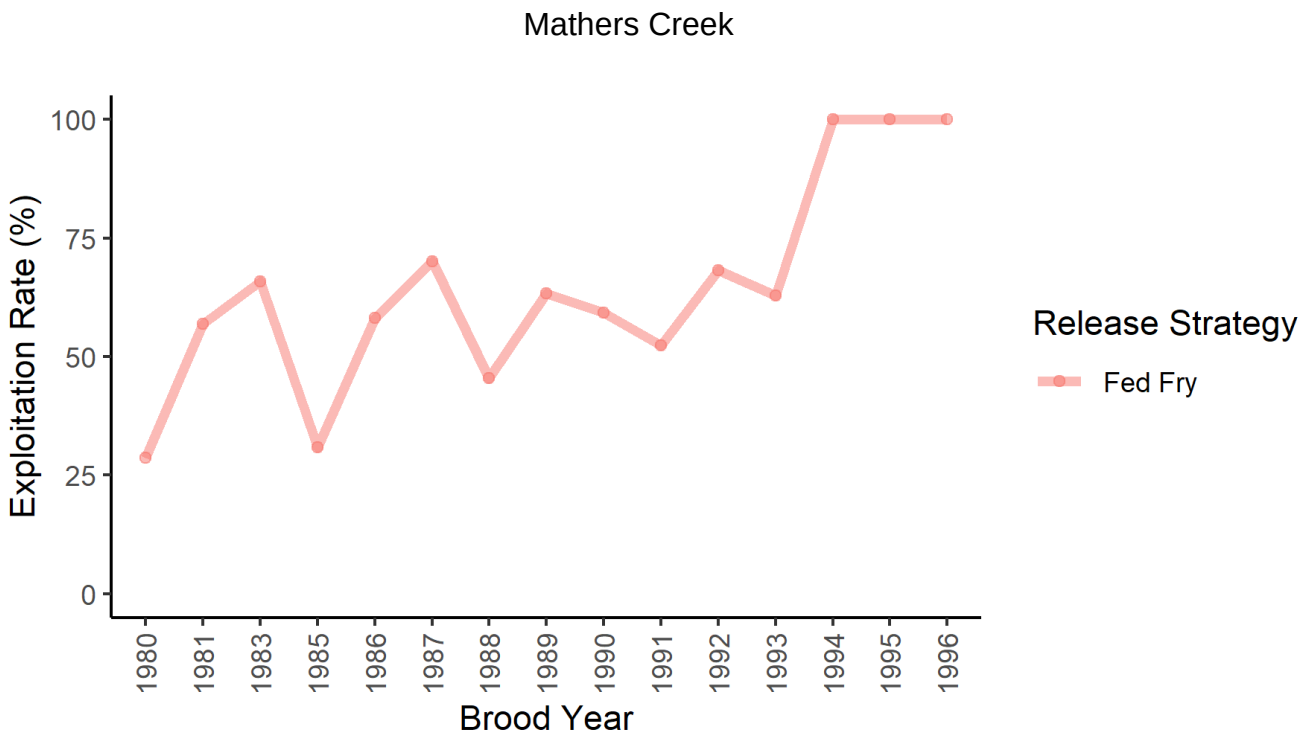

Kildala River
Exploitation Rate (%)
100
75
50
25
0
1985
1987
1988
1989
1995
1996
1997
Brood Year
Release Strategy
Fed Fry

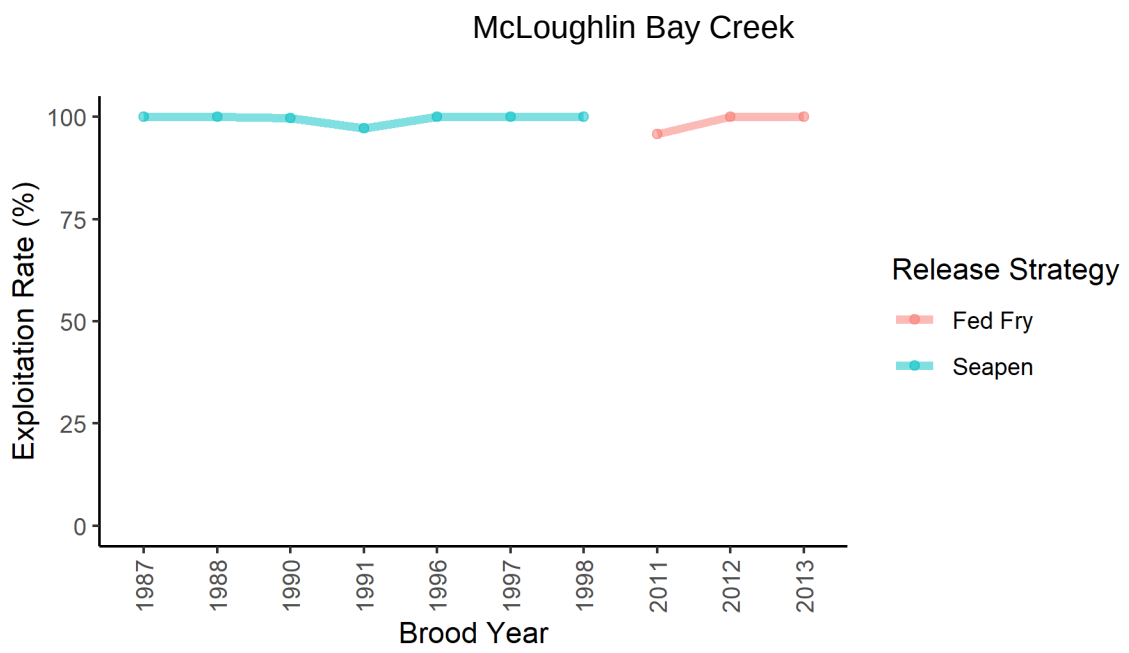

Kitasoo Creek
Exploitation Rate (%)
100
75
50
25
0
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
Brood Year
Release Strategy
Fed Fry
Seapen

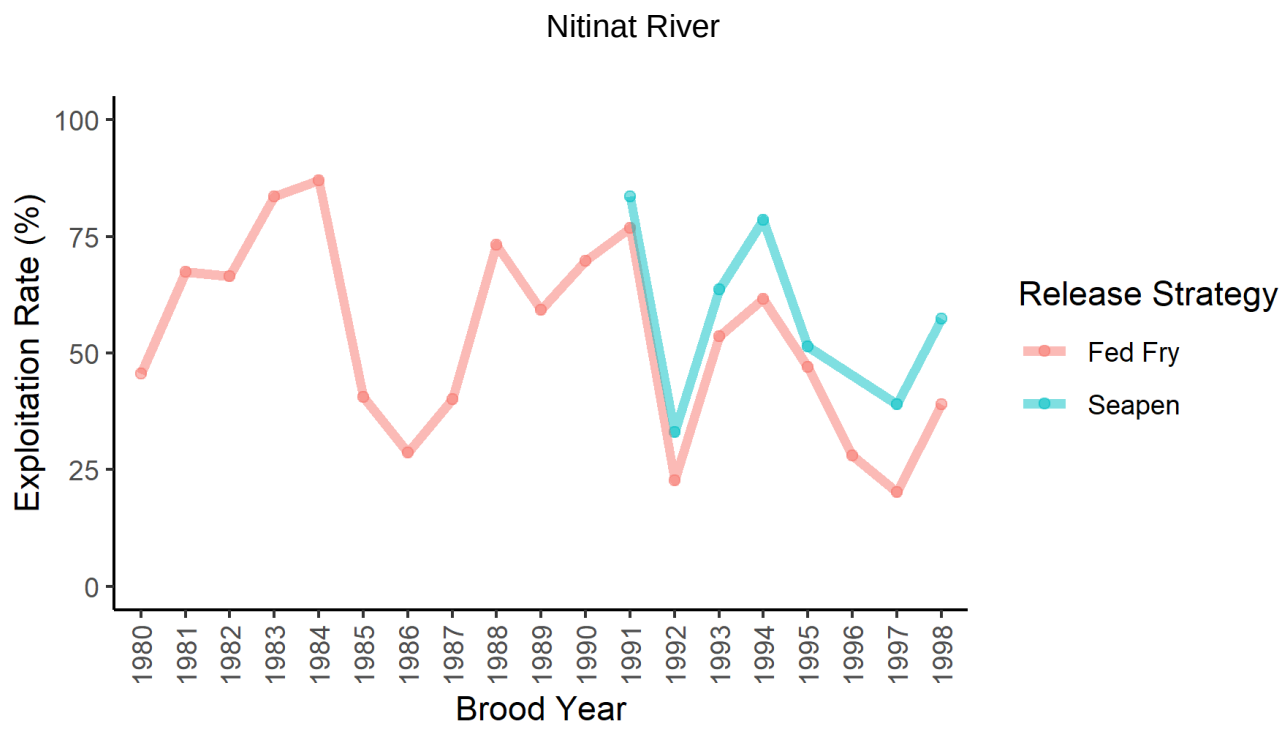

Kitimat River
Exploitation Rate (%)
100
75
50
25
0
1984
1985
1987
1988
1989
1990
1991
1993
1994
1995
1996
1997
1998
1999
2000
Brood Year
Release Strategy
Fed Fry

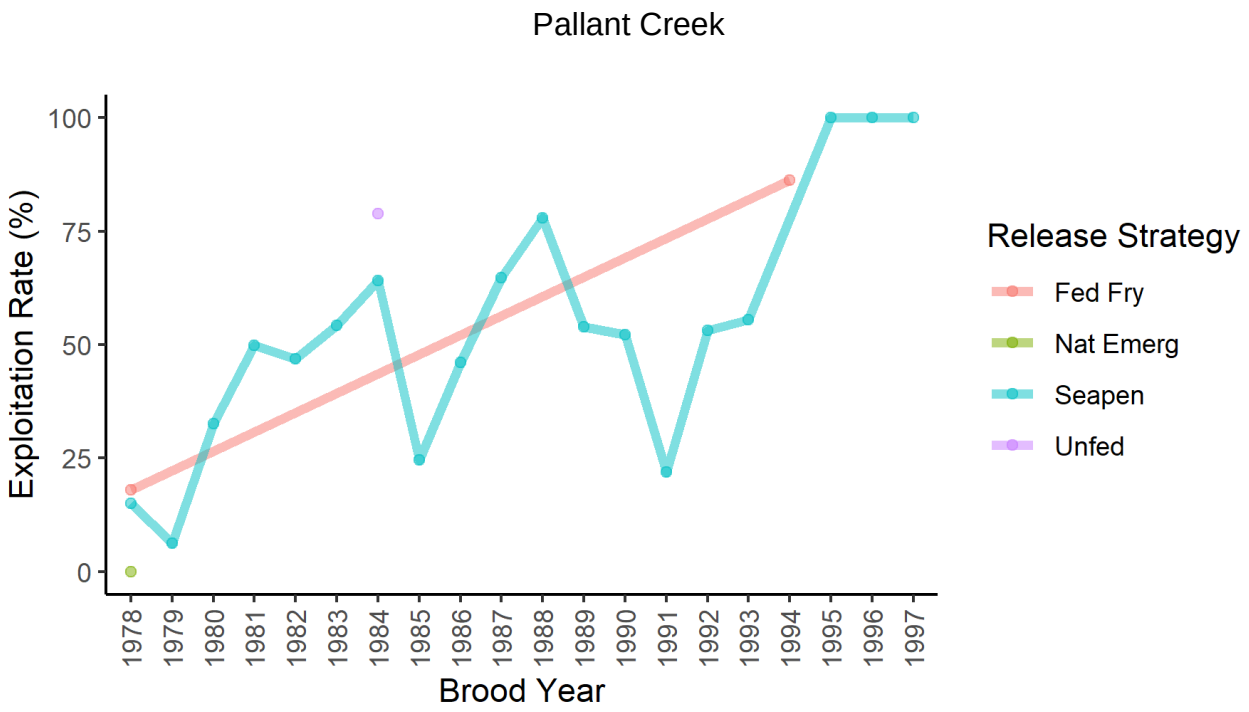

Lang Creek
Exploitation Rate (%)
100
75
50
25
0
1994
1996
1997
Brood Year
Release Strategy
Fed Fry

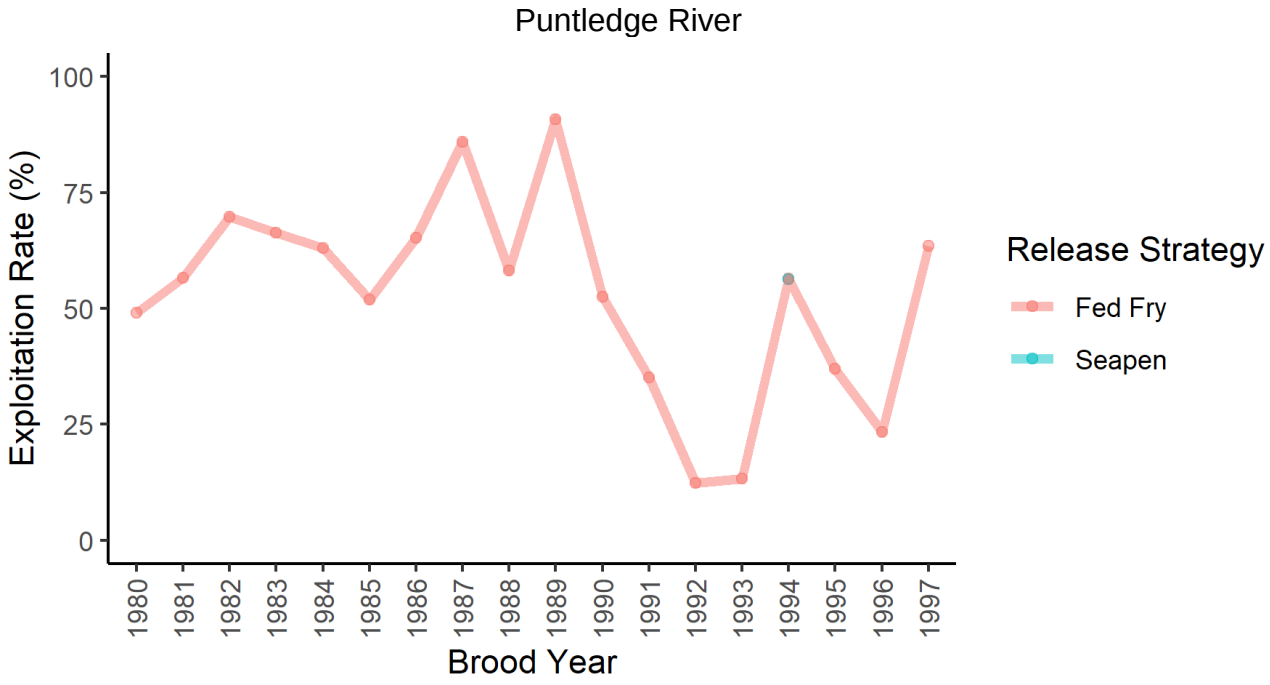

Little Qualicum River
Exploitation Rate (%)
100
75
50
25
0
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1999
2001
2002
Brood Year
Release Strategy
Chan Fry
Fed Fry

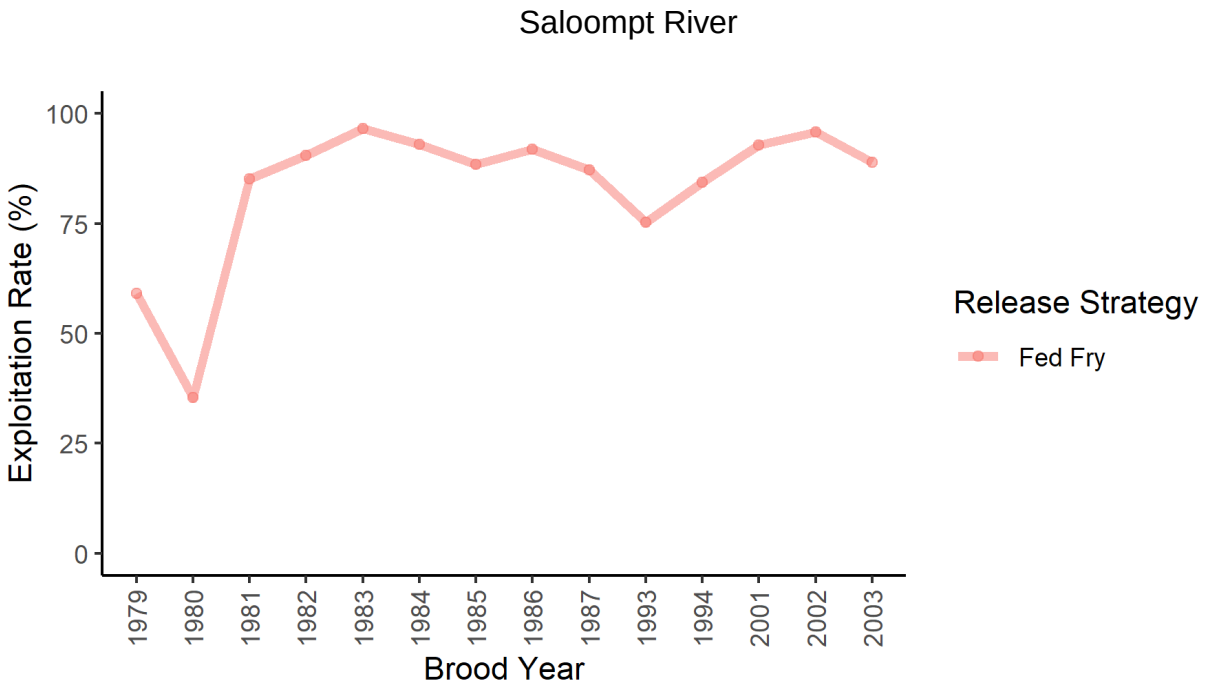

Mathers Creek
Exploitation Rate (%)
100
75
50
25
0
1980
1981
1983
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Brood Year
Release Strategy
Fed Fry

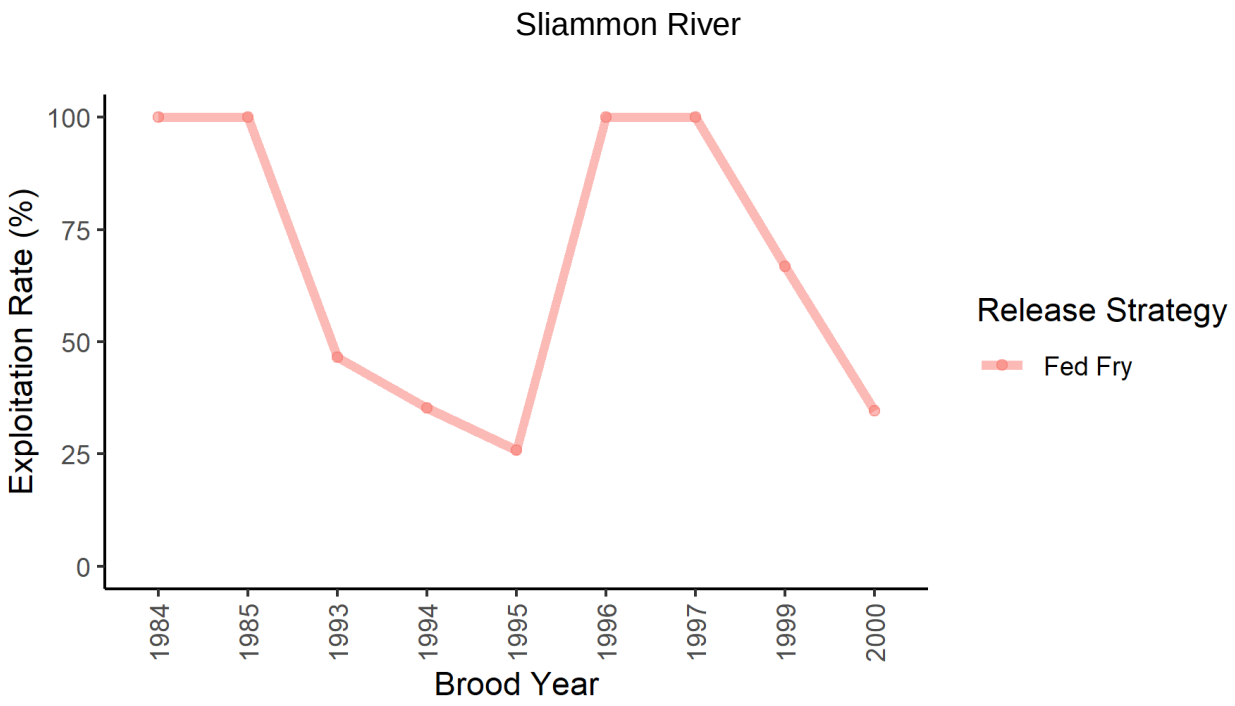

McLoughlin Bay Creek
Exploitation Rate (%)
100
75
50
25
0
1987
1988
1990
1991
1996
1997
1998
2011
2012
2013
Brood Year
Release Strategy
Fed Fry
Seapen

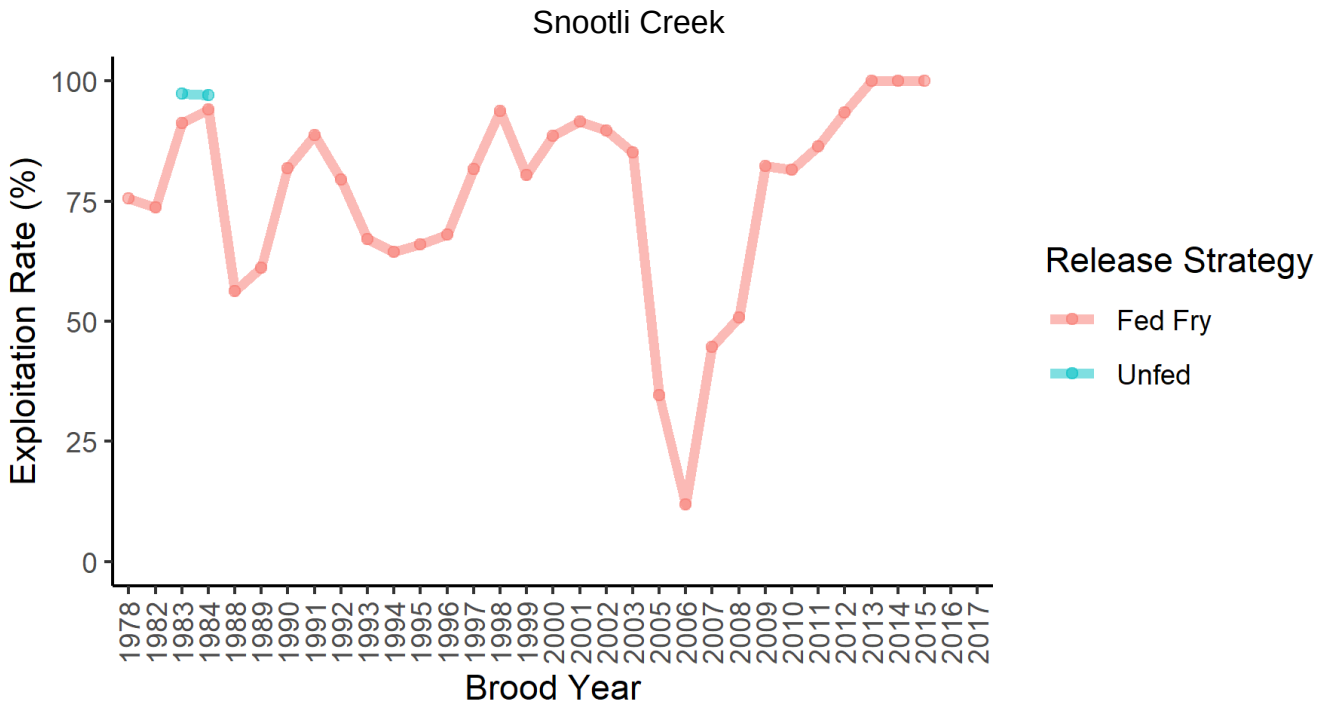

Nitinat River
Exploitation Rate (%)
100
75
50
25
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Brood Year
Release Strategy
Fed Fry
Seapen

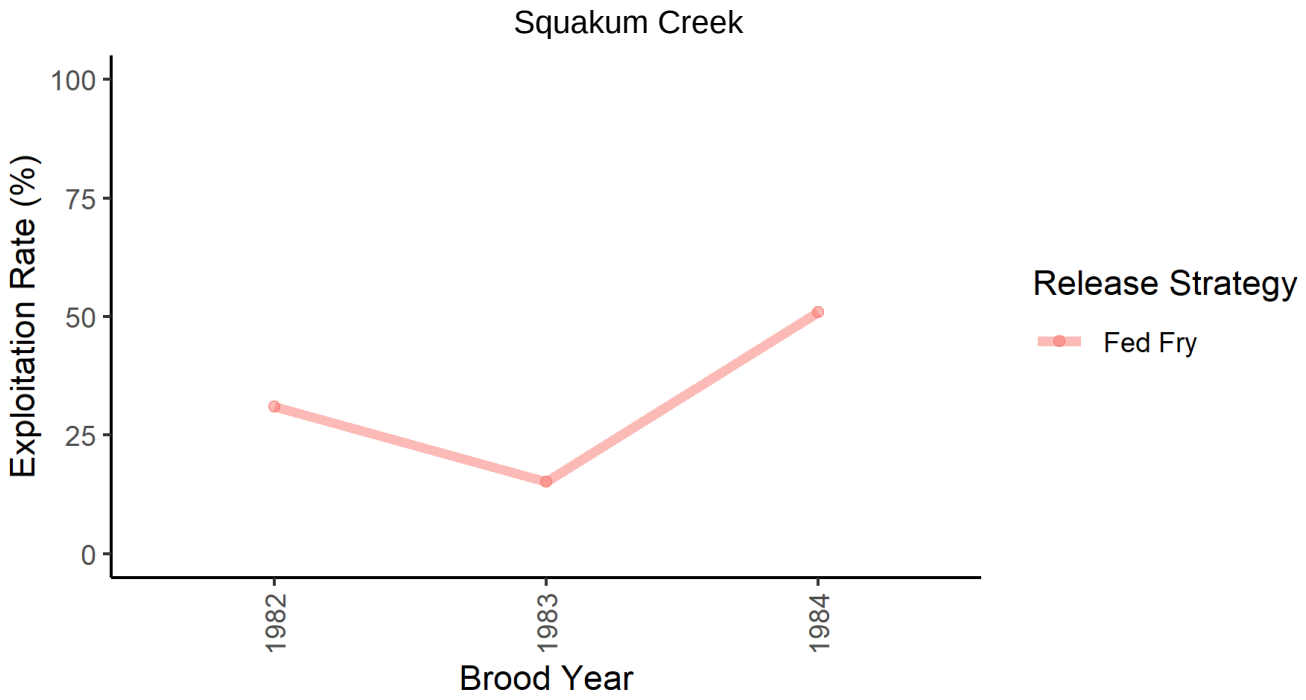

Pallant Creek
Exploitation Rate (%)
100
75
50
25
0
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Fed Fry
Nat Emerg
Seapen
Unfed

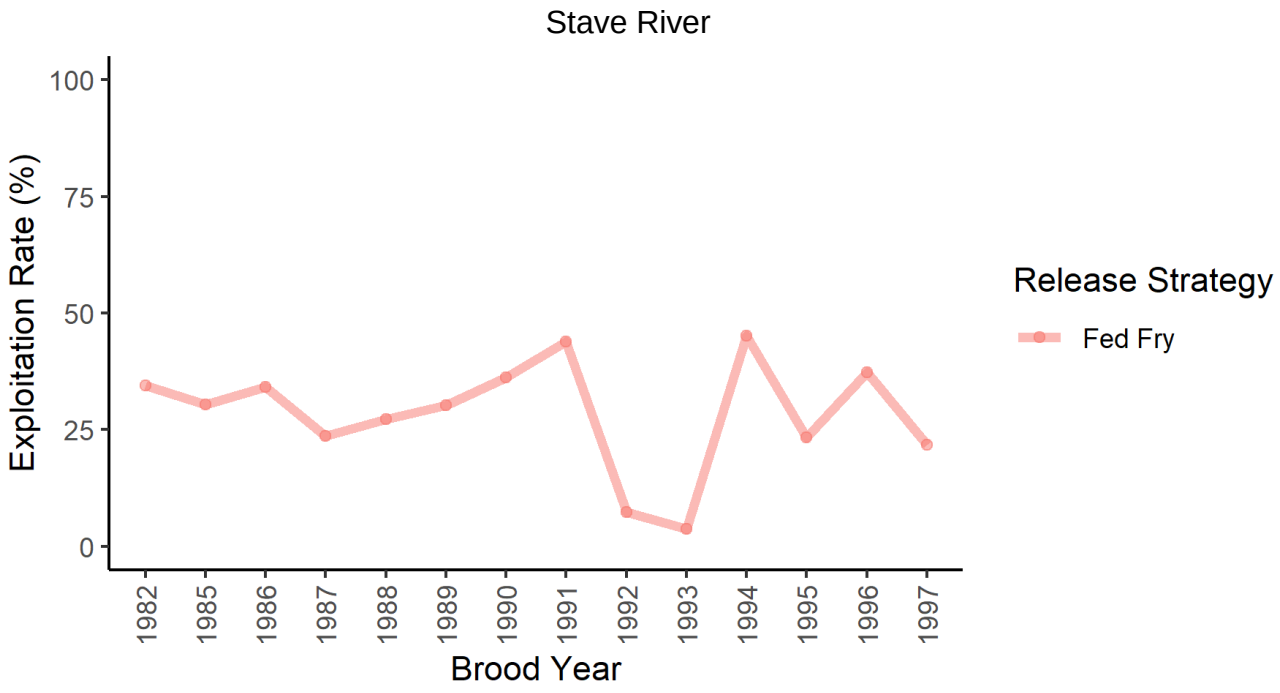

Puntledge River
Exploitation Rate (%)
100
75
50
25
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Fed Fry
Seapen

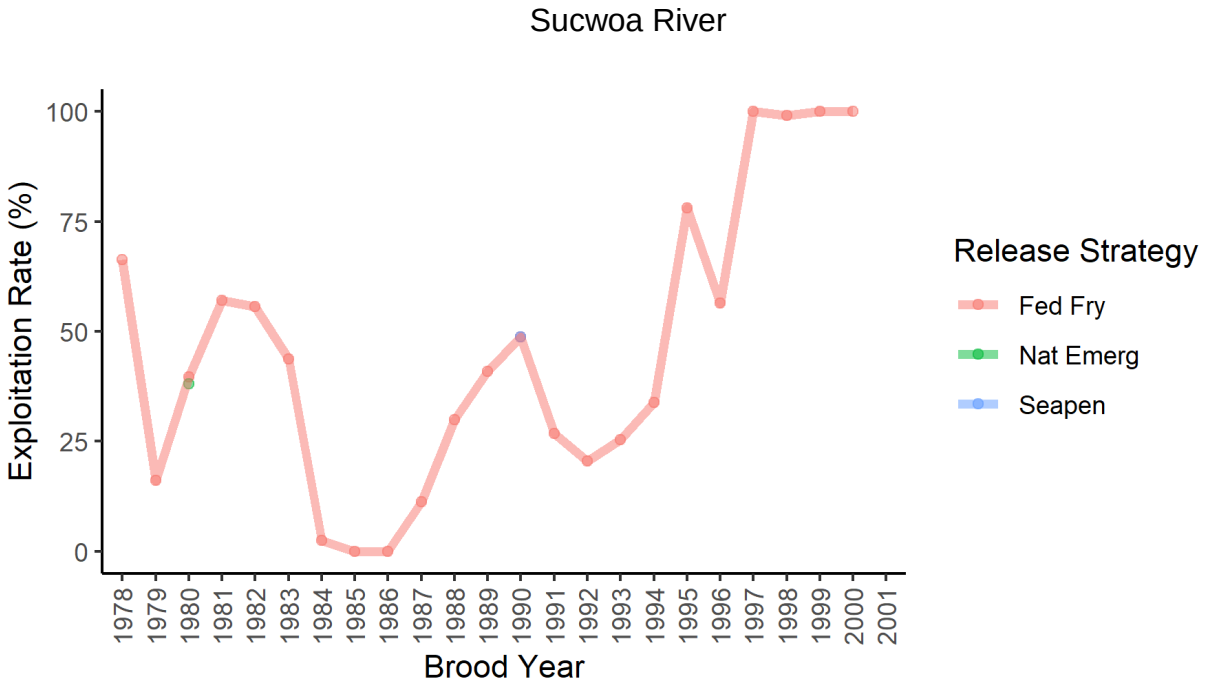

Saloompt River
Exploitation Rate (%)
100
75
50
25
0
1979
1980
1981
1982
1983
1984
1985
1986
1987
1993
1994
2001
2002
2003
Brood Year
Release Strategy
Fed Fry

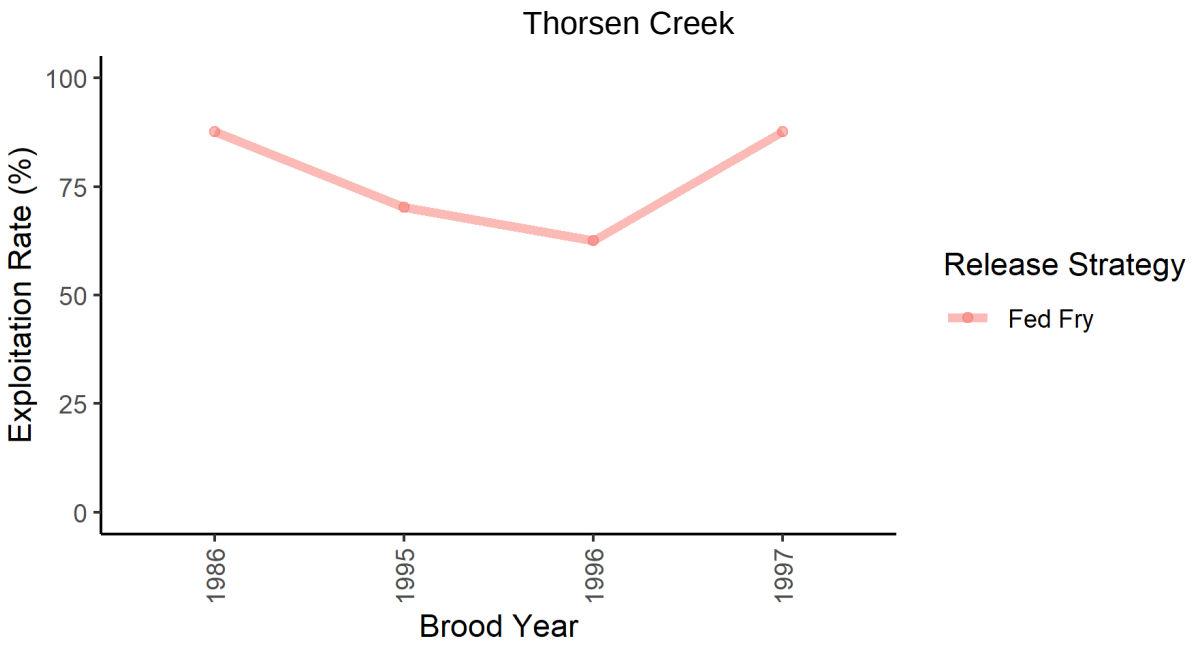

Sliammon River
Exploitation Rate (%)
100
75
50
25
0
1984
1985
1993
1994
1995
1996
1997
1999
2000
Brood Year
Release Strategy
Fed Fry


Snootli Creek
Exploitation Rate (%)
100
75
50
25
0
1978
1982
1983
1984
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Brood Year
Release Strategy
Fed Fry
Unfed


Squakum Creek
Exploitation Rate (%)
100
75
50
25
0
1982
1983
1984
Brood Year
Release Strategy
Fed Fry


Stave River
Exploitation Rate (%)
100
75
50
25
0
1982
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Brood Year
Release Strategy
Fed Fry


Sucwoa River
Exploitation Rate (%)
100
75
50
25
0
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Brood Year
Release Strategy
Fed Fry
Nat Emerg
Seapen


Thorsen Creek
Exploitation Rate (%)
100
75
50
25
0
1986
1995
1996
1997
Brood Year
Release Strategy
Fed Fry

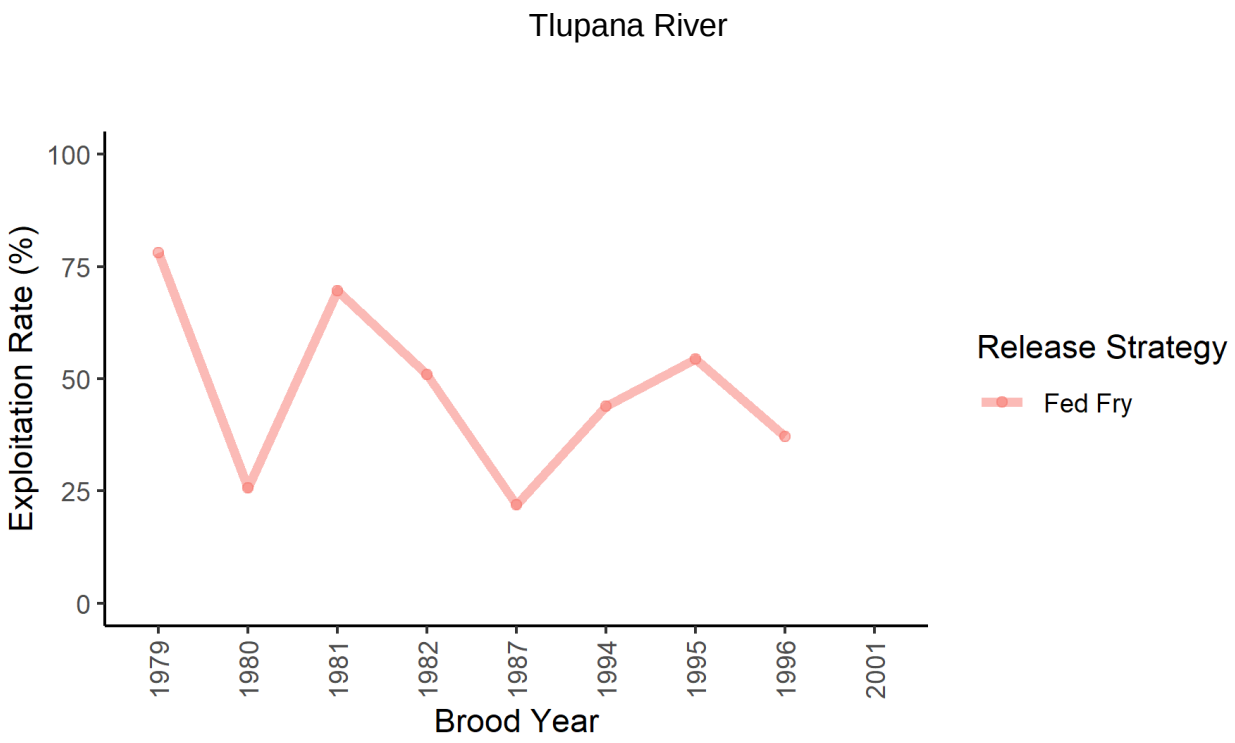
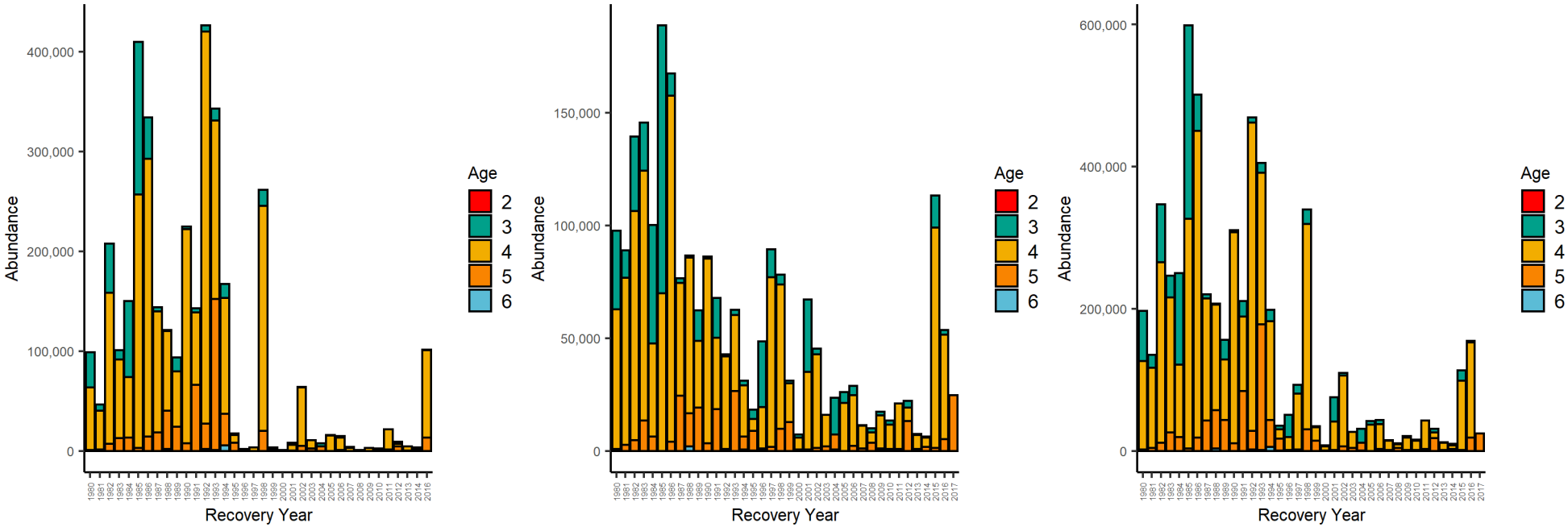
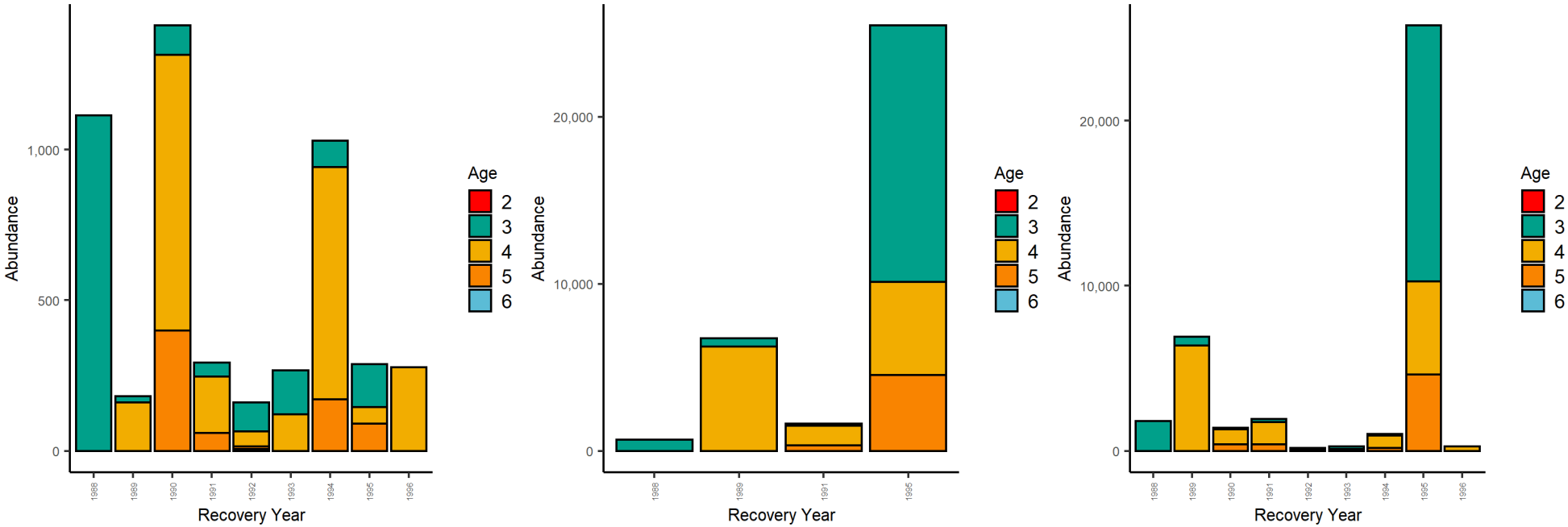

Tlupana River
Exploitation Rate (%)
100
75
50
25
0
1979
1980
1981
1982
1987
1994
1995
1996
2001
Brood Year
Release Strategy
Fed Fry

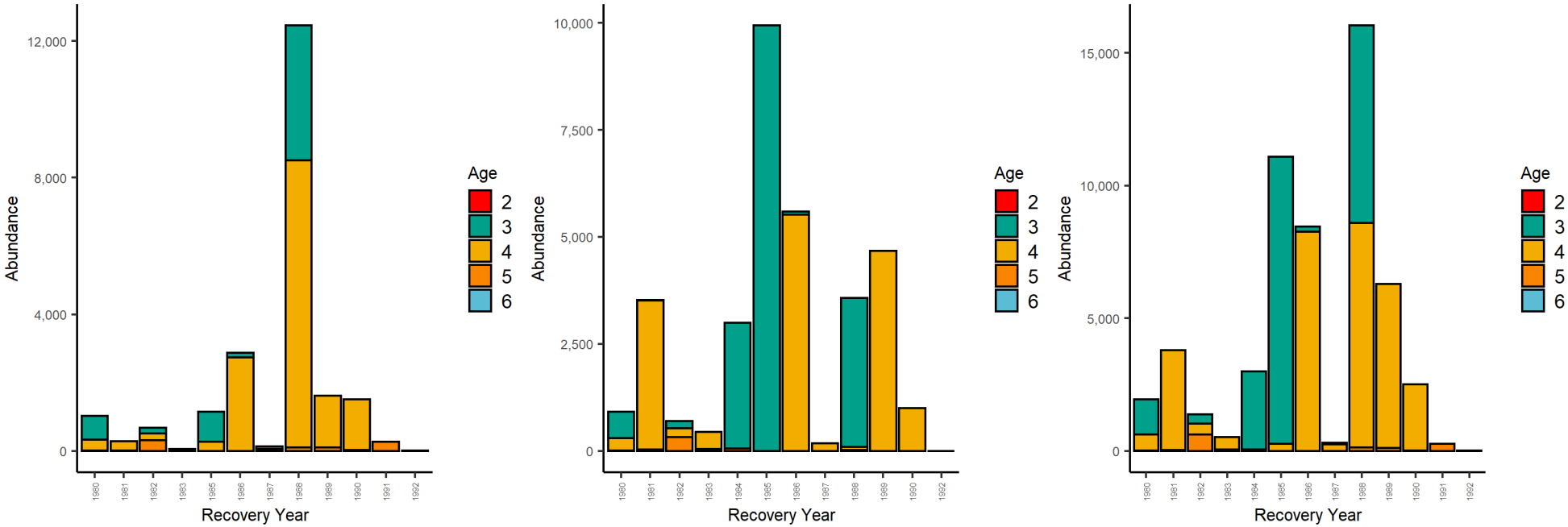
Figure 13 Age Classes in Catch, Escapement and Catch + Escapement, by Stock and Recovery Year
(Panel on the left is ages in catch marked recoveries, the middle panel is in escapement recoveries, the panel on the right is in catch plus escapement recoveries)



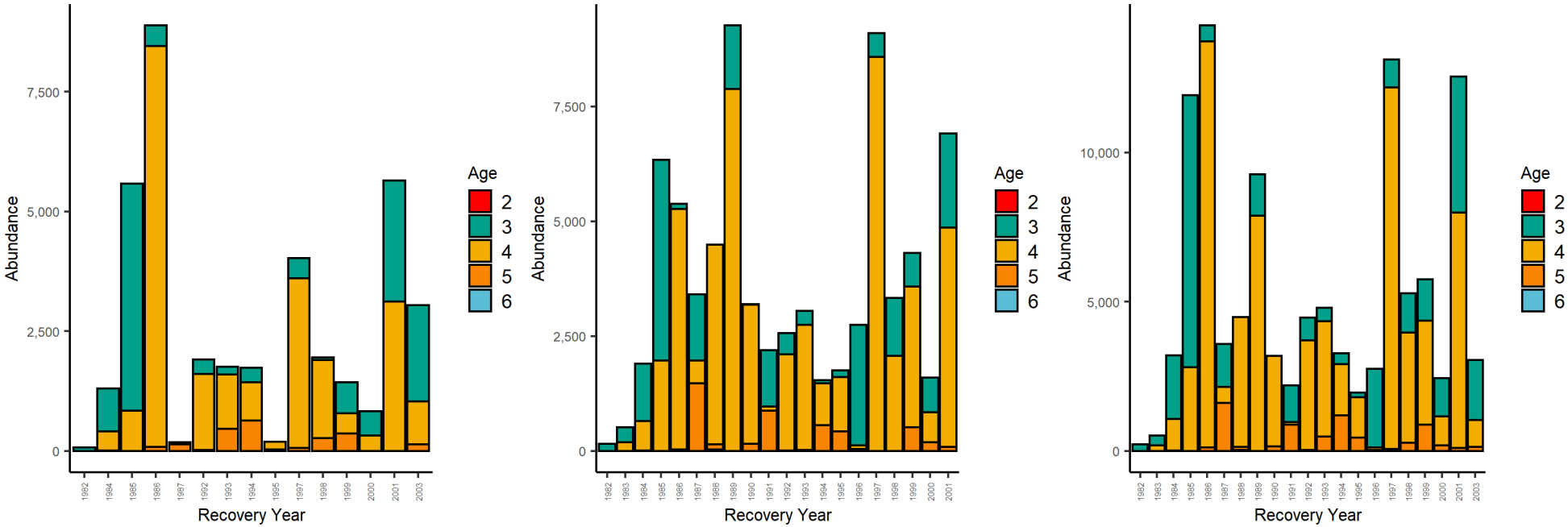
Big Qualicum River


Abundance
1,000
500
0
1988
1989
1990
1991
1992
1993
1994
1995
1996
Recovery Year
Age
2
3
4
5
6
Abundance
20,000
10,000
0
1988
1989
1991
1995
Recovery Year
Age
2
3
4
5
6
Abundance
20,000
10,000
0
1988
1989
1990
1991
1992
1993
1994
1995
1996
Recovery Year
Age
2
3
4
5
6

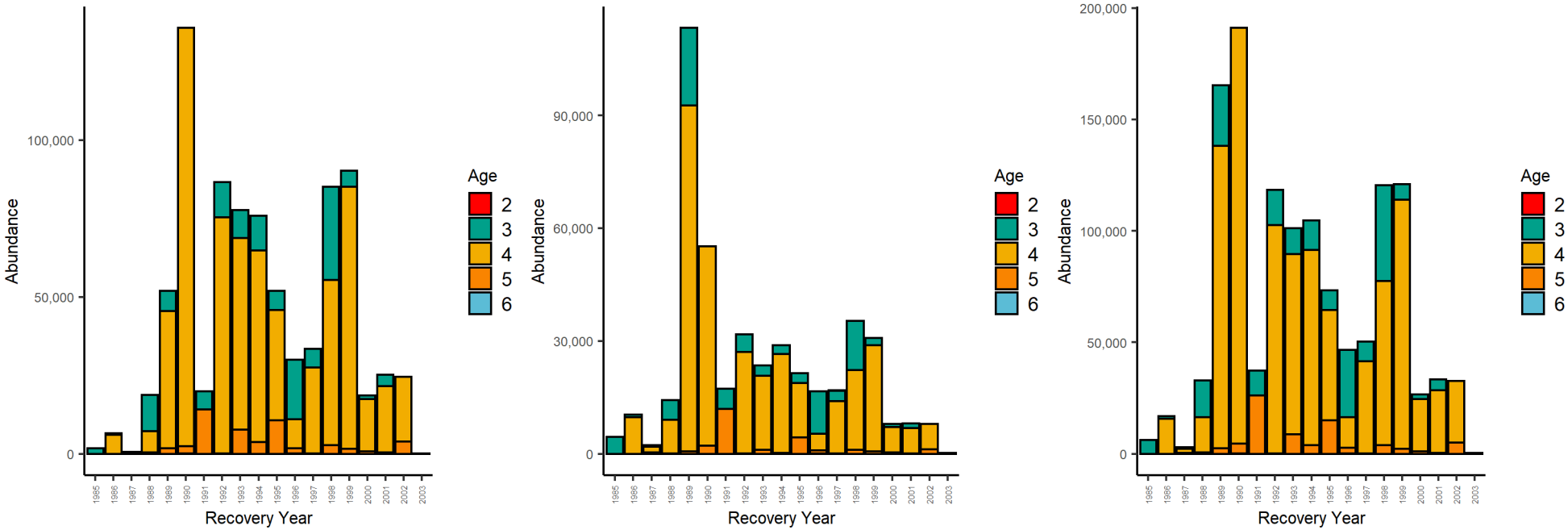
Bish Creek



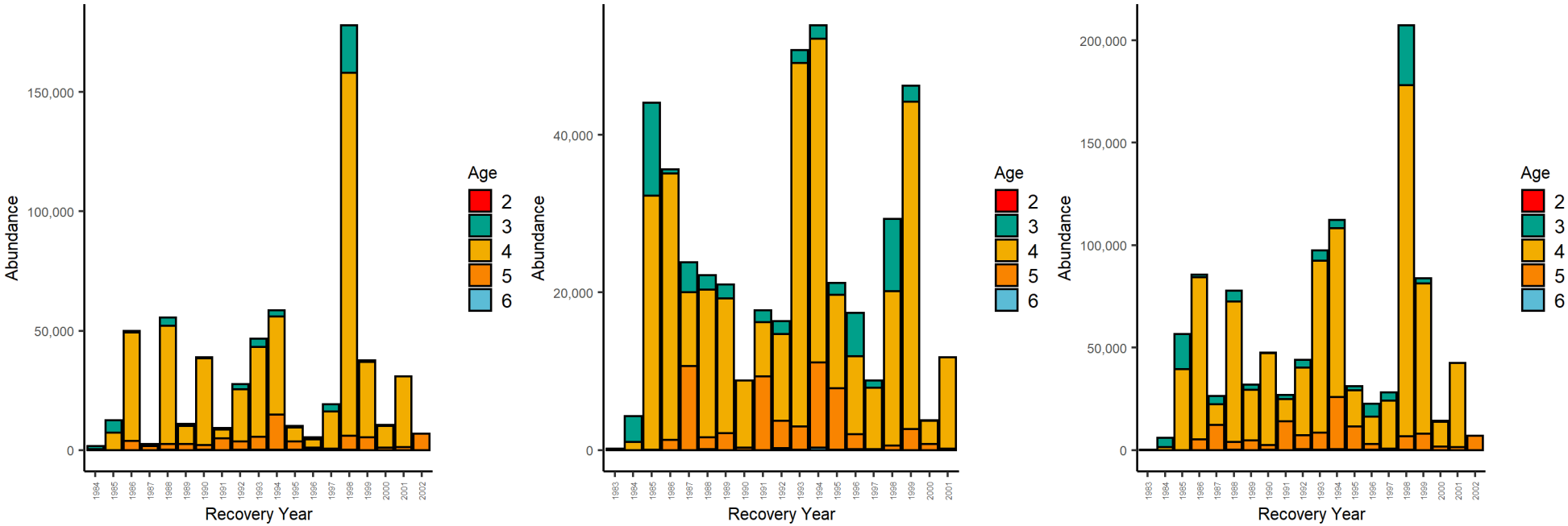
Blaney Creek



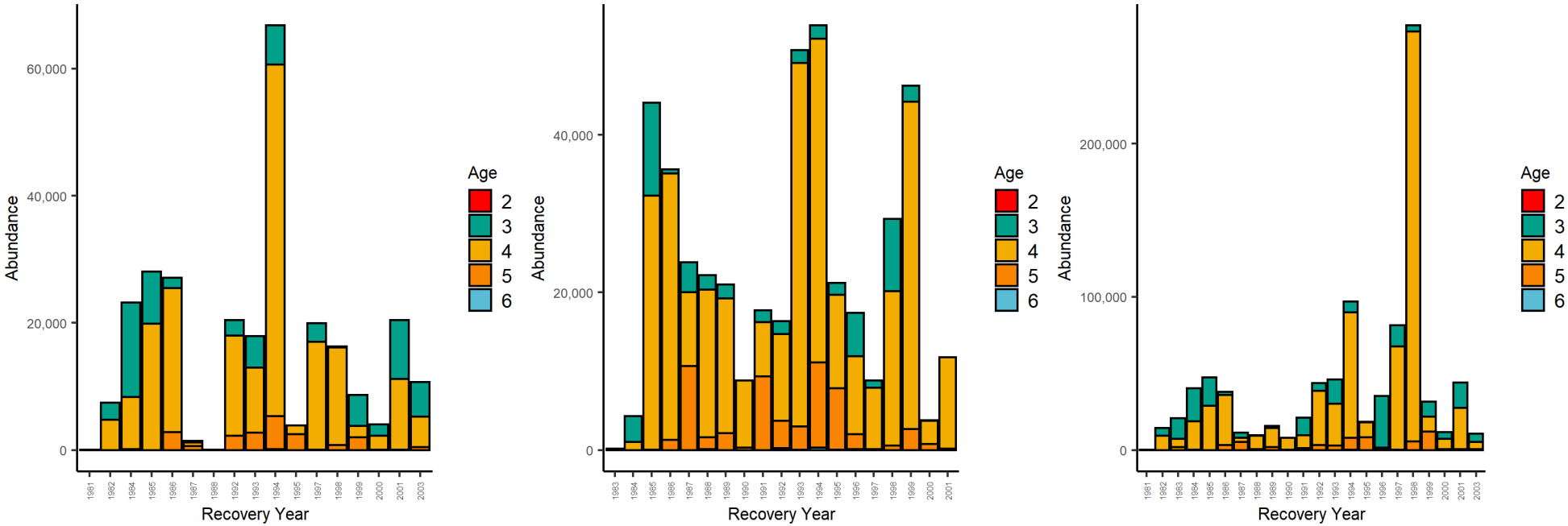
Canton Creek



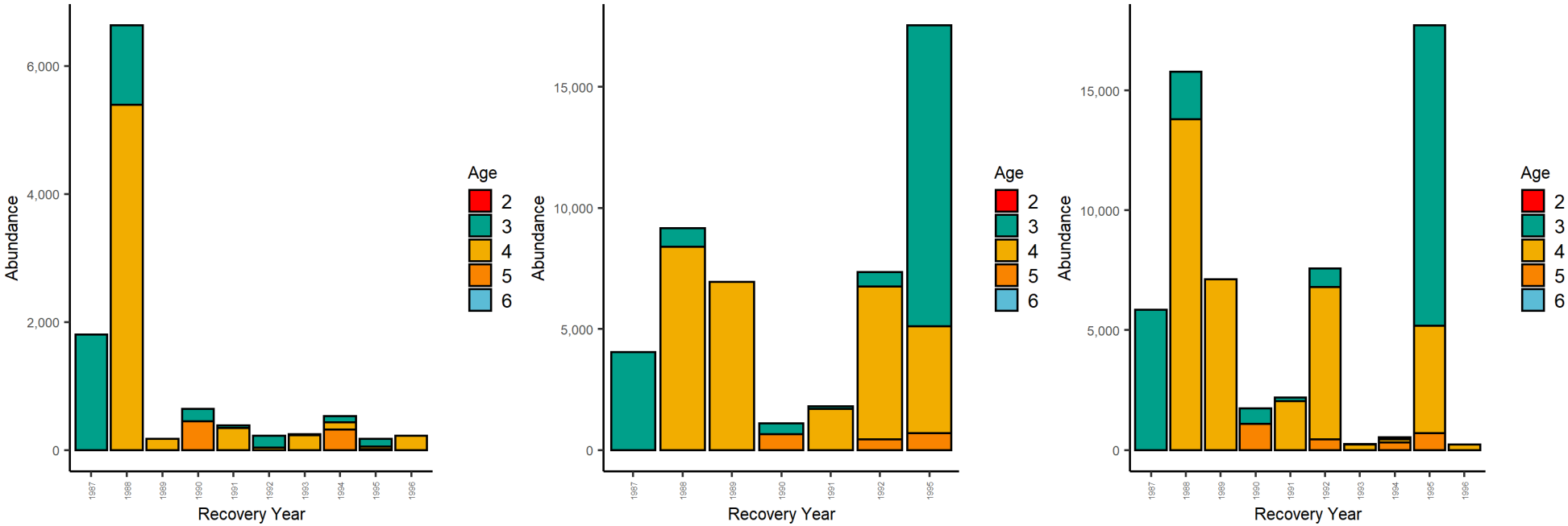
Chehalis River



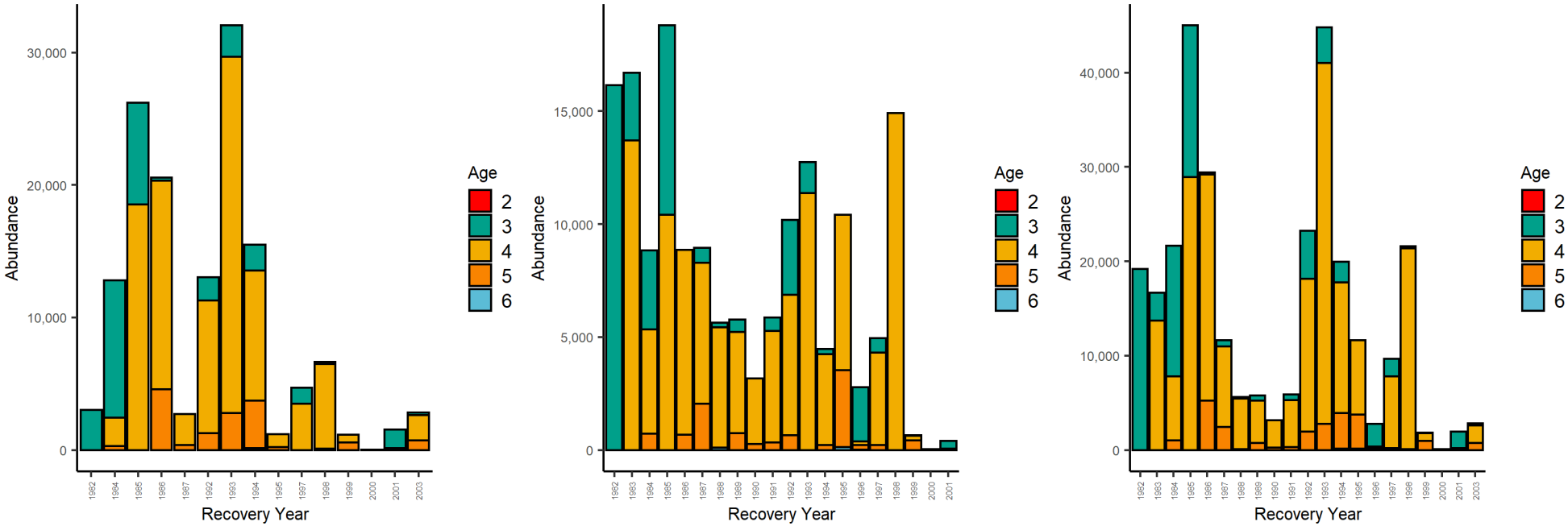
Chilliwack River



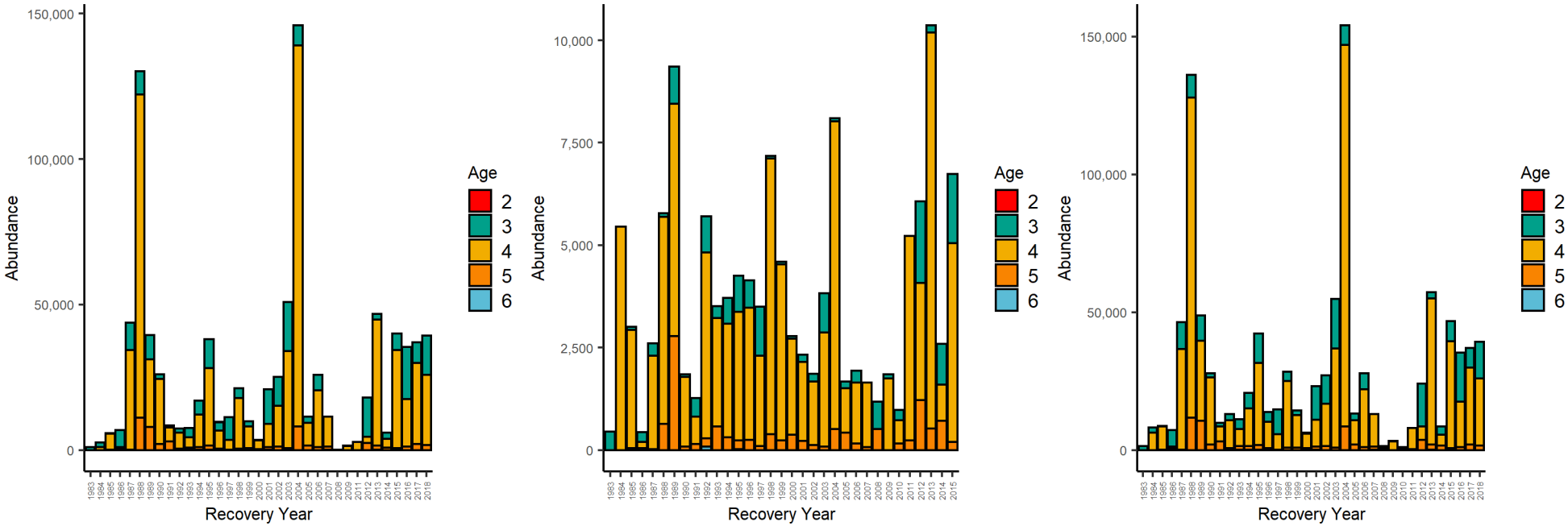
Conuma River


Abundance
6,000
4,000
2,000
0
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Recovery Year
Age
2
3
4
5
6
Abundance
15,000
10,000
5,000
0
1987
1988
1989
1990
1991
1992
1995
Recovery Year
Age
2
3
4
5
6
Abundance
15,000
10,000
5,000
0
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Recovery Year
Age
2
3
4
5
6

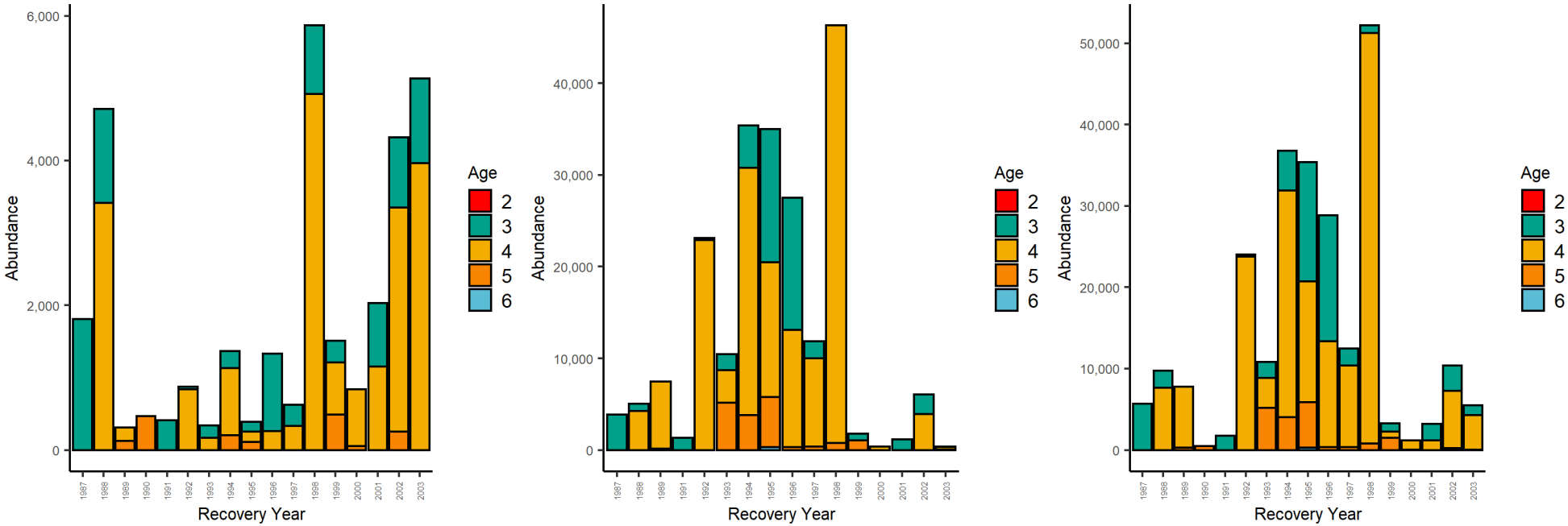
Dala River



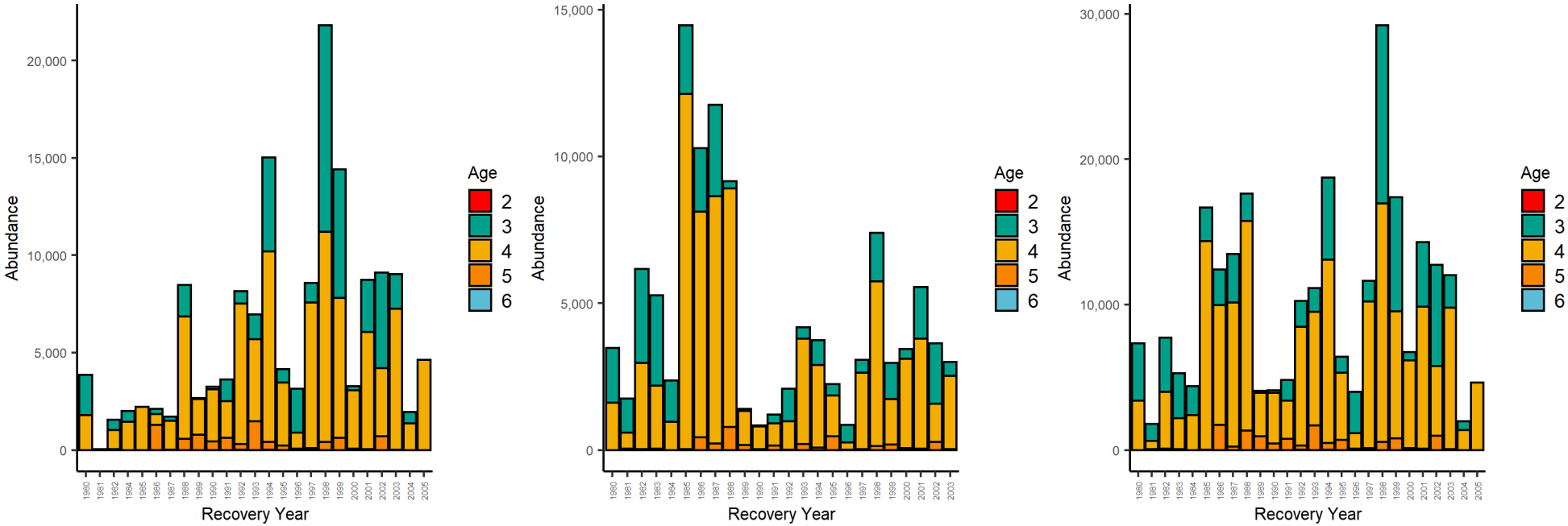
Deserted River



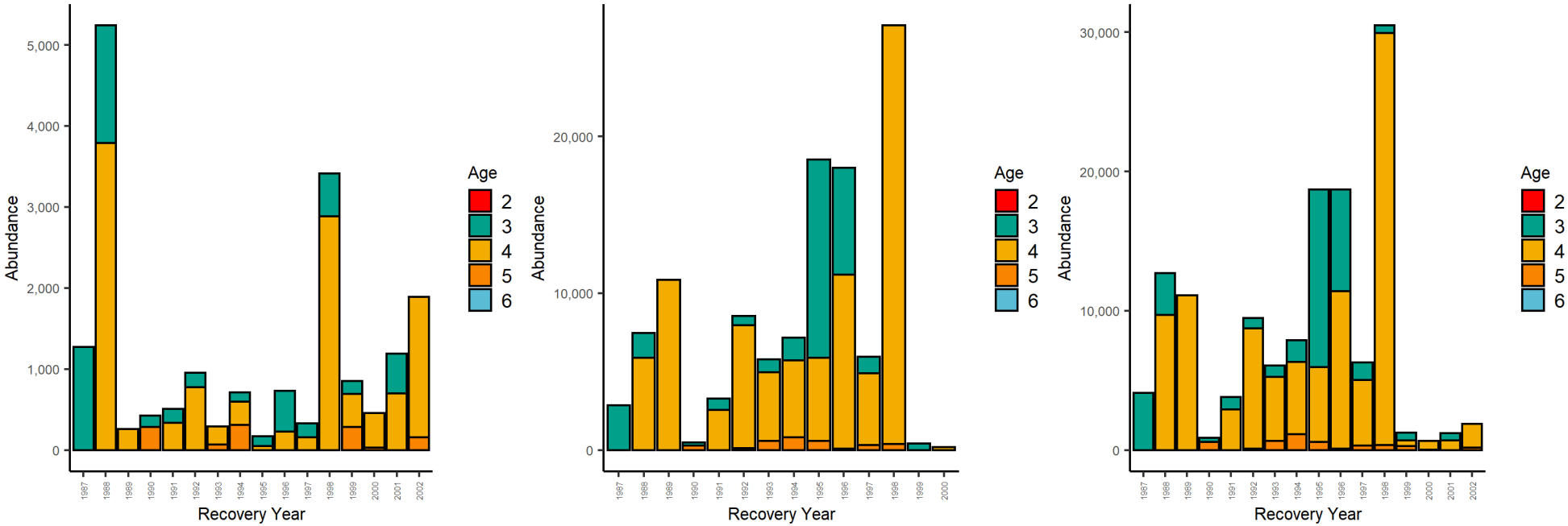
Fish Creek + Airport Channel



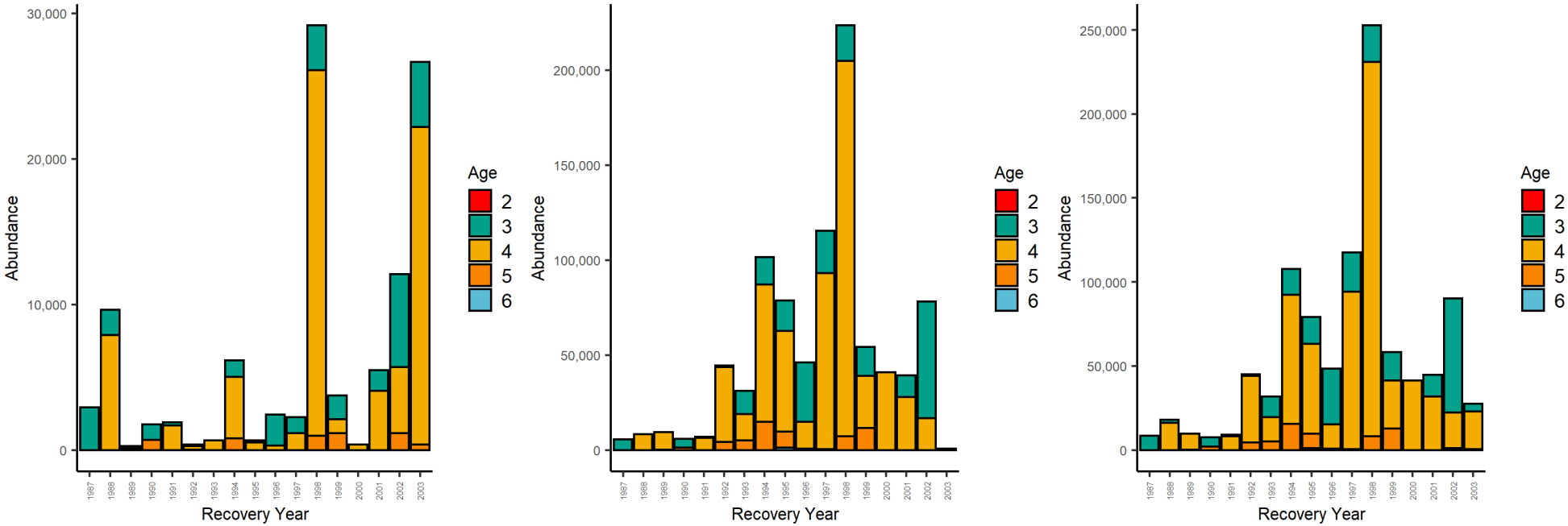
Hirsch Creek



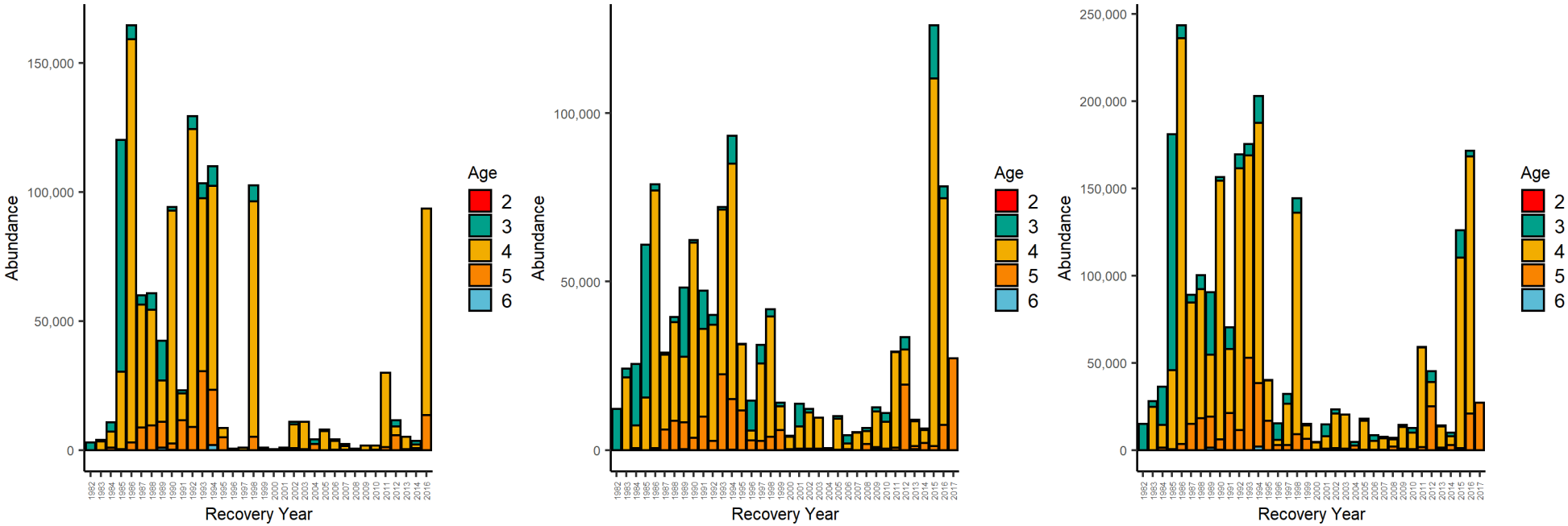
Inch Creek



Kildala River



Kitimat River



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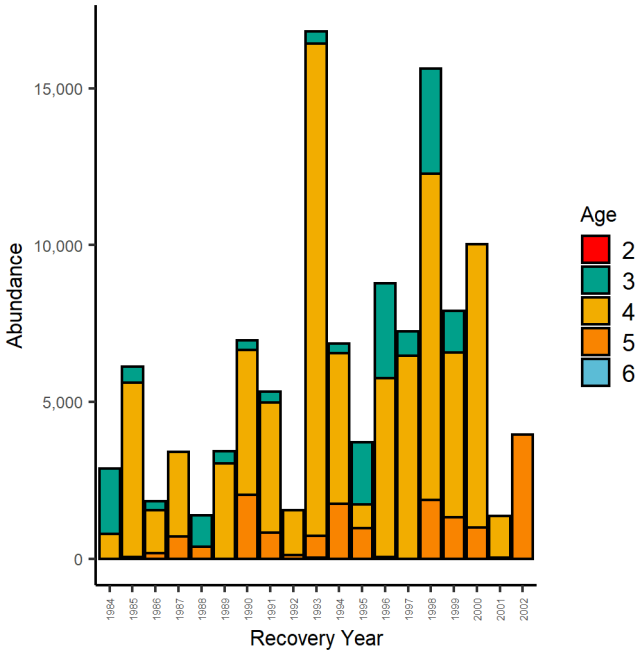
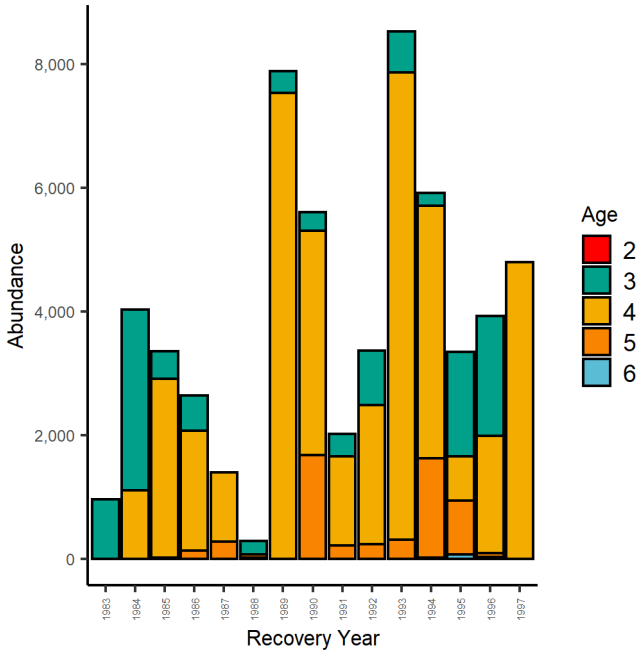
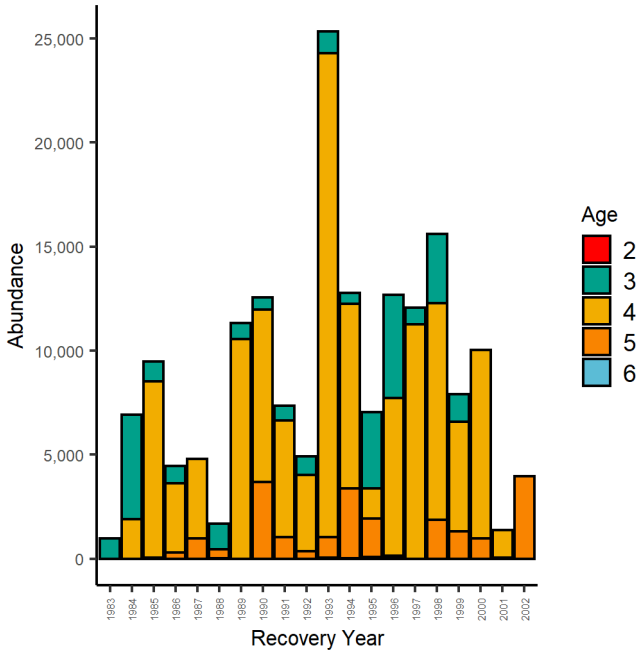
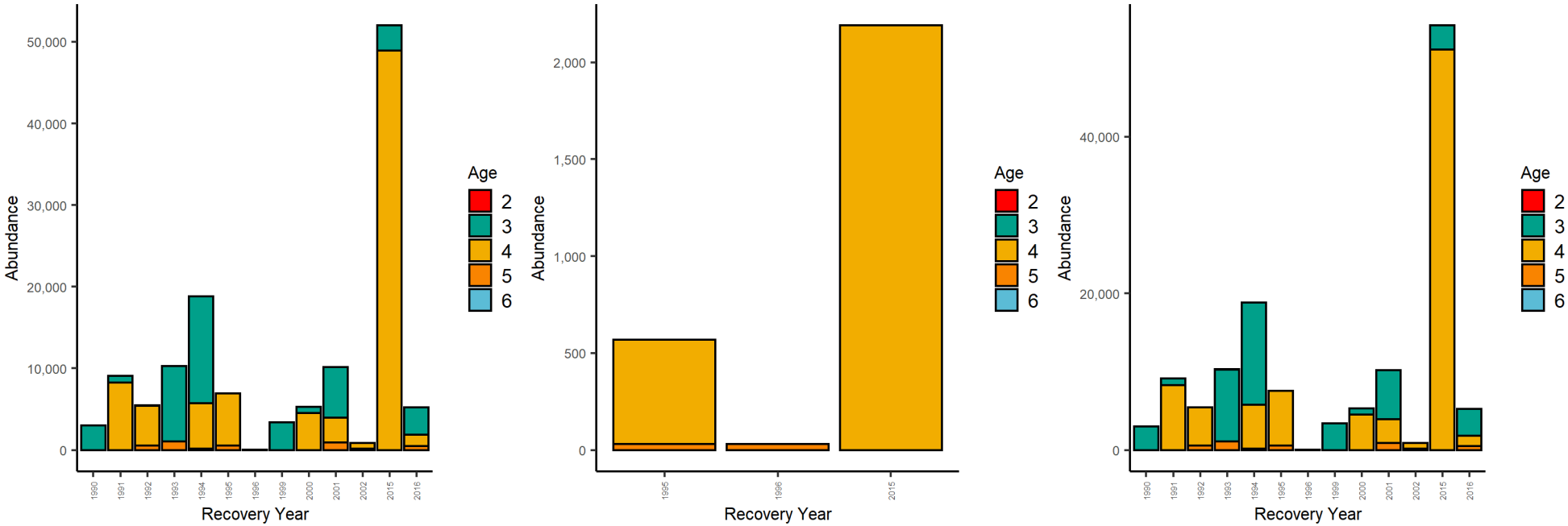


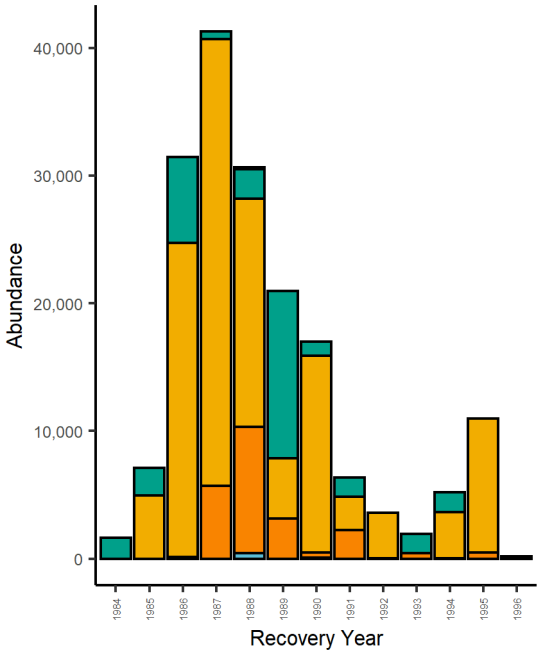


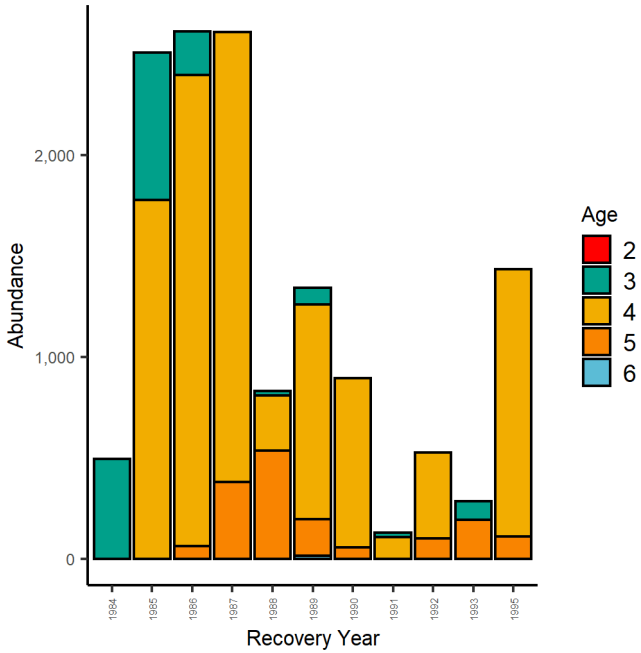


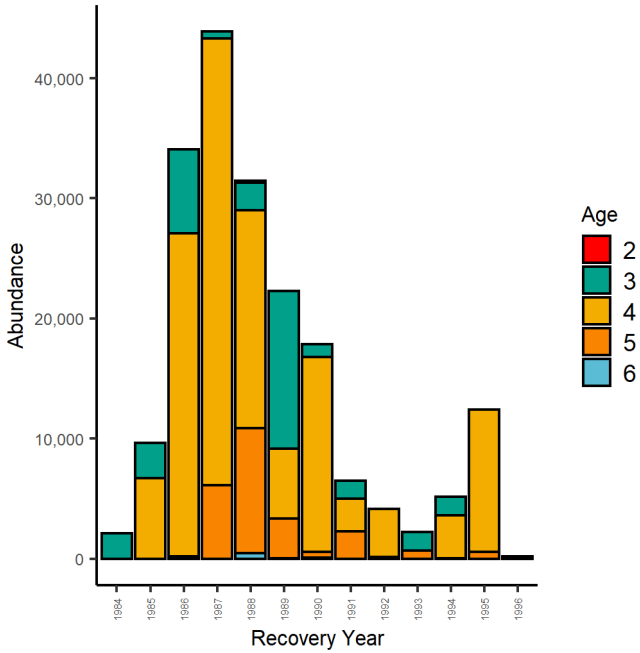
Mathers Creek



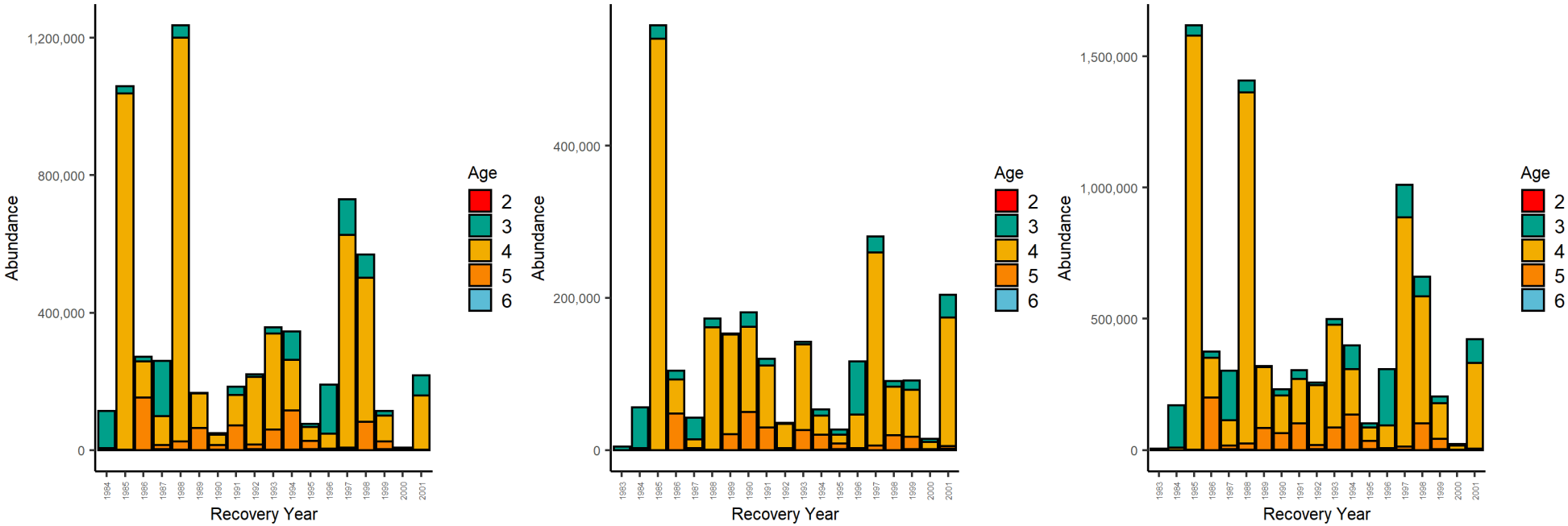
McLoughlin Bay Creek







Necleetsconnay River



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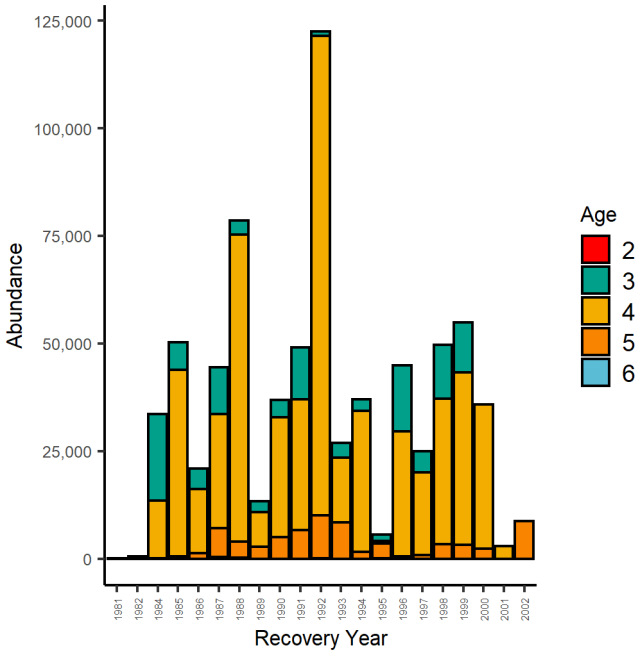

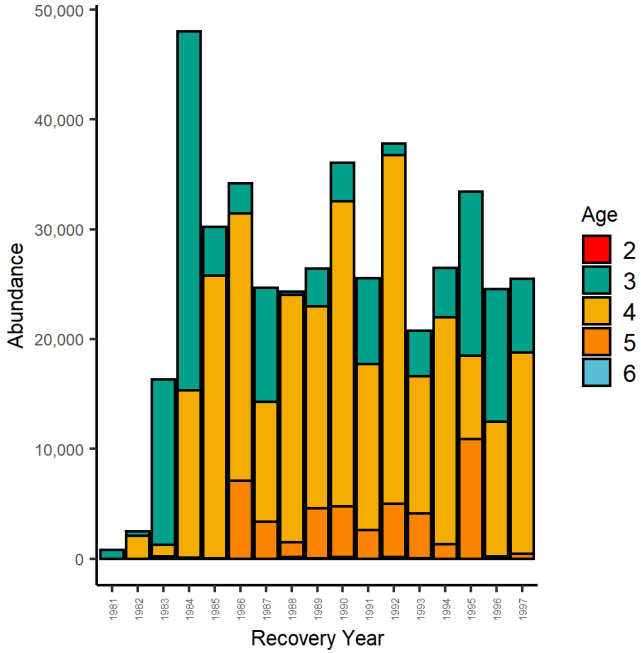

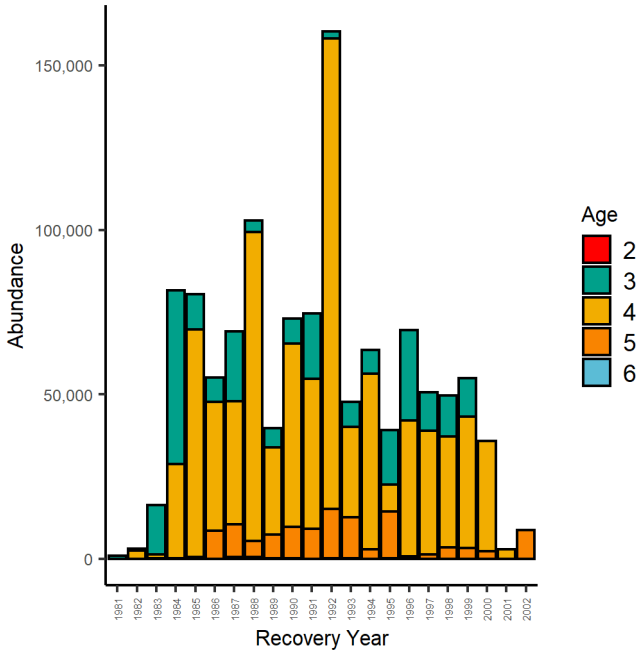

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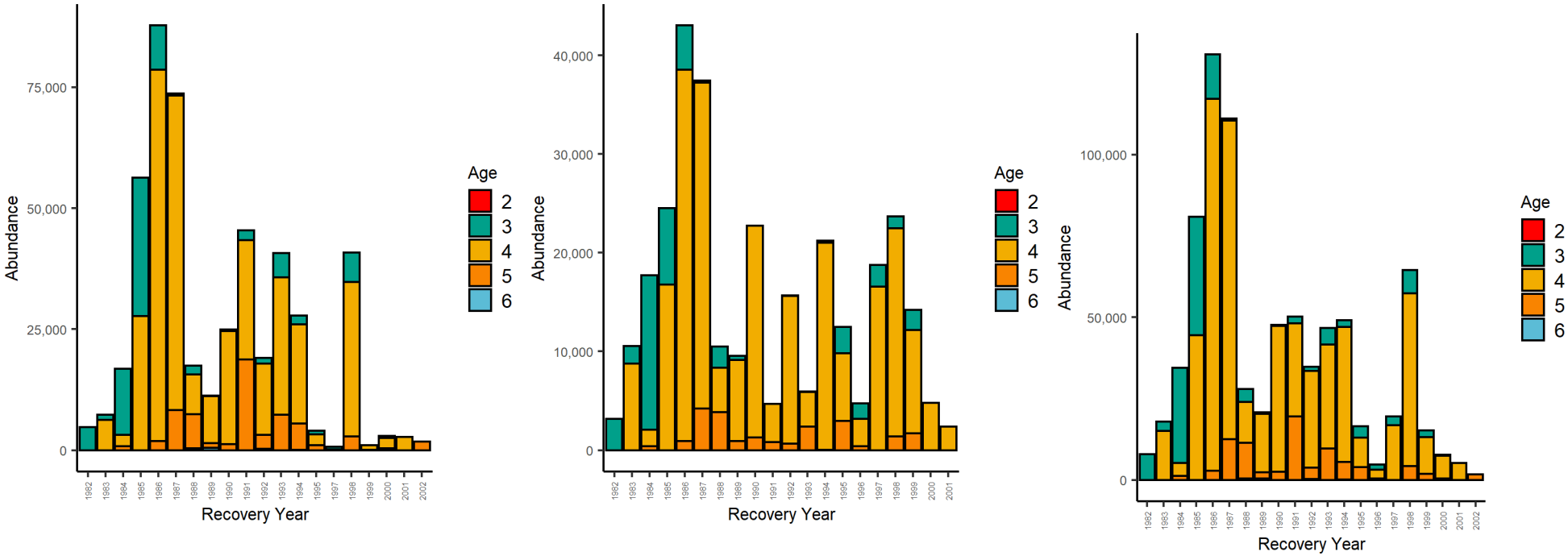
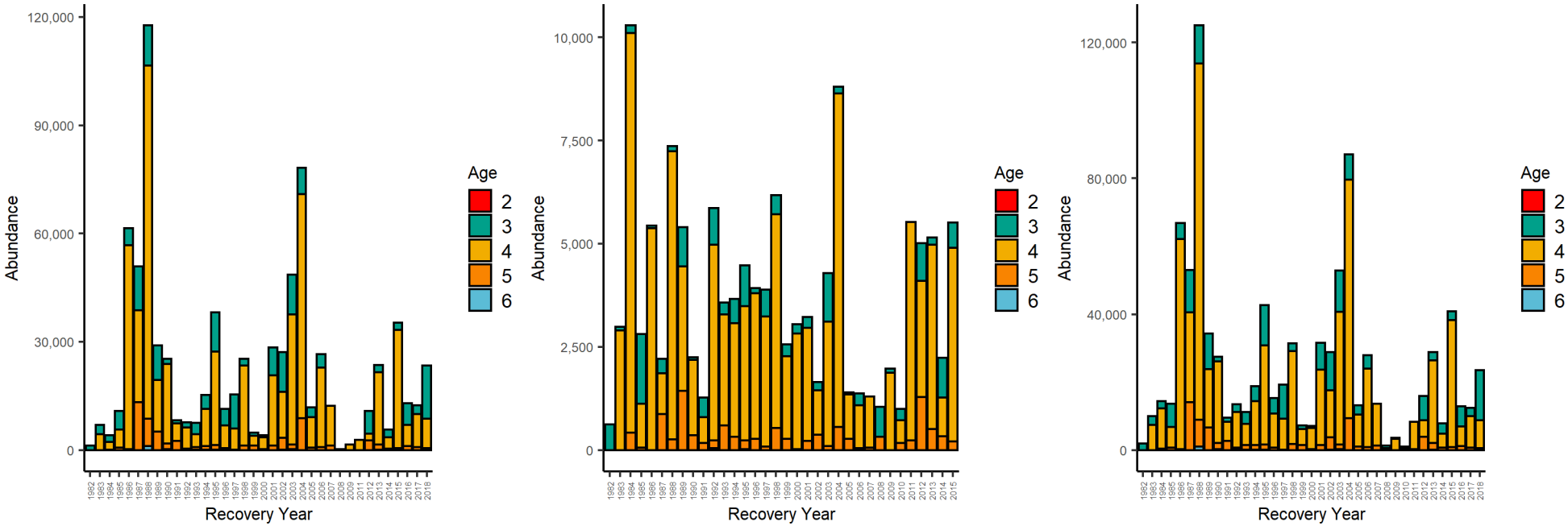
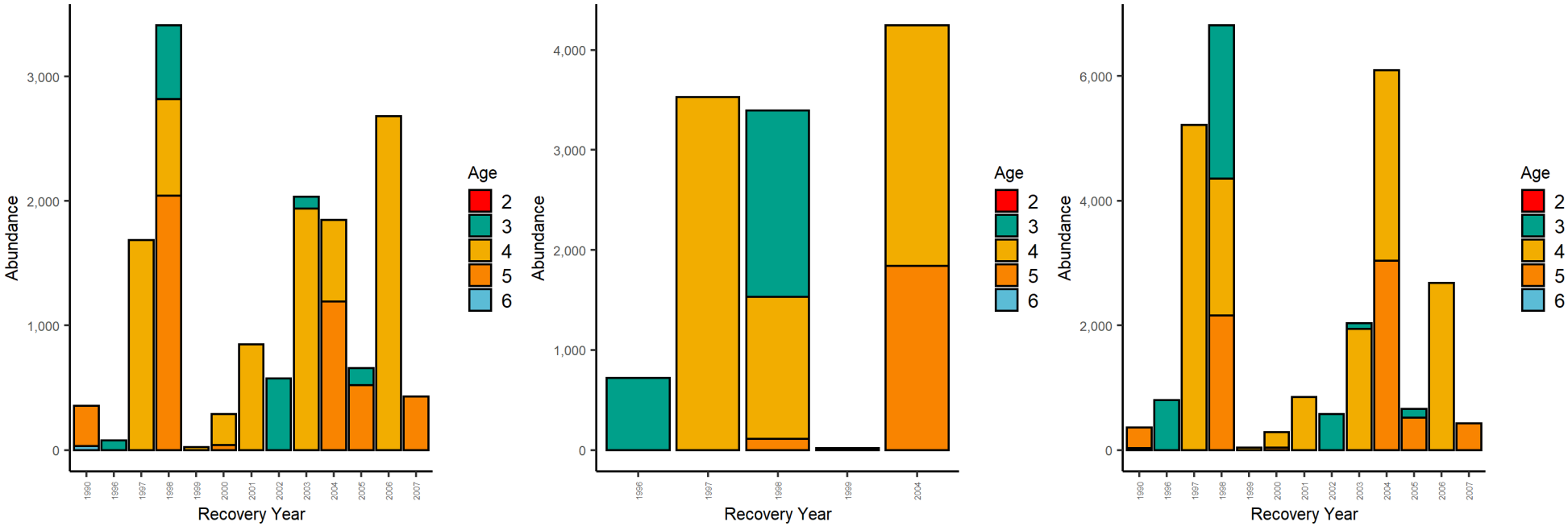


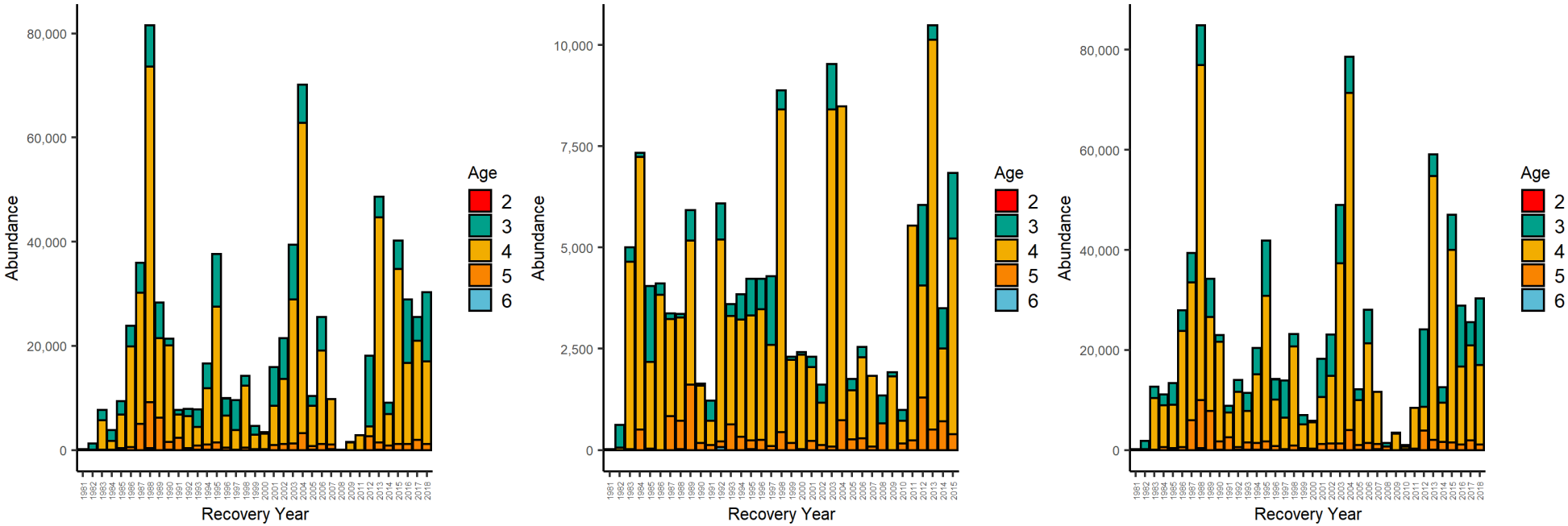
Puntledge River



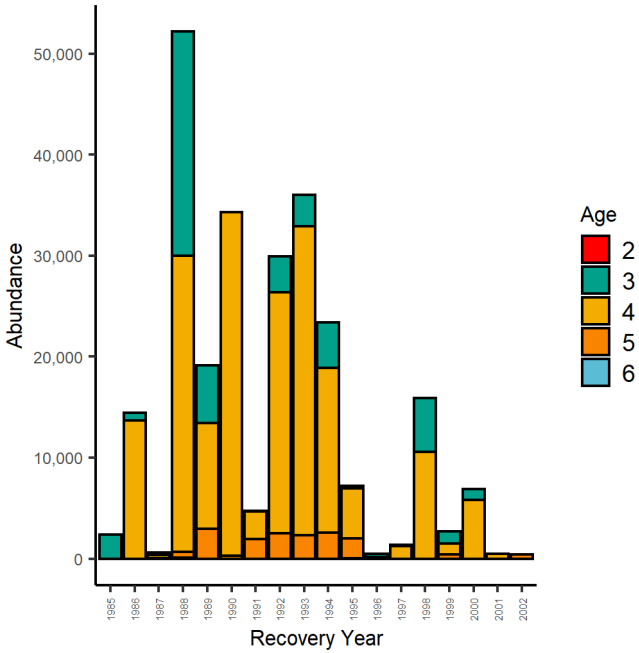
Saloompt River



Sliammon River



Snootli Creek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40,000
30,000
20,000
10,000
0
1985
1986
1987
1988
1989
1990
1991
1992
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2000
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2002
Recovery Year
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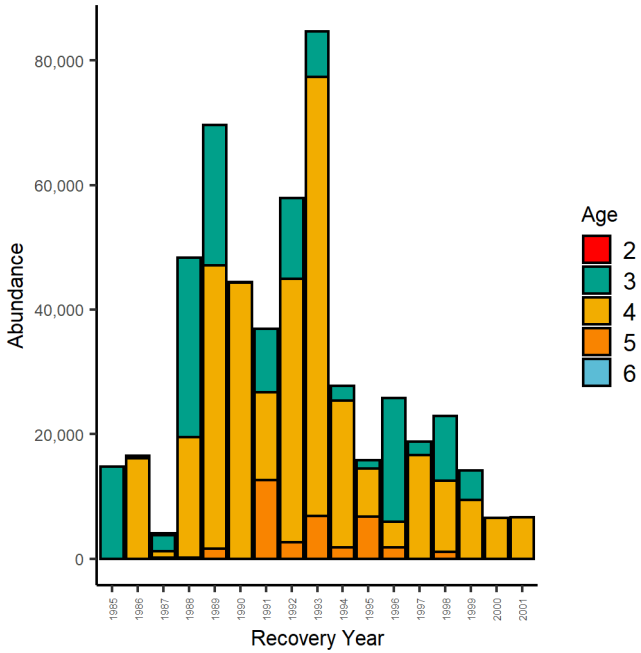
3
4
5
6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1985
1986
1987
1988
1989
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5
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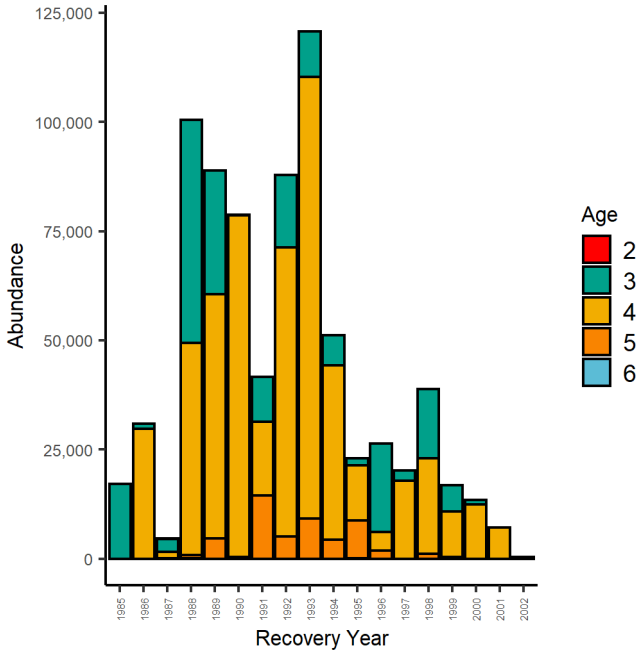
Abundance
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75,000
50,000
25,000
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1985
1986
1987
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2002
Recovery Year
Age
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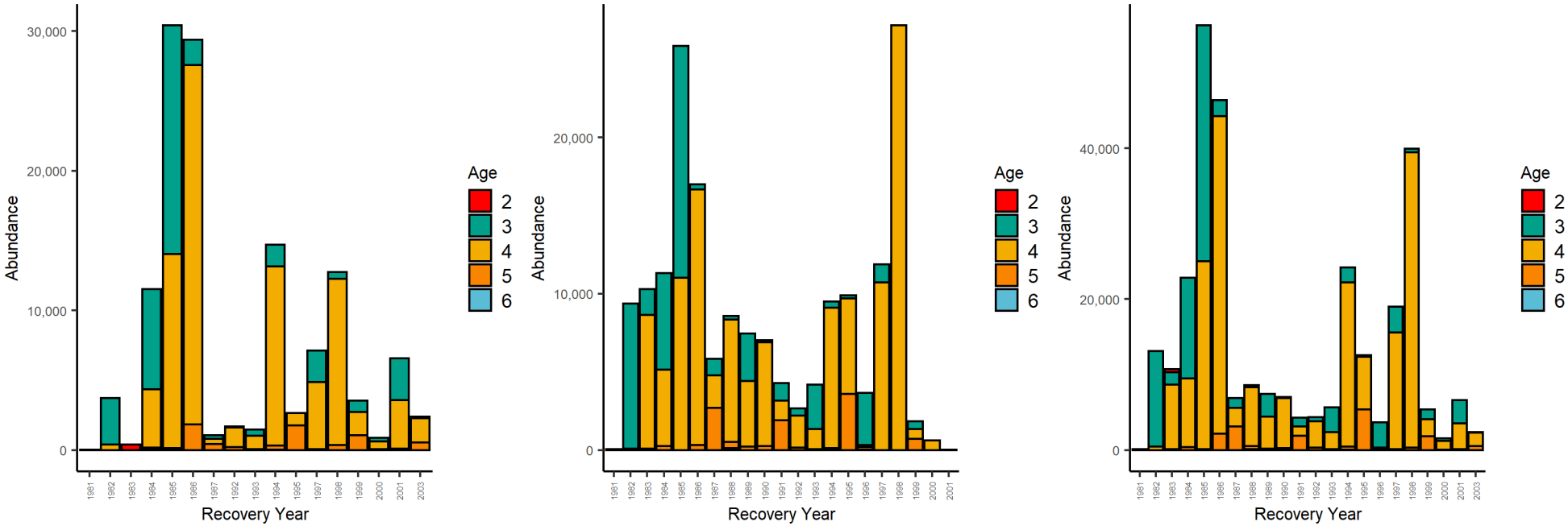
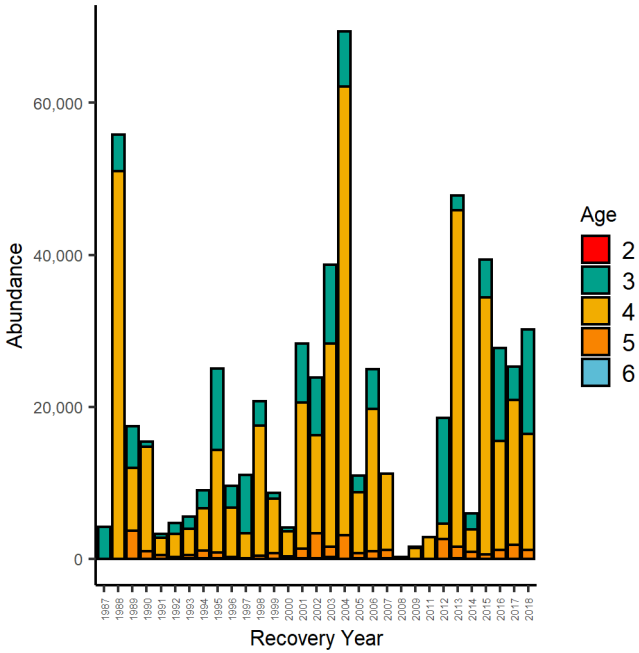
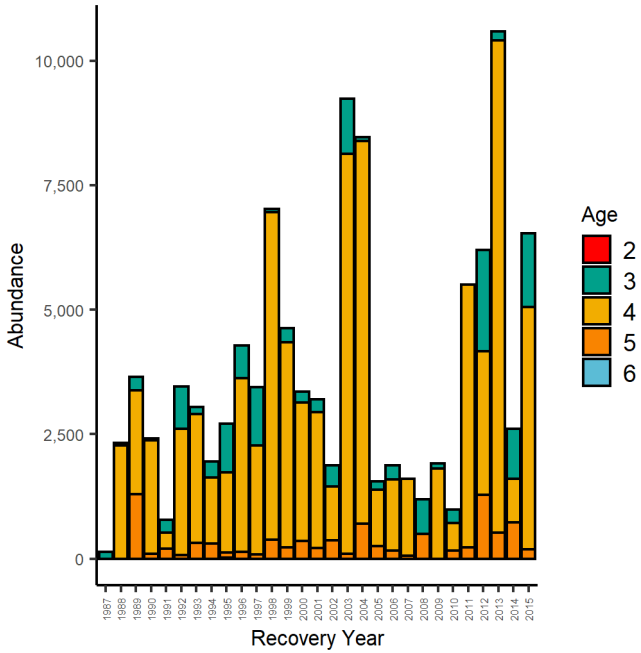
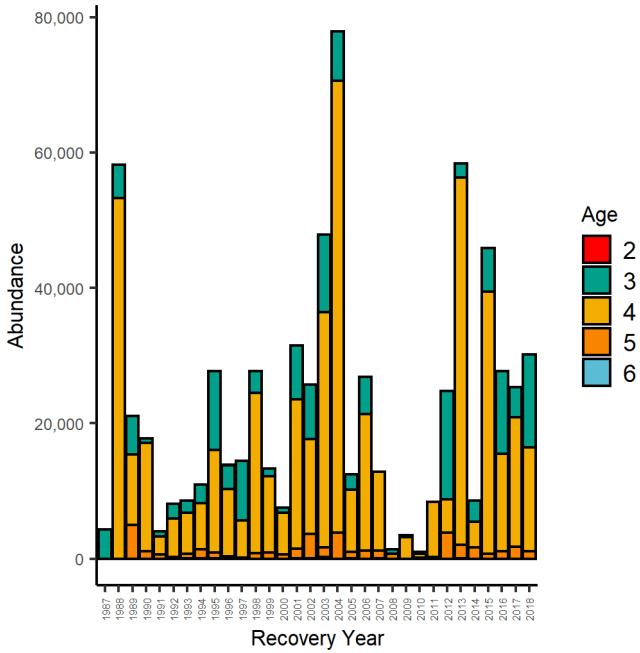
Stave River



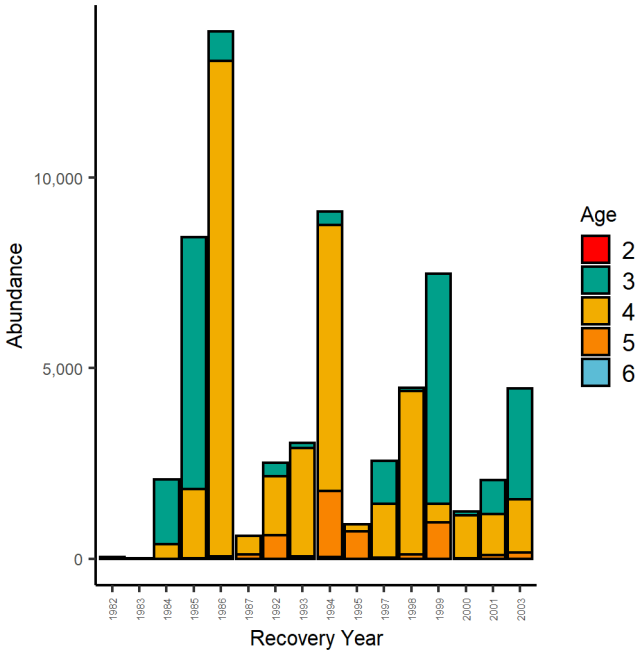
Sucwoa River

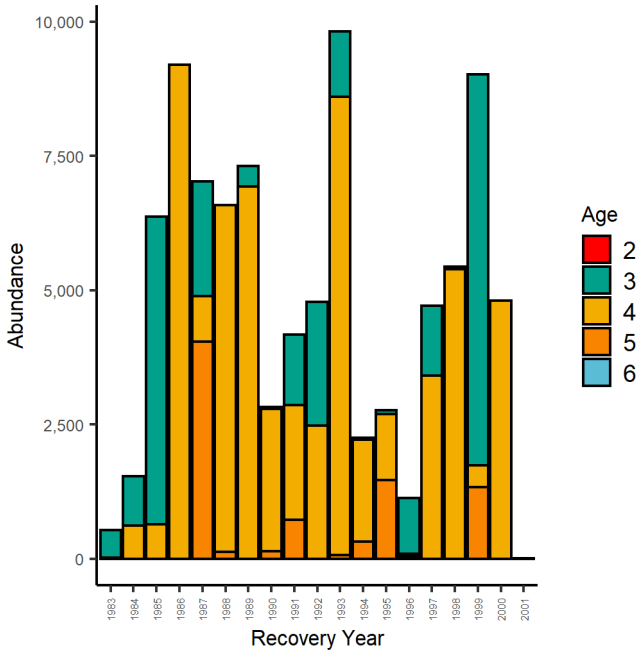


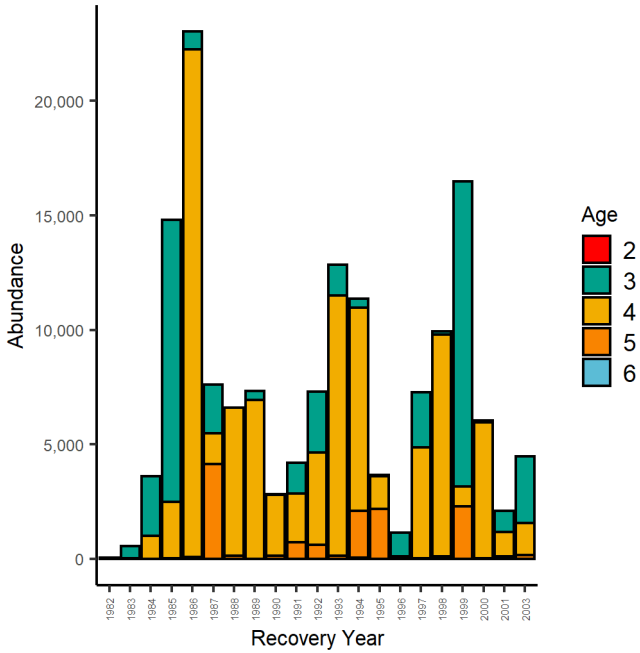




Thorsen River







Tlupana River

EQUATIONS

Equation 1 Sample Rate in Catch

Sample Rate = Max(CWT sample size, fin clip sample size)/total catch

Equation 2 Mark Rate in Catch

Mark Rate = Avg(CWT mark rate, fin clip mark rate)

where mark rate = observed recoveries/sample size

Equation 3 Adjusted Expanded Recoveries

AdjExpRec = expanded recoveries / (1 - mark mortality rate)

where mark mortality rate is defined as the reduction in mark rate from time of release to time of return.

Equation 4 Estimated Contribution of Associated Unmarked Stocks to Catch

RecUnmarked = NumUnmarked * (RecExpanded / NumMarked) * Prop'n of Code * Prop'n of Surv

where

RecUnmarked = expanded recoveries in the catch stratum of the unmarked stock

NumUnmarked = total number released in unmarked group of the associated stock

NumMarked = total number released in associated marked group of the marked stock

RecExpanded = expanded recoveries in the catch stratum of the marked stock

Prop'n of Code = a percentage if more than one stock was allocated as being likely to be encountered in the catch stratum

Prop'n of Surv = a percentage to adjust the survival rate from one release stage to another release stage

Equation 5 Estimated Troll Contribution to Catch

RecTroll = TrollCatch * (RecNet / CatchNet)

where

RecTroll = annual expanded troll recoveries for a statistical area

TrollCatch = troll catch for statistical area

RecNet = annual expanded net recoveries for a statistical area

CatchNet = annual net catch for a statistical area

Equation 6 Estimated Sport Contribution to Catch

RecSport = SportCatch * (RecNet / CatchNet)

where

RecSport = annual expanded sport recoveries for a statistical area

SportCatch = sport catch for statistical area

RecNet = annual expanded net recoveries for a statistical area

CatchNet = annual net catch for a statistical area

Equation 7 Survival Rate

Survival Rate = (Rcatch + Rescapement) /NumRel

where

R is the expanded recoveries of marks

NumRel = total number associated with the release of the marked stock

Equation 8 Exploition Rate

Exploitation Rate = Rcatch / (Rcatch + Rescapement)

where

R is expanded recoveries of marks

Equation 9 Determination of Sample Size

(Mn) (N-1)/(N-M) (N-n) = D ($p=0.10$, $1-\alpha=0.95$)

n is found iteratively by substituting values of n_{est} into the above relationship to satisfy D

where
M = number of marks in returning population
n = number to sample
N = predicted returning population
D = a constant specific to the required levels of accuracy and precision
p = desired level of accuracy
1-α = desired level of precision

and R = mark rate in population

$$\left[\frac{expectedmarksinpopulation}{expectedtotalpopulation}\right]$$

then the number of marks (M) to recover in the sample is:

M = nR

D is derived from:

$$1-\alpha = \Phi\left(\frac{1}{1-p}\ \frac{\sqrt{Mn(N-1)}}{(N-M)(N-n)}\right) - \Phi\left(-\frac{1}{1+p}\ \frac{\sqrt{Mn(N-1)}}{(N-M)(N-n)}\right)$$

for the selected levels of precision and accuracy

APPENDICES

Appendix 1 History of Chum Data Management and Assessment Tools

The Mark Recovery Program (MRP) database existed for computing catch contribution for Chinook, Coho, Pink, and Chum adipose coded-wire tagged releases. It was not designed to estimate contribution to escapement. In addition, catch/sample expansions were computed on a catch region basis; a catch region consisted of a number of statistical areas. Because of the terminal nature of most Chum catch, catch regions were too large a catch area for expansions and would result in biased expansions for Chum. In addition, many Chum stocks were marked with fin clips other than the adipose clip. No computer database existed to adequately estimate Chum and Pink contribution.

Prior to 1984 the estimation of enhanced contribution for Chum was performed with a hand-calculator and mark returns were limited to a few facilities. For later years (1984-1987), the data were calculated and analyzed in Visicalc/Magicalc spreadsheets on an Apple computer. For subsequent years, the data was maintained and analyzed in Framework spreadsheets on an IBM compatible microcomputer. Apple computer files were subsequently converted to Framework. Catch contribution by hatchery release group, fishing area, and catch week were calculated on a spreadsheet with separate spreadsheets for each return year and each major fishing area/enhancement facility. There were separate spreadsheets for enhanced contribution estimates to escapement for each facility and return year. Catch and escapement enhanced contribution data from these spreadsheets was hand entered into summary Framework spreadsheets by facility for each release group for all return years and exploitation rate, survival, and age composition were calculated. On the same spreadsheets these data were totalled by brood year and return year and survival, exploitation rate, and age composition calculated. As part of an overall evaluation of the Salmon Enhancement Program in 1995, the expanded recoveries (adjusted for mark mortality) for each release group for the 1980 to 1993 recovery years were loaded into an Access database by age and area of catch and escapement.

Appendix 2 Marking Strategy

Marking of Chum fry was conducted primarily to identify the enhanced adults in the commercial fisheries and the escapement. Marks recovered in the catch and escapement were then used to estimate the enhanced production of Chum and Pinks.

Fry marking involves mainly the excision of one or more fins, with adipose and ventrals being the fins of choice. Anal fins (Fraser et al 1978) and pectoral fins were not removed because of high mark mortality. Half dorsal clips were used occasionally but were also avoided as they appeared to have a higher mark mortality than ventral clips (DFO experimental study, unpubl. data). Fin clips were used to mark unfed fry from spawning channels (Big Qualicum and Little Qualicum) but were also used on reared Chum fry (mostly non-Fraser facilities except for Chilliwack). Their chief benefit was that they were relatively cheap to apply and could be used on unfed fry.

Beginning with SEP and the 1978 brood, Chum fry at some facilities were marked with both an adipose clip and a CWT tag chiefly because the number of facilities on the south coast meant that there were insufficient unique fin clips to mark all the new facilities. CWT tagging was generally confined to reared Chum fry, which needed to reach a size of about 0.8 grams before they were large enough to accept a full size tag. However, CWT tagging is significantly more expensive than fin clipping. Although in some years most facilities used coded-wire tags to complement finclips for within hatchery experimental studies, certain facilities (chiefly Chehalis, Inch, and Puntledge) used code wire tags exclusively and the rest mainly finclips (except for Pallant which used finclips on Pallant stock and cwt's on Mathers stock). A small portion of Chum fry were marked with CWT half-tags (used for marking small fry) but this practice was limited to Puntledge.

Marked releases of Chum fry were buffered with simultaneous releases of unmarked fish in order to avoid disproportionate losses to predation of marked compared to unmarked juveniles (assuming that the number of marked fish is much less than the number of unmarked fish being released). In addition, there were often release groups with no marks.

Chum marking was performed under contract as well as by casual staff hired by individual facilities. During marking, guidelines provided by the Pacific Marine Fisheries Commission (PMFC MS 1982) were generally followed. These guidelines covered items on random selection of fish for marking, post-marking treatment for tag loss, and mark mortality evaluation. A manual for coded-wire tagging and fin clipping in B.C. facilities was prepared by Nichols and Hillaby (MS 1990).

For production evaluation using the Mark Recovery Program adult sampling rate of 20%, 95% confidence limits (p = 1.96) two-tailed, an error rate of 10% (z = .10) and biostandard survivals, this program indicated numbers to mark at 244,000 for spawning channel unfed Chum fry (0.63% survival), 81,000 for freshwater fed Chum fry (2.0% survival), 66,000 for saltwater fed Chum fry (2.5% survival). For production evaluation, typical mark group sizes used were 200,000-300,000 for unfed Chum and 75,000-100,000 for fed Chum fry. For within hatchery experiments 20% sampling rates, 90% confidence limits (p=1.28), one-tailed, and an error rate of 25% (z=.25) were used. These required mark groups of 59,500 and 47,600 at 2.0% and 2.5% survival rates, respectively. For within hatchery experiments group sizes varied from 35,000-50,000. Extensive evaluation of fry marking techniques was

carried out at various B.C. facilities. Studies included the comparison of fry-to-adult survivals for groups marked with differential mark types, as well as studies on replicate marking to determine the statistical variability among identical mark groups. Experiments conducted within a hatchery included time and size at release, freshwater versus saltwater rearing, surface versus groundwater incubation and rearing, heritability of spawning timing, characteristics of homing and straying, and diet studies.

Appendix 3 Release Data

Chum fry were not enumerated at release time because of their small size at release after a short rearing period of 30 to 40 days. Instead, release numbers were usually based on the book balance (i.e. initial number of eggs taken minus cumulative incubation and rearing mortalities). Due to additional unknown losses during rearing, these release numbers were likely to be overestimated, resulting in underestimated fry-to-adult survivals. This error, however, is likely to be less than 5-10%. Note that at Big and Little Qualicum spawning channels, unfed fry releases were enumerated at migration time. These counts are likely to be more accurate than book balance counts.

The release data for marked and unmarked Chum juveniles from the B.C. facilities are available in two distinct databases: MRP and RMIS. The MRP database maintains all release data (CWT and fin-clip marked groups and all unmarked groups) for all salmonid species. Kuhn et al (1988) described in detail the organization of this database. Hatchery databases produce brood summaries, with numbers of eggs taken and fry ponded, allowing for the calculation of egg-to-fry and fry-to-fed fry survivals.

Appendix 4 Estimation of Enhanced Contribution to Catch

Catch Sampling

Prior to the inception of the Salmonid Enhancement Program (SEP) and the Mark Recovery Program (MRP), catch sampling of Chum was carried out by the Fisheries Branch, mainly on Big Qualicum Chum since 1967. The Mark Recovery Program began sampling commercially caught Chum in specific catch areas in the mid-1970s, although this was not part of the formal Mark Recovery Program which was mainly tasked with sampling Chinook and Coho. This sampling was generally confined to terminal fishing areas expected to contain significant numbers of marked adults. This mainly included Johnstone Strait, Area 14 off Qualicum, Strait of Juan de Fuca, and the Fraser River. With the construction and operation of new Japanese-style Chum facilities and increased marking under SEP, sampling was expanded from statistical areas 12, 13, 14 and 29 to most of the major Chum fishing areas including Area 8 (Snootli) and Area 25 (Conuma) in 1981, Area 2E (Pallant) and Area 21 (Nitinat) in 1984, and Area 6 (Kitimat) in 1987.

Not all fishing gears, statistical areas, fishing weeks or even fishing years were sampled for Chum. Although Chum are harvested in troll, net, sport and First Nation FSC fisheries, sampling effort was mainly directed to the terminal net fisheries where the majority of the catch was taken. These other fishery sectors were generally not sampled because catches and marks were likely to be minimal in these fisheries. Indeed, incidental sampling of Chum in troll fisheries has shown a very low incidence of marks. In addition to sampling in the commercial net fisheries, Chum were also sampled in the test fisheries. Test fishery sampling was conducted only occasionally, and was generally confined to those catches which were landed and handled by the MRP personnel.

Not all statistical areas were sampled for marks because of the terminal nature of Chum net fisheries. Only the major catch areas (those statistical areas which provide large numbers of marks), were consistently sampled. These included Areas 2E, 6, 8, 12, 13, 14, 21, 25 and 29. Minor catch areas where incidental catches occur, were sampled only occasionally and included Areas 2W, 7, 9, 17, 18, 20 and 26.

Not all years were sampled for marks. In minor catch areas where mark rates were likely to be low, sampling in some years did not occurr at all.

Not all fishing weeks were sampled for Chum. This was true especially early in the season when small numbers of Chum could be caught incidentally to the target species.

Compared to the above relatively incomplete sampling strategy for Chum catches, the MRP sampling strategy for Chinook and Coho catches was more complete. Each of the net, troll and sport catches of Chinook and Coho were sampled for marks, and the target was to sample 20% of the catch in each commercial gear, catch region and week.

Chum commercial catches were sampled regularly at processors in Vancouver, Steveston and Prince Rupert, and occasionally at Port Hardy and Ucluelet. The catch was usually sampled on conveyor belts as the packers were unloaded. Data recorded for Chum and Pinks samples included statistical area, gear type, vessel type, week caught, date sampled and number sampled. The data sheets were similar to those used in the MRP catch sampling of Chinook and Coho. Each marked fish recovered was sexed and measured for

length, and had two scales removed for ageing. This information was recorded along with mark type and level of fin regeneration. In catch areas where Ad-CWT tags were expected, heads from adipose-clipped Chum were removed, given a disc number, and sent to the J.O. Thomas & Associates head dissection lab for dissection and decoding, as was done for the adipose-clipped Chinook and Coho.

Catch Data Sources and Databases

Hail data were used in-season to provide hatchery contribution estimates to the catch for fishery management purposes. The hail database, where the in-season mark recoveries were expanded to total catch, was known as the In-Season Catch System (ICS). For final catch estimates, the commercial Catch Statistics (CCS) database was used, except in some areas (e.g. Area 14) and some recent years where there was under-reporting of catch by cash-buyers.[1]

Commercial fishery mark recovery data for Chum (i.e. catch sample sizes and observed recoveries of fin clips and CWTs) was reported by the MRP contractor from 1981 to 2019. These data were provided in memos on a statistical area/weekly basis approximately one week after the fishery had occurred. The information was finalized by the contractor in annual Operations Summary Reports.

Prior to 1984, the recovery data were expanded by calculator to estimate hatchery contribution. Since 1984, annual reports by the MRP contractor summarized these data. From 1984 to 1987, the summarized data were entered onto MagiCalc spreadsheets on an Apple 2E microcomputer. Except for CWT data, no biological data such as length and age, were computer-entered for individual marks. The MRP contractor also entered the CWT recoveries for Chum (but not fin-clip recoveries) into the MRP database on a catch region/weekly basis in an identical manner as for Coho, Chinook and Steelhead. Note that a "catch region" is defined as a combination of several statistical areas and a catch gear, such as net or troll (Kuhn et al 1988).

Although the Chum and Pink CWT recovery data are available in the MRP database, these data should not be analyzed using this database since the estimated recoveries are calculated on a catch region basis rather than on individual statistical area basis. As stated earlier, only certain statistical areas are sampled for Chum. The mark rate between statistical areas within the same catch region may vary considerably due to the terminal nature of Chum fisheries. Therefore, the estimated recovery data could be very inaccurate when calculated on a catch region basis.

In 1987, the MRP contractor developed a computerized database to store the in-season fishery CWT and fin-clip recovery data for Chum. The data continue to be reported weekly in-season but were finalized more rapidly. Final Chum sampling and mark recovery data were stored in the Pacific Biological Station VAX computer in the MRP CWT database for CWT recoveries and in MRP finclip database for finclip recoveries. The flat data files of

[1] The In-Season Catch System has been replaced by the Fisheries Operations System (FOS) and the Catch Statistics System by the Pacific Harvest System (PacHarv). See Data Sources in *Methods* for more information.

Chum CWT and finclip recoveries that went into these databases were accessed electronically and analyzed by the SEP Chum and Pink DBMS.[2]

The SEP Chum and Pink DBMS was developed in 1999-2000 primarily to analyze the final (post-season) Chum recovery data on a statistical area basis, since the MRP database estimates recoveries only on a catch region basis. The SEP database was the main database for Chum and Pinks, and was similar to the MRP database for Chinook and Coho. However, the SEP database dealt exclusively with Chum and Pink species and contained catch and escapement recovery data for both fin clips and CWTs. Table 26 compares the SEP database for Chum and Pinks with the MRP database for Chinook and Coho. In both these databases, net catches were the combined gillnet and seine catches, mostly because it was not possible to sample them separately.

Table 26 Comparison of SEP and MRP Databases and Sampling

CHUM AND PINK SEP DATABASE	CHINOOK AND COHO MRP DATABASE
DIFFERENCES	
- Deals only with Chum and Pink species.	- Deals with all salmonid species.
- Contains the complete release and recovery data for Chum and Pinks (CWTs and fin clips) so that the recovery data can be analyzed.	- Contains all the release data but only the CWT (not fin clip) recovery data. Therefore, Chum and Pink recovery data cannot be analyzed with the MRP database.
- Estimated recoveries are derived and reported on a statistical area basis	- Estimated recoveries are derived and reported on a catch region basis
- **Relatively incomplete catch sampling strategy:** - Only the net catches are consistently sampled for marks (troll and sport catches are generally not sampled). - In sampling net catches, certain statistical areas, fishing weeks, and even fishing years are left unsampled, e.g. major catch areas are sampled consistently but minor catch areas are sampled only occasionally.	- **Relatively complete catch sampling strategy:** - The net, troll and sport catches are sampled for marks. - The aim is to sample 20% of the catch in each commercial gear, catch region and week.
- Escapement sampling usually occurs in both the spawning stream and at the hatchery rack. Therefore, enhanced escapement contributions to both the spawning grounds and the hatchery can be estimated.	- Escapement sampling usually occurs only at the hatchery rack. Therefore, only the enhanced escapement contribution to the hatchery can be estimated .
SIMILARITIES	
Similar methods are used for computing the estimated and expanded recoveries from observed recoveries in both catch and escapement.	
Gillnet and seine catches are combined into net catches.	

[2] Beginning in 2004 the final Chum sampling and mark recovery data were provided by the MRP contractor in MS Excel format.

Catch Contribution Estimation

The three basic quantities calculated using the SEP database for Chum and Pinks, and the MRP database for Chinook and Coho, were the observed, estimated and expanded mark recoveries. Actual observed mark recoveries from sampling were multiplied by the catch to sample ratio to calculate the estimated recoveries if all the catch had been sampled for marks. Estimated recoveries were then multiplied by the total release (unmarked+marked) to marked ratio to calculate expanded recoveries which estimated the recoveries if all the release had been marked.

Kuhn et al (1988) described the methods used in the MRP database for estimating the Chinook and Coho catch contributions from CWT recoveries. Similar methods were used in the SEP database for computing the estimated and expanded recoveries from the observed recoveries (CWT and fin-clip) for Chum and Pinks. One exception was that recoveries estimated in the SEP database were derived and reported on a statistical area basis rather than on a catch region basis, as was done for Chinook and Coho. In the SEP database, samples with a mixture of recoveries from more than one statistical area were excluded, unless no other data were available on a statistical area basis for that week. The latter situation occurred on occasion in areas 12 and 13. In those cases, the available mixed-area catch was combined for that sample week.

The basic equations for calculating the estimated and expanded recoveries are shown below.

Estimated Recoveries

As stated above, the observed mark recoveries must be multiplied by the catch to sample ratio to provide an estimate of recoveries for the total catch. This is a basic expansion applied to all observed mark recoveries since only part of a given "sampled" catch is actually examined for marks. (Note that in a "non-sampled catch" none of the fish were examined for marks.)

For a given fin clip or tag code in a given statistical area in any week:

$$E = Ox\frac{C}{S}$$

where

E = Estimated recoveries O = Observed recoveries
C = Catch for week sampled S = Sample size for week sampled

Expanded Recoveries

Since usually only a portion of a juvenile release group was marked, the estimated recoveries for each mark type were expanded by the ratio of the total to marked juveniles at release. Such expanded recoveries represented the entire (marked and unmarked) release group for that particular mark type. For all recoveries of a unique mark type, the formula for expanded recoveries is:

$$X = AorEx\frac{R}{M}$$

where

X = Expanded recoveries (i.e. estimated number of recoveries of a release group represented by a particular mark group caught in a recovery stratum)

A or E = Adjusted or estimated recoveries of a particular mark in a recovery stratum

R = Total (marked and unmarked) released juveniles represented by the above mark

M = Marked juveniles released with the above mark (i.e. number of good marks for a fin clipped group, and number of adipose clips actually containing a CWT for a CWT-tagged group).

Although most Chum releases were represented by a mark, some releases were not. These unmarked release groups were assigned a mark or group of marks to represent them in order to assess their production. Fry-to-adult survivals to catch and escapement for the representative marked groups were then used in each recovery year to calculate contribution for the unmarked associated groups. By associating marked groups with unmarked groups, the total contribution for all releases from a given facility was calculated. This is different from Chinook and Coho where every effort was made to ensure all releases are directly represented by a mark. Where release groups were not represented by a mark for Chinook and Coho survival biostandards were used to estimate contribution. This was only done for Chum if there were no release groups to represent them within a hatchery in the same brood year.

Catch Calculations and Adjustments

A number of adjustments were made to the observed and estimated catch recovery data for Chum in order to estimate recoveries for the unsampled strata (e.g. statistical areas and fishing weeks). Otherwise, underestimation of enhanced catch contribution would occur. Adjustments were also required for those cases where identical fin clips were used at different facilities in the same brood year. In such cases, several stocks marked with identical fin clips could have been harvested in the same fishery. Finally, all expanded catch recoveries were adjusted for mark mortality. The various catch adjustments and calculations are described below.

Observed Catch Recovery Adjustment

Unknown ages

Observed Chum fin clips were recorded by fin clip type and age since fin clip marks are not unique codes like CWT tags. For example, an adipose-left ventral fin clip with a scale age of 3 was reported as ADLV3. Ageing of fishery Chum occured weekly and was reported weekly in-season. Because of problems with scale regeneration, resorption and poor quality impressions, not all fin clips could be aged. For a particular fin clip type, such as an ADLV, un-aged fin clips were apportioned to an age category in direct proportion to the age composition of all known aged fin clips present in all samples in each statistical area each

week. This was done in a similar manner as for lost pins (Kuhn et al 1988). The following calculation was used to adjust for unknown ages:

$$A = 0 + \left[U x \frac{0}{K} \right]$$

where for a given fin clip type in one statistical area in one week

A = Adjusted observed recoveries of a known age (e.g. age 3)
O = Observed recoveries of a known age (e.g. age 3)
U = Observed recoveries of unknown age
K = Total observed recoveries of all known ages

Observed fin clip recoveries of an age group that was not marked as juveniles was assumed to be mis-aged and was assigned to an age class that was marked. This was done only if the length of the fish was consistent with the assigned age class and only for those areas where other stocks marked with an identical fin clip, were very unlikely.

Undecoded CWTs
Unlike fishery Chum scales which were aged weekly in-season, not all CWT-tagged Chum were dissected and decoded in-season. Instead, sub-samples were usually decoded and the adjusted number of observed recoveries of each tag code was calculated using the above equation. Final observed CWT recoveries were obtained from the MRP database. A program provided the observed CWT recoveries totalled by statistical area, week and tagcode. These data were also available in the MRP contractor's database.

Lost pins
Lost pins and no data cwt recoveries were apportioned on statistical area/ weekly basis among the known observed CWT's in a similar manner to Chinook and Coho.

Estimated Catch Recovery Adjustment[3]
Unsampled weeks
Estimated catch recoveries were adjusted for unsampled weeks since some statistical areas were not sampled consistently or not sampled at all. Where one or more weeks were unsampled in an area, three options for mark recovery adjustment were possible depending on the situation. The first two options involved a major catch area where a high mark rate was expected, while the third option involved a minor or incidental catch area where a low mark rate was expected. Each of the options is described below.

Major catch area, one week unsampled
In a major catch area where one week was unsampled between weeks that were sampled, the catch from the unsampled week used the mark rate and mark composition of the previously sampled week to estimate the contribution in the unsampled week. If the previous week was not sampled the next sampled week was used. For each week not sampled within a statistical area, the adjusted estimated marks were calculated as:

[3] Describes adjustments made to historical data from 1980 to 1989. See Estimation of Enhanced Contribution to Catch in *Methods* for the adjustments for unsampled strata used in the Chum and Pink DBMS.

$$A = Ex\left[\frac{C1 + C2}{C}1\right] which is the same as A = Ox\left[\frac{C1 + C2}{S}1\right]$$

where

A = Adjusted estimated recoveries for (week sampled + week unsampled)
E = Estimated marks for weeks sampled
O = Observed marks for week sampled
C1= Catch for week sampled
C2= Catch for week not sampled
S1= Sample size for week sampled

Major catch area, a block of weeks unsampled

In a major catch area where more than one week was unsampled between weeks that were sampled, and the sampled weeks showed similar mark rates, the following approach was used. The mark rate for the first and last sampled weeks bordering the unsampled block of weeks was used to estimate the mark recoveries for the unsampled weeks. This approach reduces the error associated with estimating marks in the tails of the run. For example, where weeks #3 and #6 were sampled but weeks #4 and #5 were unsampled, for any statistical area for each mark recovered:

$$A = Ex\frac{Cw}{Cs}$$

where

A = Adjusted estimated recoveries in weeks #3, #4, #5 and #6
E = Estimated recoveries for the first and last sampled weeks #3 and #6)
Cw = Catch in weeks #3, #4, #5 and #6
Cs = Catch in the first and last sampled weeks (#3 and #6)

Minor catch area, several weeks unsampled

In a minor catch area which was not sampled consistently due to expected low mark rates, the estimated recoveries could have been expanded by the ratio of the total to sampled catch for that area. Due to the low number of marks expected for this area, concern for error using this estimating method is minimal.

For a given statistical area for all weeks for each mark recovered:

$$A = Ex\frac{Ct}{Cs}$$

where

A = Adjusted estimated recoveries for total catch
E = Estimated recoveries for all sampled weeks
Ct= total Catch for that area
Cs= Catch in all sampled weeks for that area

Unsampled minor catch area

Another adjustment method was used in cases where minor catch areas were not sampled at all, as occurred in some years. For example Area 9, the incidental catch area for Snootli Chum, was first sampled in 1986, then again in 1988. Yet the principal catch area for this stock (Area 8) showed significant recoveries of Snootli Chum from 1983 onward. While no adjustments were made to the Snootli mark recoveries in Area 9 for the unsampled pre-1986 period, adjustments were made for subsequent unsampled years, as follows.

To estimate the number of enhanced Snootli marks caught in Area 9 in the unsampled year (1987), the mark incidence reported the previous year for Area 9 compared to Area 8 was used. These total marks were then apportioned to individual mark groups in the same proportion as they occurred in the principal catch area (Area 8) in the current year.

Sampled catch area but where two stocks with identical fin clips are harvested
More than one adjustment method could have been used within any statistical area in any one year. The three examples shown below involve mark recoveries in Area 6 in 1987 and 1988. This area was first sampled in 1987 when age 3 Kitimat Hatchery Chum first appeared. Area 6 is a principal catch area for Kitimat Chum and an incidental catch area for Snootli Chum. Since the Kitimat and Snootli stocks were marked with identical fin clips for that period, they could be separated as to the origin only indirectly.

Example 1. Area 6 Snootli Chum recoveries in 1987

The first sampling of Area 6 catches in 1987, recovered not only Age 3 fin clips but also Age 4 and Age 5 fin clips in such numbers and of such body lengths that they could not be mis-aged for Kitimat Chum. Instead, they were assumed to be returns of Snootli origin Chum destined for Area 8. An adjustment was required to separate the identically fin-clipped Age 3 Kitimat Chum from Age 3 Snootli Chum both of which were harvested in Area 6 in 1987. Consequently, that year's ratio of Age 3 to Age 4+5 fin clips recovered in Area 8 (the principal catch area for Snootli Chum) was used to estimate the numbers of Age 3 Snootli Chum caught in Area 6 that year.

Example 2. Area 6 Snootli Chum recoveries in 1988
To calculate the contribution of Snootli origin Chum in Area 6 in 1988, the percentage of Snootli origin fish estimated to have been caught in this area the previous year was used.

Example 3. Area 6 Kitimat Chum recoveries in 1988
To estimate the contribution of Kitimat origin fish in Area 6 in 1988, the estimated Snootli mark recoveries for this area and year (see Example 2 above) were deducted from the total Area 6 mark recoveries in 1988.

Area unsampled for fin-clips but sampled for CWTs
A different adjustment methodology was used for statistical areas where no finclip sampling at all was conducted. For example in 1985, the catch in Areas 12 and 13 was sampled for CWTs but not for fin clips. Yet these two areas are known to harvest Big Qualicum, Little Qualicum and Chilliwack Chum stocks, all marked with fin clips only. To estimate the catch of fin-clipped Chum by stock in Areas 12 and 13, a proportionate equation was set up which compared the ratio of fin clips to CWTs in Areas 12/13 to the ratio of these marks in another area where both fin clips and CWTs were sampled. For each of the Big Qualicum and Little Qualicum stocks, a "companion stock" marked with both fin clips and CWTs, and a

"companion area" sampled for both fin clips and CWTs, were selected. These were Puntledge Chum and Area 14. For the Chilliwack stock, the Fraser Chum and Area 29 were the selected companion parameters.

The following proportionate equations were set up to provide the ratio of fin clips to CWTs:

For Big or Little Qualicum Chum

$$\frac{BQorLQfinclipsinAreas12/13}{PuntledgeCWTsinAreas12/13} = \frac{BQorLQfinclipsinArea14}{PuntledgeCWTsinArea14}$$

For Chilliwack Chum

$$\frac{ChilliwackfinclipsinAreas12/13}{FraserCWTsinAreas12/13} = \frac{ChilliwackfinclipsinArea29}{FraserCWTsinArea29}$$

In each of the above equations, the unknown variable is bolded and is represented by "A" in the equations below. Based on the above proportionate equations, the following computations were made for each age group separately to avoid any effects of migration timing of different age groups:

For Big or Little Qualicum Chum
For all weeks for each age group:

$$A = E1xE\frac{2}{E}3$$

where

A = Adjusted estimated recoveries of BQ or LQ fin clips in Areas 12/13
E1 = Estimated recoveries of Puntledge CWTs in Areas 12/13
E2 = Estimated recoveries of BQ or LQ fin clips in Area 14
E3 = Estimated recoveries of Puntledge CWTs in Area 14

For Chilliwack Chum
For all weeks for each age group:

$$A = E1xE\frac{2}{E}3$$

where

A = Adjusted estimated recoveries of Chilliwack fin clips in Areas 12/13
E1 = Estimated recoveries of Fraser CWTs in Areas 12/13
E2 = Estimated recoveries of Chilliwack fin clips in Area 29
E3 = Estimated recoveries of Fraser CWTs in Area 29

Run reconstruction

It was not uncommon to recover in a given commercial fishery identical fin clips that represent more than one stock origin because the same fin clip mark may have been used at more than one facility in the same year. This was due to the high demand for many mark groups, the limited number of fin clip marks available, and the high cost of applying CWT tags. To reduce the incidence of identical fin clips representing different stocks in the same catch area, several conventions were used. The basic one states that facilities within the same geographical area (e.g. Big Qualicum, Little Qualicum and Puntledge, all located in Area 14) should not use the same fin clip mark for stock assessment. However, a Fraser stock and an Area 14 stock could have shared the same fin clip mark because the returning adults were harvested in geographically distinct terminal catch areas.

Despite the above precautions, identical fin clips representing different stocks did occur in mixed-stock fisheries. In such cases, the incidence of these fin clips in the escapement of each stock, combined with run reconstruction, was used to estimate the incidence and origin of each mark in the commercial fishery. Examples of this approach are shown below.

Big and Little Qualicum Chum received identical fin clip marks because of assessment requirements. Chilliwack Chum also received the same mark. To determine the contribution of the Big and Little Qualicum Chum in Area 14 fishery, it was assumed that no Chilliwack Chum were caught in that area. This assumption was supported by results from CWT marking and sampling programs which showed that while some Fraser Chum (e.g. Chehalis) were caught in Area 14, their contribution was very low compared to the Area 14 enhanced stocks. Next, the estimated marks in the escapement of each of the Big Qualicum and Little Qualicum Chum, were used to apportion the estimated marks in the Area 14 fishery to the appropriate stock origin.

Big and Little Qualicum Chum received fin clip marks which, although different between them, conflicted with marks used for Chilliwack Chum. To identify fin clips in the Area 14 fishery, it was again assumed that no Chilliwack fish were caught in that area. The situation was more complex for the mixed-stock fishery in Areas 12 and 13. To separate the Big and Little Qualicum stocks from the Chilliwack stock in this area, a type of run reconstruction was used. For example, considering just the Big Qualicum and Chilliwack stocks, it was assumed that each of these stocks had the same harvest rate in the Area 12/13 fishery. The total Area 12 + 13 estimated recoveries of the identical fin clip were then apportioned to each of the Big Qualicum and Chilliwack stocks in direct proportion to their total terminal area recoveries, i.e. Area 14 catch and escapement for Big Qualicum stock, and Area 29 catch and escapement for Chilliwack stock. The equation for this calculation is as follows:

For the estimated recoveries of the identical fin clip in Areas 12 + 13 for all weeks

For Big Qualicum stock

$$A1 = E1x\left[E\frac{2}{E2+E3}\right]$$

For Chilliwack stock

$$A2 = E1x\left[E\frac{3}{E2+E3}\right]$$

where

A1 = Adjusted estimated recoveries for Big Qualicum stock in Areas 12+13
A2 = Adjusted estimated recoveries for Chilliwack stock in Areas 12+13

E1 = Estimated recoveries in Areas 12+13
E2 = Estimated recoveries of Big Qualicum stock (catch + escapement) in Area 14
E3 = Estimated recoveries of Chilliwack stock (catch + escapement) in Area 29

This method was also used to separate the contribution of the Big and Little Qualicum identical fin clips in Areas 12+13.

The above method of assigning stock origin to identical fin clip marks assumes the same harvest rate for each stock. This assumption may be reasonable for a terminal fishery like Area 14 where fish congregate and are of similar timing. However, it may not be valid for Area 12 and 13 interception fisheries where actively migrating stocks may have quite different timings.

Expanded Catch Recovery Adjustment[4]

Mark mortality

Mark mortality is defined in this methodology as the reduction in mark rate from time of release to time of return. All expanded estimates of enhanced catch (and escapement) were adjusted upwards (divided by 0.7) to account for an estimated 30% mark mortality. This value is based on the Big Qualicum data for unfed fin-clipped Chum fry. The mark mortality rate of 30% was applied to all expanded recoveries of Chum and Pinks from all facilities each year. The exception was the Big Qualicum system where the entire Chum production was considered enhanced, allowing the computation of an annual mark mortality rate.

An adjustment for mark mortality was required because both fin clipping and CWT-tagging may result in mark mortality which could lead to underestimation of hatchery contribution.

Several factors contributed to mark mortality, including a reduction in survival of marked over unmarked fish due to stress of marking, wound infection, or preferential predation; or it may be some factor, such as fin regeneration, that makes the mark unrecognizable in adults. Studies have shown that mark mortality rates can differ for different mark types. Based on results for Quinsam Pinks and Snootli Chum, the adult return data were adjusted for a 30% single mark mortality for both facilities, and for an additional 36% (Quinsam Pinks) and 37% (Snootli Chum) double-mark mortality.

[4] Expanded catch was adjusted for mark mortality in the historical data from 1980 to 1989. It was not adjusted for mark mortality from 1990 to 2018. See Sources of Uncertainty: Assumptions, Data Quality And Data Gaps in *Methods* for more information.

Appendix 5 Estimation of Enhanced Contribution to Escapement

Escapement Estimates and Mark Sampling

Chum escapement estimates for enhanced streams generally consisted of a minor hatchery rack component and a major spawning ground component. The latter component included broodstock taken for egg takes. Escapement estimates for the spawning grounds where the majority of Chum and Pinks return, were obtained from surveys by Fishery Officers or hatchery personnel, mark recapture studies, and fence counts. Escapement estimates were often made jointly between the hatchery staff and the local stock assessment biologist.

SEP funded a number of Chum adult tag and recovery programs to estimate the hatchery contribution to escapement. These programs were conducted on Nitinat River in 1985, Chilliwack River in 1986, Conuma River in 1988 and Stave River in 1989-1991.The Petersen estimates from these studies were used to estimate escapement and hatchery contributions. For Bella Coola stocks, a combination of fence counts and tag/recovery estimates was used to estimate escapements since 1985. At some facilities (Pallant/Mathers, Quinsam, Big Qualicum, Blaney and Inch Creek), fence counts provided escapement estimates, with some adjustments made for below the fence estimates and for unsampled periods when the fences are not operational (e.g. due to floods).

Methodology for mark sampling of Chum escapements was the same as that reported in Kuhn et al (1988). For most facilities, mark sampling was limited to two sites, usually the hatchery rack and the spawning grounds. Hatchery rack recoveries generally included surplus sales, native food fish, and broodstock. Spawning ground recoveries may have included sampling during broodstock collection and/or dead pitches. Regular dead pitches occurred on Tlupana Inlet streams, Big and Little Qualicum spawning channels and rivers, Chilliwack River, Harrison River system, Inch Creek and Stave River. At some facilities, mark sampling also occurred at the fences that span the river.

Observed mark recoveries were summarized for each sampling site for each stock for each complete recovery year. Mark expansions were stratified at this level and calculated separately for each of the major recovery sites (i.e. hatchery rack and spawning grounds).

Since the majority of Chum and Pinks spawned in the wild, the limited returns to the hatchery rack were generally sampled in their entirety. By comparison, Chinook and Coho adults returned to the hatchery rack in large numbers so that subsampling for marks may have been required.

Unlike the thorough mark sampling of Chum rack returns, the sampling of their spawning ground returns was less extensive and did not always span the entire escapement timing. This was due to the large numbers of wild spawners, and the time constraints placed on hatchery staff due to fish culture commitments.

From 1985 to 2017, sampling plans were prepared annually to advise hatchery staff on the numbers of fish to sample for marks, based on 95% confidence limits ($z = 1.96$) and a 10% error rate ($p = 0.90$), and on the biological data to collect. An unknown equation [*the equation was absent in the unpublished Chum Assessment Methodology document, but a sample size determination forumula was provided by a statistician using the same*

parameters, see ***Error! Reference source not found.***] was used to determine the number of fish to sample for marks:

where

n = Number to sample
z = z statistic at desired level of confidence
p = Confidence interval
N = Predicted returning population

And R = Mark rate in population,

i.e. $$\left[\frac{expectedmarksinpopulation}{expectedtotalpopulation}\right]$$

Then the number of marks (M) to recover in the sample is:

$$M = nR$$

Escapement Data Handling

Escapement data were collected at each facility each year, and the annual summaries were sent to the SEP Planning and Assessment unit. Since 1986, escapement sampling forms were used to summarize the data. Biological data, mainly length and age of marked and unmarked adults were collected and compiled regionally.

The observed mark recoveries were adjusted upwards to estimated and expanded recoveries to cover the entire release group represented by each mark type. The escapement spreadsheets were completed for the 1984 data onwards. Prior to that, the data were hand-calculated. Prior to 1984, the observed and estimated recoveries were not always entered.

The Chum escapement data in the SEP database differed from the Chinook and Coho escapement data in the MRP database in that more recovery-area strata were sampled for Chum. This was because the escapement sampling of Chum was usually conducted on both the spawning grounds (dead-pitch and broodstock collection) and at the hatchery rack. As a result in most cases, the enhanced escapement contribution of Chum could be estimated for both the spawning grounds and the hatchery. By comparison, only the rack sampling data were generally available for Chinook and Coho so that only their hatchery contribution could be estimated.

Escapement Contribution Estimation, Calculations and Adjustments

The same basic expansions used for the observed and estimated catch recoveries were used for the observed and estimated escapement recoveries. That is, the observed mark recoveries were multiplied by the escapement to sample ratio to obtain the estimated recoveries, and these were multiplied by the total to marked ratio at release to obtain the expanded recoveries. Also, the same adjustments used to adjust the observed and estimated catch recoveries for data gaps, (e.g. missed recovery strata and unknown ages), were used to adjust the escapement recoveries. Finally, as for catch recoveries, all expanded escapement recoveries were adjusted upwards (divided by 0.7) to account for

an estimated 30% mark mortality, based on Big Qualicum data. However, as stated previously, an annual mark mortality rate was calculated for the Big Qualicum Chum and was used for adjusting its escapement (and catch).[5]

Special escapement calculations were required for Big Qualicum Chum, Puntledge Chum and Quinsam Pinks. These are described below.

Big Qualicum Chum escapement
Escapement estimation
The Big Qualicum system was unique in that the entire system was considered enhanced. By comparison, escapements to all other enhanced streams consisted of both the wild and enhanced components.

The estimation of Big Qualicum Chum escapement was closely linked with the fry marking strategy. Highlights of the marking strategy are outlined below.

BROOD YEAR	CHUM FRY MARKING STRATEGY
1959 - 1963	No fry marking occurred.
1964	River fry were marked.
1965 - 1970	River and channel fry were differentially marked.
1968 , 1969	Freshwater-reared fry were marked.
1971, 1972	Channel fry were marked.
1973 - 1999	Mix of channel and river fry were marked with identical marks.
2001 - 2015	Mix of channel and river fry were marked with identical marks.
1980 - 1982	Freshwater-reared fry were marked.
1983, 1985, 1986	Early versus late fry migrants were differentially marked.

Generally, for estimating escapements for each mark type group, fin clips were recovered during live sampling at the fences, and during dead pitches in the river and spawning channels. Scales were analyzed to provide the age composition of each mark type group and of the unmarked group. To compute the ratio of channel to river adults in the escapement (or the catch) the following equation was used:

$$\frac{Riveresc.}{Channelesc.} = \left[\frac{Rivermarks}{Channelmarks} x \frac{Riverfry}{Channelfry} x \frac{Markedchannelfry}{Markedriverfry} \right]$$

This ratio was calculated for each age class of each differentially marked brood (1965 1970) using dead and live recovery data. For 1971 to 1975 return years when freshwater-reared Chum from the 1968 and 1969 broods were present, their returns were calculated using a 20% mark mortality and subtracted from the total escapement before the assignment of river and channel origin fish.

For estimating the overall Big Qualicum Chum escapement, the actual counts at the main fence plus estimates for below the fence were combined. The latter estimate was based on

[5] Expanded escapement was adjusted for mark mortality in the historical data from 1980 to 1989. It was not adjusted for mark mortality from 1990 to 2018. See *Assumptions, Data Quality and Data Gaps* in *Methods* for more information.

count distribution over time and a redd life of 6.5 days, based on a mean redd life in channel No.1. The area under the distribution curve was used to estimate the below the fence escapement for all years up to 1971 (Fraser et al 1978). From 1972 1974, the below the fence escapement estimate was based on the formula:

[Total fish counted] x [Count frequency in days/6.5 days]

In 1975, a new fence constructed at the mouth of the river was used to get an accurate total river count. The "area under the curve" method was used to estimate the below the fence counts historically. The exception was in 1986 when no sufficient counts were available for this method.

Using the Big Qualicum escapement data for estimating the commercial fishery catch
The entire Big Qualicum catch, like the escapement, was considered enhanced, and the escapement data were used for computing the catch estimates. Specifically, the mark rate found in the escapement was used to expand the estimated marks recovered in the commercial fishery on a statistical area/weekly basis. Live sampling data for escapements showed that the mark ratio was not homogeneous over time. A timing curve was developed for Big Qualicum Chum using adult tagging data, and a temporally variable mark ratio from live sampling was used to estimate the commercial fishery contributions from 1967 to 1976. For that period for years when no live sampling occurred, weekly dead-pitch mark ratios were used.

From 1977 to 2018, escapement mark sampling was confined mostly to the channel dead-pitch, and no temporally consistent live sampling or dead pitches occurred. As a result, a seasonal mark rate derived from the combined [channel pitch + fence dead + food fish + surplus sales sampling] was used to estimate Big Qualicum contribution to the commercial fishery. It is highly likely that the sampling regime provided biased mark rate estimates in the escapement because fry marking rate over time was not proportionate to the size of the migrating population, and past data indicated that the mark ratio at return was also not consistent over time.

The other concern is that the annual fry marking at Big Qualicum was reduced from an average of 1.18 million fry (1963 - 1972 broods), to 0.46 million fry (1973 - 1983 broods), a drop of 61%. The mean sampling rate of escapement for these broods was also reduced from 41% (1967 - 1976 return years), to 26% (1977 - 1987 return years). Correspondingly, the mark rate at return dropped from 2.54% to 0.74%, a 71% reduction. This drop in mark rate at return exceeds the above 61% drop in mark rate at release indicating the possibility of missed escapement marks for the later brood returns.

Since the Big Qualicum escapement mark rate was used to estimate Big Qualicum catch contribution, any errors in escapement estimates could have been compounded in the catch. If the true mark rate was underestimated, such as would occur if marks were missed during escapement sampling but not in catch sampling, catch contribution would be overestimated. Potential temporal mark rate variability and missed mark sampling in escapement should have been evaluated at Big Qualicum.

Mark mortality estimates for Big Qualicum Chum

An annual mark mortality rate was calculated for Big Qualicum Chum. This rate is computed as the difference between:

- The actual escapement counts, i.e. fence counts and below the fence estimates and
- The estimated escapement based on expanded recoveries uncorrected for mark mortality

This calculation is possible for Big Qualicum Chum because, unlike other enhanced streams where both the enhanced and wild components are present, the wild component was absent from the Big Qualicum system since the entire system was considered enhanced. Also, reliable counts of the total enhanced escapement were available for comparison with the estimated escapement.

The mark mortality rate for Big Qualicum Chum averaged 22% for the 1968 to 1982 period but increased to a mean of 35% (range 10% 59%) for the 1983 to 1987 period. This increase in mark mortality may have been attributed to several factors including higher fin regeneration from lower quality marking, biased sampling of temporally variable mark rates at return, and missed marks during escapement sampling. Below the fence fry estimates may also have been overestimated. Although this would have decreased the measured mark mortality, it could have accounted for some of the annual variability in the measured mark rate, depending on the proportion of the escapement spawning below the fence.

The Big Qualicum estimates of Chum mark mortality were critical to the estimates of all facilities' enhanced catch and escapement contributions. This was because all mark expansions were adjusted for an estimated 30% (divided by 0.7) mark mortality based on the Big Qualicum data. If this value was based on erroneous data, then contribution estimates for all facilities are suspect. However, this may be a serious problem only for the Big Qualicum catch and escapement estimates after 1976 when only the mean seasonal, rather than the mean weekly mark rates for Big Qualicum escapement were available; the earlier data are considered to be of good quality, except for the effect of below the fence fry estimates.

Puntledge Chum escapement

In 1986 and 1987, the Puntledge escapement sampling occurred only during broodstock collection. The escapement sampling rate was low, and the resulting low mark rate gave low estimates of the enhanced escapement. This produced a high (>85%) calculated harvest rate for this enhanced stock, compared to the lower mean harvest rates (65% - 67%) for the Big and Little Qualicum enhanced Chum for the same time period. This suggested that the enhanced Puntledge escapement was underestimated, a possibility that was reinforced when the ratio of the enhanced to total Puntledge escapement was used to estimate the total (wild and enhanced) Puntledge catch. The resulting calculated total catch of Puntledge Chum exceeded the total Area 14 catch, clearly an impossibility. To correct this problem, the enhanced Puntledge escapement contribution in 1986 and 1987 was estimated using the mean harvest rate of the enhanced Big and Little Qualicum Chum for these two years.

Appendix 6 Associated Release Groups

Assignment of Unassociated Releases to Mark Groups

Unmarked release groups (i.e. releases unassociated with a mark), could be assigned to a marked release group with similar characteristics. This allowed for the calculation of expanded adult contributions for such unmarked but associated release groups. Except in rare circumstances, the unassociated releases were assigned only to those mark groups within the same facility and brood year. This was based on the assumption that between facility and brood year variation was too large to do otherwise. Once the primary criteria of the same facility and brood year were met, the secondary criteria of similar release timing and release size, in that order, were used for selecting mark groups.

More than one mark group may have been assigned to the unassociated group. If these mark groups spanned the range of release timing of the unmarked group, they were treated as a single group. If they were replicates, the mean survival of these replicates was used to calculate contribution of the unassociated group. In some situations, the unassociated group was similar to the mark group but only half the size at release; in these cases the unassociated group was assigned half the survival of the mark group (i.e. X2 in the equation below is divided by two).

For any recovery stratum the formula for estimating expanded recoveries for an unmarked release group associated with a marked release group is as follows:

$$X1 = X\frac{2}{R}2xR1$$

where

X1 = Estimated expanded recoveries of associated unmarked release group
X2 = Expanded recoveries of associated marked group
R1 = Juveniles Released from the associated unmarked release group
R2 = Juveniles released from associated marked release group

For unmarked release groups associated with more than one marked release group, the formula is as follows, depending on the number of marked release groups R2...Rn:

$$X1 = \left[X\frac{2}{R}2 + X\frac{3}{R}3 + X\frac{4}{R}4 \right] xR1$$

Note that no more than three mark groups were used.

In some situations where no comparable mark groups existed within a brood year at a given facility, a comparable mark group from another facility in the same area for the same brood year was used. For example, contributions from the 1980 brood Little Qualicum unmarked releases of unfed Chum fry were estimated using the 1980 brood Big Qualicum marked releases of unfed fry. Similarly for Quinsam Pinks, unmarked fry broods were associated with the marked Puntledge groups from the same brood year, and vice versa. Only the unfed Pink fry from the 1979 and 1984 broods were not marked at either the Puntledge of Quinsam facilities, and past mark data had to be used for these sites.

Appendix 7 Assumptions, Data Quality and Data Gaps

Most errors in mark sampling resulted in an underestimation of marks recovered. Such errors included incomplete sampling of catch for certain gears and areas, under-reporting of catch, mark mortality, missed marks during sampling, missed marks due to fin regeneration, CWT tag loss, and lost pins during dissection. Overestimation of enhanced contribution could also have occurred, for example due to the presence of naturally missing fins and from overestimating the numbers of juveniles released. However, since Chum were reared for only short periods, overestimation of their release numbers may not have been as high as for the longer reared species, such as Chinook and Coho.

Adjustments of mark recoveries for unsampled week-area strata, did not seriously affect mark recovery estimates since, as shown above, they increased the number of marks by only 1% to 4%. However, the assumptions implicit in the use of these adjustment methods should have been tested or supported with references. For example, the rate of mark recovery in weeks that were not sampled, was assumed to be the same as that in weeks that were sampled. This assumption could be tested with data from years and stocks for which all weeks were sampled. Other key assumptions concerning potential biases in (1) Release enumeration methods, (2) Mark mortality rates, (3) Missed mark rates, (4) Escapement methods, and (5) Utility of associated release groups, should have been supported with references, evaluated, or tested on a limited representative group of stocks. Assumptions on mark mortality and missed mark rates are particularly important to the assessment of Chum salmon because both fin clips and CWT tags are used as marks, and the mark mortality and missed mark rates likely differ between the two mark types.

Specific concerns regarding Chum data quality are addressed in sections below.

Sampling Rate of Catches

The mean annual sampling rate of Chum net catch from 1984-1987 was 28.7% in the major catch areas and 12.7% in the minor catch areas for an overall sampling rate of 26.1% (range 21.1% - 31.8%). That is, about a quarter of the sampled Chum catch was actually examined for marks each year. This sampling rate was considered sufficient to provide reliable Chum mark recovery data.

Non-sampled catches

The bias due to non-sampled catches of Chum (i.e. catches where none of the fish were examined for marks), should be low because all the important temporal and spatial strata in the commercial fishery were sampled for marks.

Unsampled Incidental Catches

Another data gap involves unsampled incidental catches in minor catch areas. For those years prior to the initial sampling in these areas, no adjustment was made for missed marks. Therefore, the total catch contributions of some enhanced stocks may have been underestimated for the early unsampled years. For example, the returns of enhanced Snootli Chum may have been underestimated for the pre-1986 period when Area 9 (the incidental catch area for Snootli Chum) was not sampled. However, any unsampled years in Area 9 after 1986 were adjusted for missed marks.

Missed Marks in Catch and Escapement Sampling
Missed marks during catch and escapement sampling constituted another potential source of error. In sampling of Chinook and Coho catches in some troll fisheries in 1987, this error ranged from 0% to 3.5% (J.O. Thomas, unpubl. data). Chinook and Coho were generally CWT-tagged, and the accompanying adipose clips were readily visible and had a low fin regeneration rate. By comparison, a greater error of missed marks was expected for Chum, since several types of fin clip marks were used. These could be missed more readily than an adipose clip, with fin regeneration adding to the problem. In those regions where both the CWTs and ventral clips were likely to have been present in Chum, both the dorsal and ventral areas of each fish should have been carefully examined for marks. Fish examination may have been simplified for those catch regions where adipose clips were not likely to be present. In such cases, only the ventral area required examination initially, and if a ventral clip was found, the adipose fin should then have been checked as well.

The speed of catch sampling was also a factor. Unlike Chinook and Coho catches which were usually sampled at a much slower pace, Chum catches were often sampled on a rapidly moving conveyor belt from an unloading packer. The high speed of the conveyor and the large numbers of fish passing, made sampling difficult. These potential biases could result in a higher missed mark rate during catch sampling of Chum compared to Chinook and Coho, with different clips being missed at different rates.

Missed marks were of even greater concern in escapement sampling compared to catch sampling because brood stock collection and egg take activities often took precedence over escapement mark sampling. Evaluation of missed marks in escapement sampling in 1987 estimated an average missed mark rate for Chinook at three SEP hatcheries ranged from 15% to 40% (Cross et al https://waves-vagues.dfo-mpo.gc.ca/Library/40612673.pdf). The potential for missed marks in multiple fin-clipped Chum may have been even higher.

CWT Tag Loss
CWT tag loss in Chum was more variable and usually higher than in Chinook and Coho because of the small size of Chum when CWT-tagging occurred.

Mark Mortality
Estimates of enhanced contributions are highly sensitive to the estimate of mark mortality rate. As stated previously, all expanded estimates of catch and escapement were adjusted upwards (divided by 0.7) to account for an estimated 30% mark mortality. An exception was the Big Qualicum Chum for which an annual mark mortality rate was calculated, as the difference between the actual and estimated escapement values. This rate was then used to correct the catch estimates for Big Qualicum Chum.

The accuracy of mark mortality measurement could be affected by missed marks, especially during escapement sampling, and by temporal and spatial variance in mark incidence. Also, it was not known whether the commonly used 30% mark mortality, based on the Big Qualicum Chum data for unfed fry, was applicable to fed fry from other SEP facilities.

In some instances, the standard adjustment for 30% mark mortality resulted in underestimated enhanced contributions, so that alternate adjustment methods were used.

For example, mark sampling of Nitinat Chum from 1984 through 1986 showed a large proportion of poor quality marks and a high level of fin regeneration. Analysis of the catch and escapement data using the standard methods of expansion and adjustment for 30% mark mortality indicated an unrealistically low proportion of enhanced fish. Because of these problems, the enhanced contribution was calculated by estimating the wild fry output in the corresponding brood years, and splitting the catch and escapement by age in proportion to the appropriate brood wild and hatchery fry output. Wild fry output was based on the following: escapement to the Nitinat system, 50:50 sex ratio, 2,500 eggs/female, and 10% egg to fry survival. To be conservative, unfed wild fry and fed hatchery fry were assumed to have equal survival. Mark quality showed improvement in the 1987 and 1988 sampling, and the conventional mark analysis was used to estimate contribution for those years.

In other instances, the enhanced contribution estimates were too high. For example, in the Area 14 Chum fishery, the total (wild + enhanced) catch of each of the Big Qualicum, Little Qualicum and Puntledge Chum stocks was estimated by applying to the estimated enhanced catch, the ratio of the enhanced to total escapement. The resulting Area 14 catch estimated for the three combined stocks exceeded the total Area 14 catch in 1985 and 1987. This erroneous estimate may be attributed to the high Big Qualicum mark mortalities of 58.9% and 44.2% computed for 1985 and 1987, respectively. By comparison, the 1986 Big Qualicum mark mortality was only 32.9%. The enhanced contribution of Big Qualicum Chum was reanalyzed using a mark mortality rate of 30% for the 1985 and 1987 return years, and this provided a more realistic estimate of enhanced contribution.

Scale Ageing

Interpretation of Chum fin clip marks required assigning of fish to an age class, a process subject to error. This error would bias the mark origin results and affect contribution estimates. Generally, scale ageing of fishery or broodstock Chum was considered to be relatively accurate, and the proportion of un-aged marks in fishery mark recoveries was usually low. Therefore, any bias in catch data due to a possible higher scale regeneration rate in older fish should have been negligible. However, scale resorption on dead-pitched Chum may have reduced the reliability of ageing, and regenerated scales may have resulted in some unaged marks. Another concern was that any errors in scale ageing of Chum would reduce the precision of contribution estimates based on fin clips relative to estimates based on CWTs. Therefore, the relative precision of contribution estimates based on these two methods should have been compared.

Where escapement recoveries were not aged, the closest available age composition data was used. For example, in 1985 and 1986, Little Qualicum River Chum were dead-pitched for marks but not sampled for scales. In this case, scale age composition for the channel dead-pitch marks was used to estimate the age breakdown for the river-pitch marks.

Unmarked Unassociated Releases

In some years at some facilities, no juvenile marking was conducted, and no suitable mark groups could be assigned to represent them. For such unmarked unassociated releases, alternate expansions methods were used to estimate the enhanced catch and escapement components. For example, for the unmarked Chum from the Blaney (1981 brood) and Inch Creek (1970-1975 broods) facilities, the total escapement estimates were apportioned into enhanced and wild components based on the enhanced and wild fry outputs. The enhanced

catch component was then calculated by applying the above enhanced escapement estimates to the estimated Fraser Chum harvest rates (Fedorenko and Bailey 1980).

Escapement Estimation and Mark Sampling

Estimation of marks in the escapement could have potential for bias and error. Ideally, the proportion of the escapement sampled for marks should have been representative of the entire spawning population. Of the four major escapement recovery methods listed by Kuhn et al (1988), only the hatchery rack recoveries and the fence recoveries (usually just below a hatchery) generally provided random samples. Rack recoveries in particular, should have provided high quality samples because of the ease of fish handling and the ability to sample throughout the run. The other two recovery methods were broodstock collection (e.g. with seines or angling gear) and dead pitches on the spawning grounds. These two methods generally provided selective or temporally biased samples of the overall escapement. Note also that a temporally biased sample would result if only a portion of the hatchery rack recovery was sampled for marks (e.g. that portion used for egg takes).

Escapement data were consistently provided by those facilities with fences spanning the entire river. Such facilities were limited to Pallant, Quinsam, Big Qualicum, Blaney and Inch Creek. Regular dead pitches on the spawning grounds, such as occurred annually at Little Qualicum, Inch Creek and Chilliwack may have been biased due to removal of carcasses by predators, often preferentially removing female carcasses.

Since the majority of enhanced Chum spawned naturally, sampling on the spawning grounds was important for estimating the escapement. Over time, more facilities conducted dead pitches, in addition to rack and broodstock sampling. Also, the quantity and quality of samplingincreased as the facility staff have became more knowledgeable of the importance of sampling. Nevertheless, mark incidence on the spawning grounds could vary dramatically over time, and since hatchery staff were rarely able to sample proportionately throughout the run, the potential existed for biased escapement results.

The above potential errors in escapement sampling may not appear significant when estimating fishery contribution. However, this belief is false since the adjustment of fishery contribution for mark mortality and for the use of identical fin clips in different stocks was based on escapement sampling.