

North American Salmon Stronghold Partnership

Harrison Basin Certification Application

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North American Salmon Stronghold Partnership: Harrison Basin Certification Application

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Harrison Basin Certification Application

I. GENERAL INFORMATION

NAME OF PROJECT: HARRISON RIVER STRONGHOLD

Preface

In recognition of the Harrison Basin's fisheries values the Pacific Fisheries Resource Conservation Council, after meeting with the Chehalis Indian Band, determined to pursue and test the Salmon Stronghold concept in the Harrison Basin. This followed on a Council report that recommended that Canada should participate in the Salmon Stronghold Partnership and test the Salmon Strongholds approach in Canada including the scientific evaluation and ranking of a potential stronghold (Beeson, 2009).

Project Location

Located Within the Fraser River Watershed in Southern British Columbia: 3 maps attached.

Basin/Watershed: See Attached Maps. The proposed Harrison River Stronghold is the key downstream portion of the Lillooet-Birkenhead and Harrison Rivers basins (map 1). The Harrison system is located within British Columbia's Coastal Western Hemlock biogeoclimatic zone (Krajina, 1965). It is also a key component of the Fraser River Salmon Ecoregion (North American Salmon Stronghold Partnership, unpublished).

The main features of the proposed Harrison River Stronghold are Harrison Lake, the Chehalis River, Weaver Creek and the Harrison River (map 2). Important upstream tributaries draining into Harrison Lake include Big Silver Creek and Cogburn Creek. The Harrison River is a short but large tributary flowing southwest from Harrison Lake for 16.5 km, entering the Fraser River 116 km upstream from Georgia Strait (map 3). The Harrison River is navigable but has small rapids and difficult water downstream of the lake. Further downstream near the confluence with the Fraser the Harrison River widens into a wide backwater, Harrison Bay. In the days of the Fraser Canyon Goldrush (1858 era) there were sandbars at the confluence with the Fraser River that were dredged. The Harrison River has little habitation, is forested most of the way and while crossed by a highway and railroad bridge, it has no road next to the river itself and little disturbance of its riparian zone.

There is a highway that connects the town of Harrison Hot Springs, located on Harrison Lake, as well as the nearby town of Agassiz with points south but this highway does not proceed up the lake for any appreciable distance. Like the river, the lake is non-roaded save for some forestry roads that are on the eastern upslopes and not directly next to the lake. Harrison Lake is about 60 km in length and at its widest is almost 9 km across. At its southern end the resort community of Harrison Hot Springs is about 95km east of Vancouver.

The Chehalis River is a key tributary to the Harrison River and an important salmon producer. It arises in the mountains west of Statlu Lake. This canyoned river first empties into Statlu Lake, and eventually flows into Chehalis Lake and then the Harrison River.

The largest stream entering Harrison Lake (other than the Lillooet River) is Big Silver Creek also known as Big Silver River or Silver River. It has benefited from habitat enhancement work and has had numerous fisheries projects on it over the years.

The Harrison Stronghold area is marked by both strong and unique runs of Pacific salmon. In fact, it is perhaps the only area within BC that has all five species of salmon and steelhead trout.

Three Conservation Units of sockeye are explicitly recognized: one spawning in the Harrison Rapids area of the Harrison River; and another in tributary portions of the basin including the Chehalis River and Weaver Creek (Fisheries and Oceans, 2009). Another CU is the Big Silver tributary to Harrison Lake. The Harrison Rapids Conservation Unit has an unusual life history with the sockeye salmon swimming downstream to the Fraser River estuary upon emergence rather than rearing in freshwater first. This run is not enhanced, yet it has remained strong and even shown increases despite the fact that other late-run Fraser River sockeye salmon populations are decreasing in number. Sockeye monitoring in the Fraser during the 1990's to the present has demonstrated that many late-run Fraser sockeye died in-river before spawning (Labelle, 2009). An exception to this pre-spawning mortality pattern has been the Harrison sockeye. In the last five years there have been close to 400,000 spawners in a very short stretch of the Harrison River. The population of sockeye in Weaver Creek also has a unique life history in that the salmon swim downstream to the Harrison River and then upstream to Harrison Lake to rear, thereby exhibiting an amazing local adaptation. Other upstream/uplake populations of this Conservation Unit of sockeye salmon have a more standard life history pattern. In addition to the three CU's of salmon discussed in this application there is a fourth in the Lillooet portion of the drainage.

There are also two Conservation Units of chinook recognized in the Harrison Basin. Similarly to sockeye, the chinook population that spawns in the Harrison River itself has a unique life history and swims downstream after emergence and heads to the ocean to rear rather than rearing in freshwater first. It is a rapid growing three year old white-fleshed fall chinook that is very productive. In the last five years as many as 250,000 spawners were enumerated in the short section of the Harrison River. This chinook stock has been used as spawning stock for other local areas such as the Chilliwack River but the population in the Harrison itself is not enhanced. The other chinook Conservation Unit behaves more normally in terms of life history with a freshwater rearing phase. Those spring chinook are found in the Chehalis and Big Silver tributaries in particular. In addition to the runs relevant to this application chinook also occupy the Birkenhead in the Lillooet portion of the drainage. The proposed Stronghold also has very important stocks of a Conservation Unit of chum salmon, partly enhanced. Inventory of that resource is now poor save for what that carried out by Sts'ailes (Chehalis) Band. There is also Conservation Unit of a very abundant run of odd year spawning pink salmon in the system. In addition the proposed Stronghold area contains poorly studied coho salmon in the tributaries and probably some in the mainstem Harrison itself. There is a separate coho CU in the Lillooet portion of the drainage.

Persistent populations of steelhead trout occur in the Chehalis River, Weaver Creek, Cogburn Creek (tributary to Harrison Lake) and Big Silver Creek in addition to populations in the upper Lillooet-

Birkenhead watershed. Interestingly for steelhead, some of these populations have the unusual life history of migrating through a lake (Harrison) to reach their spawning grounds while others such as the Chehalis and Weaver Creek Steelhead don't. Steelhead populations in the basin are the second most abundant steelhead population in the region. The Chehalis run, in particular, is strong with as many as 1,000 wild steelhead being caught some years. The fishery is now catch and release and in 2007 there were 367 wild steelhead reported caught (appendix 6). There is an enhancement facility on the Chehalis and marked steelhead are also caught by anglers. In addition the Harrison has been noted in the past for its strong populations of cutthroat trout. The appendices at the end of this document summarize stock assessment data for all five species of salmon. It also includes information from the Steelhead Harvest Analysis that while developed for a different purpose is proving useful as a stock assessment tool.

Salmon and steelhead enhancement projects are underway for some of the basin's salmon populations. To offset the impacts of sediment inputs from the Hemlock Valley Ski development a sockeye spawning channel was built in Weaver Creek (map 2,3). There is also a moderate sized hatchery for chum, coho, chinook and steelhead in the Chehalis River. This channel also benefits some pink salmon. In the upper drainage, Fisheries and Oceans Canada operated a hatchery in the Birkenhead for chinook salmon but this was decommissioned in the late 1990's. It was subsequently operated as a public involvement project by local interests who also used it for coho and steelhead enhancement but they also closed this facility and it has not been operating at all since the early 2000's.

In due course it would be beneficial to extend the Salmon Stronghold to the entire Harrison-Lillooet-Birkenhead Basin, which drains an area of 7870 km² and which is 177km long from the Harrison-Fraser confluence to the head of the Lillooet River. This upper area of the watershed, particularly the Birkenhead, has very important runs of coho, chinook and sockeye salmon. Other species such as steelhead are also present. At this point the upper portion of the watershed has not been included in this application only for pragmatic purposes. Currently, there is no highway access joining the Harrison portion of the basin to the Lillooet – Birkenhead portion. Paved access to both areas are available but one route is north of Vancouver the other east of Vancouver putting an examination of the two portions of the Basin beyond practical consideration at this time. Further, as a result of access, key contacts and potential Stronghold participants are different in the two portions of the watershed. Before the other portion of the basin is also given Stronghold Status, a different applicant organization will need to become involved. The Mount Currie First Nation has a great interest and expertise in the fisheries of the area and may well be interested in leading such an effort in due course.

II. APPLICANT CONTACT INFORMATION

Applicant Organization: Pacific Fisheries Resource Conservation Council	Contact Name: Mark Angelo, Chair, Pacific Fisheries Resource Conservation Council
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Key partners: This activity to build widely-inclusive participation will need to commence in earnest once Salmon Stronghold status is obtained. The Pacific Fisheries Resource Conservation Council will work to identify key partners and in due course turn over the management of the partnership to a local community organisation. Key partners that will be approached include Sts'ailes (Chehalis) Band, the Fisheries and Oceans Canada and B.C. Environment. Local sport fishing groups are also very interested in the application and should be approached.

Additional groups with interests wider than fish should also be approached. These include the District of Kent, the Town of Harrison Hot Springs, the Fraser Valley Regional District and stewardship organizations working in the watershed such as the B.C. Conservation Foundation, and the Fraser-Harrison Smartgrowth Partnership. Other organizations which operate in many areas including the Harrison area should also be approached including the Nature Trust of B.C., the B.C. Salmon and Watersheds Program, the Pacific Salmon Foundation, Pacific Streamkeepers Federation and others. In addition local forest harvesters and agriculture organizations should be approached.

III. INFORMATION RELEVANT TO NORTH AMERICAN SALMON STRONGHOLD PARTNERSHIP SELECTION

Why make the Harrison Basin a Salmon Stronghold?

The Harrison is currently a “Crown Jewel” of the BC salmon resource. All five species of salmon are present as well as steelhead trout; perhaps the only basin that has all anadromous species present. The system supports unique life histories of salmon including river run sockeye salmon that migrate downstream to the Fraser estuary upon emergence from the gravel as well as two other sockeye Conservation Units including sockeye that migrate down Weaver Creek to the Harrison River and then up the Harrison River to rear in Harrison Lake. They are numerous and increasing in number at the very time when other late run Fraser River salmon stocks are decreasing in number. The Harrison chinook stocks are also particularly exceptional and abundant with over 250,000 spawners in some years and, like the sockeye, migrate to the ocean upon emergence.

Habitat in the Harrison basin is in generally good shape right now, albeit problems are being addressed and other ones need to be, and several emerging threats to wild salmon have been identified. The Harrison chinook and Harrison River and Weaver Creek sockeye Conservation Units of salmon have very strong Salmon Stronghold expert analysis scores ranging from 17-20 out of a maximum of 20 for these three Conservation Units. (expert assessments for salmon are incorporated into the last part of section III of the Application).

Despite the importance of wild salmon in the river, local citizens by and large are unaware of the significance of the Harrison salmon resource. The assignment of Salmon Stronghold status will be instrumental in raising public awareness of the basin’s extraordinary salmon values and leading to proactive management and planning in the Harrison Basin.

Similarly, government fisheries agencies are currently not seen to be devoting extra care and attention to ensuring the viability of salmon and steelhead in the area. New developments that can affect salmon are being reviewed via standard agency policies. A startling example of this is the Fraser Valley Regional District Aggregate Pilot Project (2009) examination of potential aggregate sources in the Fraser Valley which published a “for discussion only” map in which most of the west side of the Harrison River as well as the large islands on Harrison Lake were identified as potential aggregate sources. This study was undertaken by the Province of BC, in conjunction with the aggregate industry, and while the report did mention the environment it did not mention the word “fish” or “salmon”. The report also made it clear that decisions on such matters rested with the Province and such decisions were not subject to municipal zoning. The role of the federal government, which is responsible for the protection of fish habitat under the constitution, was not mentioned either.

Ongoing activities such as log booming in the Harrison River proper are increasing but the risks that these activities pose to salmon and steelhead are not being given the attention they are due despite the very strong and unique stocks of salmon spawning in the Harrison.

The Harrison is a prime example of a crucial salmon system being taken for granted and lacking attention by those entrusted with its care. No proactive approaches are in place to avoid damage or to screen-out inappropriate development proposals as is the case for many other areas in British Columbia. Compounding the problem, key information on the status of stocks for salmon

management purposes is not being collected for some of the Conservation Units such as coho, chum and pink salmon. Stronghold Status could be the driver for more attention being paid to stock assessment for currently healthy populations, and therefore better information for professional management of the fisheries resource associated with Harrison salmon and steelhead stocks.

Complex issues facing the Harrison Basin:

The Harrison Stronghold is less than 100 km from the City of Vancouver, British Columbia. This large population base creates an inherent threat to nearby areas. Already a golf course has been constructed within the lower Harrison basin. More recently, a small residential community has been developed. Additional urbanization, given the proximity of the basin to Vancouver, remains a key threat to the integrity of salmon and steelhead habitat.

In addition the Harrison's proximity to British Columbia's largest population has generated interest in infrastructure projects in the area.

- These projects include a potential new highway following the west side of Harrison Lake and thereby adding a new link from the lower mainland to the interior of the province. This is dubbed the "Sasquatch" Highway. If built such access would fundamentally compound the number of direct and indirect impacts to the Basin.
- Another infrastructure project of very serious concern involves the use of Harrison Lake as a water supply. In 2000, the Greater Vancouver Regional District recommended consideration of Harrison Lake as one of a number of options for water supply in the long term.

Resource issues facing the Harrison Basin:

As referred to above, it appears that an emerging issue which might affect the Harrison watershed is aggregate removal. The Fraser Valley Regional District Aggregate Pilot Project (2009) examination of potential aggregate sources in the Fraser Valley which published a report and "for discussion only" map in which most of the west side of the Harrison River as well as the large islands on Harrison Lake were identified as potential aggregate sources. The area was coded yellow, meaning that removal had to be assessed. However, this study, undertaken by the Province of BC in conjunction with aggregate producers, did not even mention the word "fish" or "salmon" or acknowledge the risks to the fisheries resource. The report also made it clear that decisions on such matters rested with the Province, and such decisions were not subject to municipal zoning that could prevent or restrain it. The role of the federal government, which is responsible for the protection of fish habitat under the constitution, was not mentioned either.

In the past, logging practices in the Harrison drainage were not carried out to the environmental standards of today. Important side channels to the Harrison River were sedimented and, while some of these have been restored, remediation work remains. While logging practices have improved with the BC Forest Practices Code and now the Forest and Range Practices Act, challenges still continue in the protection of habitat from such activities. The Harrison River has long been used as a means to boom logs to the Fraser River. This activity is increasing and is of great concern given the unique biodiversity and high productivity of the sockeye and chinook

stocks in the Harrison River. Impacts from scouring or bark and other debris sinking to the bottom have not been assessed.

Groundwater-fed sloughs are important to salmon rearing and there is concern that this not be impacted. Increased urbanization associated with a growing population also increases the number of houses being built along the banks of the Harrison River creating water use and other concerns.

More generally, there is a need for more adequate habitat protection especially with respect to rate of cut in headwaters and logging in riparian zones and in land disturbance leading to sedimentation and flow regime changes in headwaters. There is a view that full protection be awarded to sensitive areas in the flood plain.

A number of streams in the basin have the potential to attract small hydro projects that are being given serious attention in much of British Columbia. Resultant impacts from such projects can include changes in hydrology in the immediate vicinity of the project, habitat loss, channeling and diversions. Access roads and powerline right-of-ways have considerable potential for detriment to salmon habitat.

Other issues facing the Harrison relate to the competition and conflicts amongst those involved in fishing the Harrison salmon. Responsible behavior, respectful sharing of the resource, and cooperation on the part of everyone are necessary components for the long-term viability of the salmon fishery and the maintenance of the remarkable attributes of the Harrison basin.

Water quality, as is the case in so many areas, is also a concern (Neiner and Wernick, 1997). As one example, the Village of Harrison Hot Springs discharges its sewage into Harrison Lake just near the entrance to the Harrison River. Fortunately, there was a 2008 federal-provincial government announcement of funding to improve the treatment and collection of sewage including the pumping of Harrison Hot Springs sewage to the District of Kent's facility. This, in due course, will allow the Village to decommission its sewage plant in Harrison Lake. While the stated reason is to improve drinking water it should, when completed, also have benefits in water quality and habitat conditions for the salmon resource.

In addition to resource issues within the Basin, there are risks and threats of impacts from outside the area, especially regarding the maintenance of high quality rearing habitat in the Fraser River estuary including its outer banks. This is particularly germane to the strong fall white chinook that leave the river upon emergence and rear in the Fraser estuarine area for a period of time.

Impacts of climate change and the implications to ocean productivity are also emerging and becoming significant. However, the Harrison stocks are doing better than other Fraser River stocks and may be better adapted to climate change.

Benefits of Salmon Stronghold Status:

The establishment of the Harrison basin as Canada's first Salmon Stronghold would generate broad interest and draw public attention to the extraordinary nature of the region. It would serve

as a rallying point for local residents, First Nations, fishing and environmental interests and local governments to work together to build on this uniqueness.

The designation of Salmon Stronghold status would provide a marketable “branding” of the Harrison basin as an exceptional environmental model. It would give a tangible basis to promote the area as an environmental example, and provide a basis to enable local residents to foster more sustainable development.

Salmon Stronghold status and associated branding should also help in both conserving and marketing the Harrison salmon that involve sustainable technologies. Earlier work in the drainage on traceability (tracking salmon through the harvesting, processing and distribution stages) would be enhanced by a Salmon Stronghold designation. There would be a strong benefit to reduce risky ocean fisheries in favour of more terminal fisheries in the Harrison region. The British Columbia Institute of Technology is promoting a River to Plate program that could operate in conjunction with Salmon Stronghold initiatives. Such a program would assist local residents, including First Nations, and help to conserve salmon stocks. It would also be consistent with the recent paper by Kim Charlie and Ken Wilson (2008) related to their recommendations for fisheries targeting Harrison sockeye.

Implementing a Harrison Salmon Stronghold could be the catalyst needed to enable stakeholders to work together across a broad spectrum of interests on a long-over due coordinated fisheries and land use management plan. This planning initiative would have, as its initial focus, a recognition of the requirement for activities to be compatible and supportive of the protection of the Harrison salmon resource, not simply considering salmon interests and values as secondary considerations.

Salmon Stronghold designation should assist in attracting interest and potential contributions from public and private sources to support salmon conservation projects in the Harrison basin. The generation of new funds for high-priority habitat projects, salmon stock assessment projects and key land acquisitions in the Harrison Salmon Stronghold would be an expected major benefit as a result of its Stronghold status.

The proposed Harrison Salmon Stronghold should also benefit from its involvement with others in the North American Salmon Strongholds Partnership and Wild salmon Center by drawing on their experience, technical support and sharing of best practices.

Finally, as Canada’s first Salmon Stronghold, it would give impetus for the establishment of other Salmon Strongholds in Canada. The Harrison Salmon Stronghold would be the first of what could be several Strongholds in Canada. It would be highly beneficial to the North American Salmon Stronghold Partnership to fulfill its original intent to become inclusive of the entire coastal region by expanding to Canada and Alaska, as its founders had hoped it would become.

Expert Rating of Harrison Basin Salmon and Steelhead:

Chinook assessment:

Dr. Brian Riddell, Executive Director, Pacific Salmon Foundation:

Harrison White Chinook

Harrison white Chinook are genetically unique, they are one CU under the Canadian Wild Salmon Policy, and have a distinct life history.

- Productivity score = 5 (amongst the most productive Chinook on the coast but production can be highly variable due to fry migrations, habitat conditions are excellent overall)
- Abundance = 5 (usually the largest Canada Chinook population)
- Viability = 5
- Life History diversity = 5 (unique life history for Chinook in BC)
- Percent Natural origin spawners = 5 (hatchery is present in the Chehalis River CU but contribution is miniscule compared to wild)

Score = 20

Richard Bailey, Program Head Chinook and Coho. Fraser River Stock Assessment, DFO Science
Harrison White Chinook

- Productivity score = 5 most years. Stock is highly productive and as mentioned above, that productivity is linked to ocean productivity. If ocean environment is favourable, Harrison abundance explodes. It contributes very heavily to Southern BC fisheries in the Gulf and off WCVI, plus US fisheries in Juan de Fuca and Western WA.
- Abundance = 4-5. Abundance is consistently high but very variable. Stock is very dependant on ocean regimes and can produce huge numbers. I have seen fluctuation in escapements between about 25,000 and 240,000.
- Life History diversity = 5 Rare/unique. Harrison is the ONLY natural fall white Lower Fraser stock, and as an immediate migrant, it is unique among Fraser Chinook
- Percent Natural spawners = 5 most years. Hatchery contribution to Harrison is low and assessed annually.
- Viability = 4.5-5

Score = 19-20

Chehalis Stream-type Chinook

Unrated but score would be low.

Comments: This "stock" is not really assessed and may be the result of experiments by previous hatchery managers. Early timed returns to the Chehalis have been crossed with various upper Fraser origin springs including Slim and Bowron, plus mid Shuswap in attempts to produce high quality early returning stocks for recreational fishing. It is likely that there were unique spring type stocks (perhaps similar to the lost upper Stave or like Birkenhead) in these areas but the present status of wild Chehalis spring-type chinook is unknown.

Coho Assessment:

(Richard Bailey, Program Head Chinook and Coho. Fraser River Stock Assessment, DFO Science)

Chehalis Coho

Unrated but score would be low

Comments: This is a hatchery dominated population that supports major sport fisheries both in the Chehalis and in marine and downstream freshwater areas. We don't try to assess it.

Sockeye Assessment*:

Jeremy Hume, Research Biologist, Cultus Lake Salmon Research Laboratory, Science Br., DFO
Lower Fraser River type (LFR CU)

- Productivity 5 Highest return/spawner in watershed from 1994 to 2003
- Abundance 3 Comprise about 2-3 % of the Fraser River population, similar to many FR stocks but 3 are each >20% of total.
- Life History Diversity 5 Harrison R. sockeye have a rare life history type, migrating to the ocean upon emergence. River type sockeye are rare in B.C. This is one of 2 in the lower Fraser and one of 5 in the whole Fraser.
- Percent natural origin 5. No enhancement.
- Viability 4

Score = 18

Harrison Big Silver Sockeye (D/S-L CU). Fry migrate downstream to lake

- Productivity 0 Catch not counted, therefore productivity cannot be estimated in a manner similar to other stocks.
- Abundance 1
- Life History Diversity 5
- Percent natural origin 5. Hatchery on Trout lake creek from 1905 to 1920. Not very successful and no lasting effect
- Viability 0.5

Score = 10.5

Weaver Creek-Harrison River (Fry migrate down Weaver Cr. To Harrison R. then up to Harrison Lake CU)

- Productivity 4 Was the highest in the Fraser River watershed but declined dramatically in 2002 and 2003.
- Abundance 3 Creek and channel numbers are about 2-3% of total Fraser River abundance.
- Life History Diversity 5. The Weaver Cr. Fry have a unique migratory pattern migrating down to the Harrison River and then up to Harrison Lake to rear.
- Percent Natural Origin 5. There is no known effects on genetic diversity from spawning channel which allows natural mating and spawning. Its possible that better egg to alevin survival conditions may affect fitness selection, but no data to evaluate.
- Viability 3.5

Score = 17

Note: (Note: expert certainty for all sockeye CU's = 5)

Note: Birkenhead CU also assessed but not included in this application for the Harrison portion of the Basin.

Note: References: Fisheries and Oceans Canada. 2009. Abundance and productivity data from DFO and Pacific Salmon Commission databases.

Pink Assessment:

DFO determined this CU could not be assessed owing to lack of data.

Steelhead Assessment:

Not yet assessed.

IV: STS'AILES (CHEHALIS) BAND, GOVERNMENT AGENCY AND PARTNER SALMON AND STEELHEAD PROJECTS IN THE WATERSHED

Production and habitat projects:

The Harrison Basin has a production spawning channel on Weaver Creek and a hatchery on the Chehalis River. Information on species enhanced by year and releases are outlined in appendix 7. As indicated above there used to be a small hatchery in the Birkenhead but Fisheries and Oceans discontinued its use in the 1990's. A local group took over and operated the Birkenhead facility as a Public Involvement Program (PIP) hatchery but this also ceased operations prior to the mid 2000's.

There have also been a number of habitat improvement projects carried out in the basin. For instance, the BC Conservation Foundation (BCCF) in the summer of 2008 installed, as a pilot, six "J-hook vane" woody debris habitat structures in the Chehalis River immediately downstream of the Morris Valley Bridge (Hryhorczuk, 2009 personal communication).

Recently the BCCF, in association with the Greater Georgia Basin Steelhead Recovery Program, conducted a height barrier assessment on the Big Silver, and created a concept for a side-channel along the margins of Hornet Creek (a tributary to the Big Silver). Opening up the barrier would provide passage for coho and chinook salmon and steelhead trout into an additional upper 8-9 km's of high quality river habitat. The BCCF has also identified other steelhead improvement projects in the watershed including gravel placement, large woody debris complexing and refuge alcoves and an annual stream enrichment program. Interestingly, fertilization experiments were completed a decade ago by BC Environment (Wilson et al. 1999).

While a number of habitat restoration projects have been carried out additional work could be done involve creating better pool habitat, gravel augmentation and off-channel rearing.

Assessment projects:

Chinook – Fisheries and Oceans Canada conducts extensive work on chinook spawners in the Harrison. This fall-returning Harrison stock dominates other lower Fraser chinook stocks. Since 1984, mark-recapture studies have been conducted annually on the Harrison River to obtain reliable estimates of spawning escapements (PSC, 2009). Fisheries staff utilize the fall chinook as an indicator stock with good spawning estimates based upon mark-recapture work and this is a means to verify numbers elsewhere that are based only upon visual surveys. As an indicator stock it also provides useful information on production, ocean survival and fishing impacts over time. The Harrison chinook also have specific stock escapement goals, unlike many populations.

Sockeye Fisheries and Oceans Canada conducts extensive work on sockeye spawners in the Harrison system.

Chum Fisheries and Oceans Canada has discontinued chum salmon escapement estimates for the Harrison system. Some work continues to be done on Harrison chum escapements by the Sts'ailes (Chehalis) Band under agreement with Fisheries and Oceans.

Coho Fisheries and Oceans discontinued coho salmon escapement enumeration in the Harrison system in the 1980's and 1990's depending upon location.

Pink Fisheries and Oceans discontinued pink salmon escapement some years ago, with the last enumeration taking place in the Weaver system in 1991.

Steelhead BC Environment does not enumerate steelhead per se but does conduct a mail-out harvest analysis with licence holders. Those results have a long-time period and are useful as an indicator of abundance. The BC Conservation Foundation has conducted steelhead stock via electro fishing (Chehalis) and snorkel surveys (Chehalis and Big Silver). Snorkel survey counts are not reported in Appendix 7 but were relatively good for steelhead (summers and winters) in the Chehalis, with only a few (~10) being observed in the Big Silver. In addition the BCCF has estimated Steelhead Smolt Capacity & Returning Adults (assuming 13% marine survival with estimates of approximately 6000 smolts/700 adults (based on a regional review of existing information).

Planning:

The only regional land-use plan existing in the area is a Fraser River Management Plan (FRMP): Hope to Mission whose focus is on removing gravel in the Fraser River for flood protection.

The focus of the Fraser-Harrison Watersheds Stewardship Program (FHWSP) is on projects for the restoration of habitat, specifically for the endangered Salish Sucker.

Partnership examples

- The Sts'ailes (Chehalis) Band and local sport fishers along with DFO and the Province have established a Collaborative Angler Access Management Plan under the Fraser Watersheds and Salmon program. This is an example for the Salmon Stronghold to build upon in bringing diverse interests together to make progress in the basin, including better habitat management and cooperative actions of parties with diverse interests
- Fraser Valley Regional Watersheds Coalition promotes watershed sustainability and to date has been active in the Chilliwack watershed.
- The Fraser-Harrison SmartGrowth program is another example of a partnership that emphasizes planting trees along fence lines and in environmentally sensitive areas as a means to maintain rural quality. They plan to build trails and greenways, amongst other activities.

Land Acquisitions

The Nature Trust of BC has been involved in acquisitions of key lands in the Harrison Basin, primarily for wildlife but with some secondary benefits for salmon habitat including:

- Chehalis River Conservancy (marshland) /Nature Trust DFO management (200.9 ha)

- Harrison River marsh and riparian habitat at the confluence with the Chehalis and Harrison (7.5 ha)
- Harrison Knob – donation from Canfor --located in the heart of Scowlitz Territory, it is an important burial site and cultural heritage resource (22 ha)
- BC Environment is exploring the possibility of a Wildlife Management Area in the Harrison River area.

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References Cited

Beeson, K. 2009. Applying the Salmon Stronghold Concept in Canada. Pacific Fisheries Resource Conservation Council. 28 pp.

B.C. Mines. 2009. Fraser Valley Regional District Aggregate Pilot Project. Recommendations Report. 20 pp.
http://www.empr.gov.bc.ca/Mining/Aggregate/Documents/FVRD_AggregatePilotProject_FinalRecommendations.pdf

Charlie, K. and K. Wilson. 2008. Harvest River Sockeye Test Fishery 2008: Investigations and Preliminary results. 14pp.

Fisheries and Oceans Canada. 2009. Framework for implementation of the Wild Salmon Policy: Initial lists of Conservation Units for British Columbia. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2009/055.

Hryhorczuk, C. 2009. BC Conservation Foundation. Personal communication. Also:
<http://www.bccf.com/steelhead/r2-focus6.htm#bigsilver>. <http://www.bccf.com/steelhead/r2-focus5.htm#cheh>.

Krajina, V. J. 1965. Biogeoclimatic zones and classification of British Columbia. In: Krajina, V. J., ed. Ecology of western North America. Vancouver: University of British Columbia: 1-17.

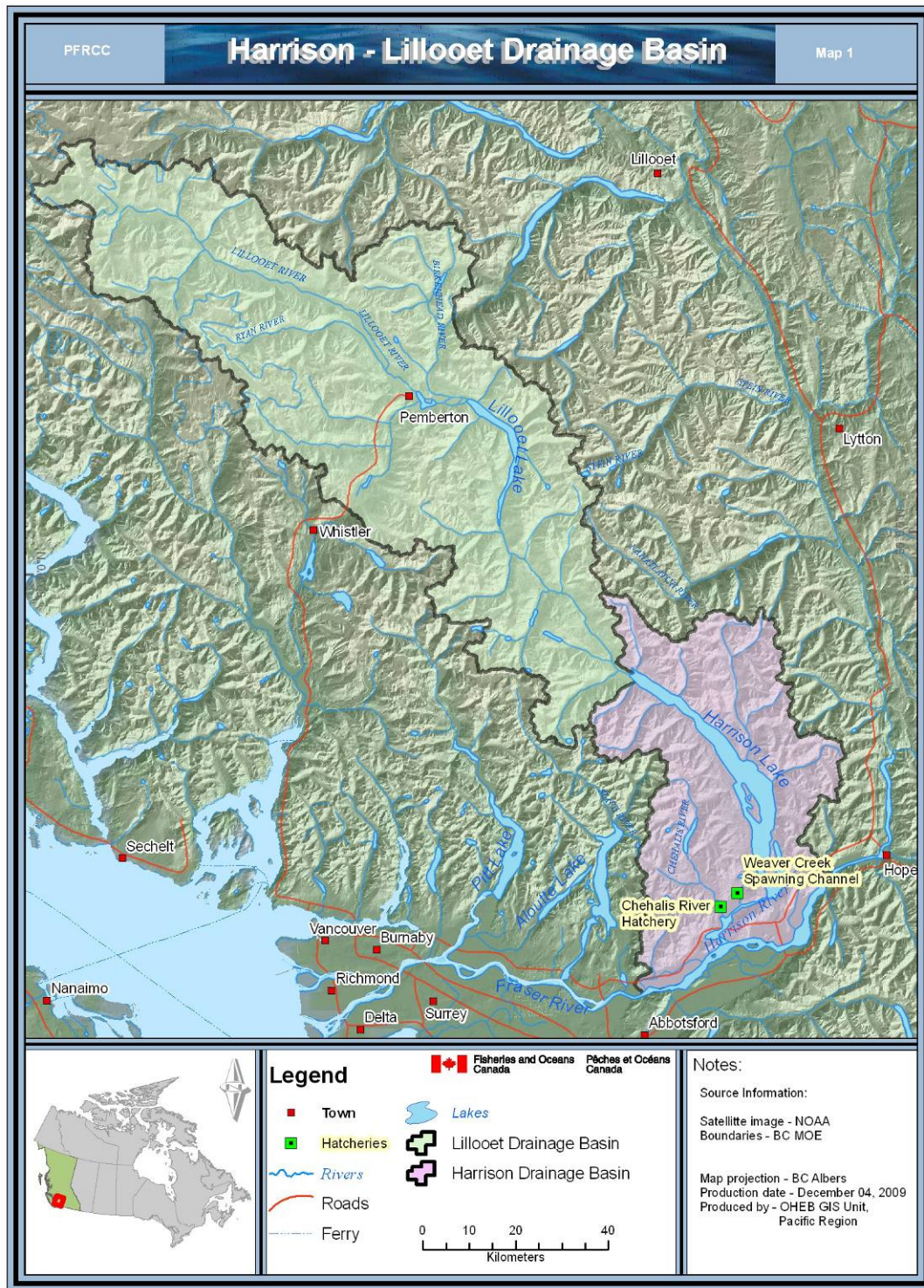
Labelle, M. 2009 Status of Pacific Salmon Resources in southern British Columbia and the Fraser River basin. Pacific Fisheries Resource Conservation Council. 91pp.

NASSP Salmon Ecoregions of British Columbia, unpublished.

Nener, J.C. and B.G. Wernick. 1997. Fraser River Basin Strategic Water Quality Plan. Lower Fraser River: Fraser Delta, Pitt-Stave, Chilliwack and Harrison-Lillooet Habitat Management Areas. Fraser River Action Plan. Fisheries and Oceans Canada.

Pacific Salmon Commission 2009. Joint Chinook Technical Committee Report of Catches and escapements. Report TCChinook (09)-1.

Wilson, G., K. Ashley, S.M. Ewing, P. Slaney and R. Land. 1999. Development of a premier river fishery: The Big Silver Creek fertilization experiment, 1993-1997. Final project report. Fish. Proj. Rept. No. RD 69. Province of BC. Ministry of Fisheries. 45pp.



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Map 1. The Harrison-Lillooet-Birkenhead watershed and its key features. The lower Harrison watershed is shown in purple and the upper Lillooet-Birkenhead watershed, which should be added to the Stronghold as soon as feasible, is shown in light green.



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Map 3. Ortho photo map of the Harrison River proper with key features marked.

Appendix 1. Chinook Salmon Escapements to the Harrison system.

Stock	Brood Year	Escapement
Big Silver	1951	75
Big Silver	1952	200
Big Silver	1953	200
Big Silver	1954	75
Big Silver	1955	75
Big Silver	1956	300
Big Silver	1957	200
Big Silver	1958	25
Big Silver	1959	75
Big Silver	1960	300
Big Silver	1961	75
Big Silver	1962	50
Big Silver	1963	24
Big Silver	1964	25
Big Silver	1965	50
Big Silver	1966	25
Big Silver	1967	25
Big Silver	1968	25
Big Silver	1969	75
Big Silver	1970	75
Big Silver	1971	75
Big Silver	1972	200
Big Silver	1973	200
Big Silver	1974	200
Big Silver	1975	75
Big Silver	1976	25
Big Silver	1977	75
Big Silver	1978	25
Big Silver	1979	75
Big Silver	1980	20
Big Silver	1981	100
Big Silver	1982	20
Big Silver	1983	75
Big Silver	1984	50
Big Silver	1985	30
Big Silver	1986	25
Birkenhead	1951	750
Birkenhead	1952	750
Birkenhead	1953	1,500
Birkenhead	1954	750
Birkenhead	1955	750
Birkenhead	1956	750
Birkenhead	1957	3,500
Birkenhead	1958	750
Birkenhead	1959	750
Birkenhead	1960	750
Birkenhead	1961	750

Birkenhead	1962	750
Birkenhead	1963	750
Birkenhead	1964	750
Birkenhead	1965	750
Birkenhead	1966	750
Birkenhead	1967	100
Birkenhead	1968	750
Birkenhead	1969	1,000
Birkenhead	1970	1,500
Birkenhead	1971	250
Birkenhead	1972	400
Birkenhead	1973	200
Birkenhead	1974	400
Birkenhead	1975	356
Birkenhead	1976	473
Birkenhead	1977	891
Birkenhead	1978	461
Birkenhead	1979	470
Birkenhead	1980	300
Birkenhead	1981	100
Birkenhead	1982	846
Birkenhead	1983	550
Birkenhead	1984	571
Birkenhead	1985	218
Birkenhead	1986	273
Birkenhead	1987	130
Birkenhead	1988	687
Birkenhead	1989	303
Birkenhead	1990	441
Birkenhead	1991	273
Birkenhead	1992	788
Birkenhead	1993	263
Birkenhead	1994	379
Birkenhead	1995	183
Birkenhead	1996	344
Birkenhead	1997	634
Birkenhead	1998	636
Birkenhead	1999	166
Birkenhead	2000	446
Birkenhead	2001	703
Birkenhead	2002	512
Birkenhead	2003	480
Birkenhead	2004	202
Birkenhead	2005	1,491
Birkenhead	2006	1,259
Birkenhead	2007	1,968
Birkenhead	2008	234
Chehalis	1951	400
Chehalis	1952	750
Chehalis	1953	75

Chehalis	1954	750
Chehalis	1955	400
		None
Chehalis	1956	Observed
Chehalis	1957	25
Chehalis	1958	25
Chehalis	1959	25
Chehalis	1960	25
Chehalis	1961	25
Chehalis	1962	200
Chehalis	1963	25
Chehalis	1964	25
Chehalis	1965	25
Chehalis	1966	25
Chehalis	1967	25
Chehalis	1968	75
		None
Chehalis	1969	Observed
		None
Chehalis	1970	Observed
Chehalis	1971	25
Chehalis	1972	75
Chehalis	1973	75
Chehalis	1974	25
Chehalis	1975	25
Chehalis	1976	25
Chehalis	1977	25
Chehalis	1978	25
Chehalis	1979	25
Chehalis	1980	25
Chehalis	1981	
Chehalis	1982	
Chehalis	1983	
Chehalis	1984	
Chehalis	1985	10
Harrison	1951	1,500
Harrison	1952	75,000
Harrison	1953	15,000
Harrison	1954	15,000
Harrison	1955	7,500
Harrison	1956	3,500
Harrison	1957	3,500
Harrison	1958	16,500
Harrison	1959	18,000
Harrison	1960	3,500
Harrison	1961	5,000
Harrison	1962	2,000
Harrison	1963	13,500
Harrison	1964	6,000
Harrison	1965	8,500
Harrison	1966	9,000

Harrison	1967	7,500
Harrison	1968	7,500
Harrison	1969	7,500
Harrison	1970	7,500
Harrison	1971	15,000
Harrison	1972	15,000
Harrison	1973	35,000
Harrison	1974	35,000
Harrison	1975	15,000
Harrison	1976	7,500
Harrison	1977	25,000
Harrison	1978	15,000
Harrison	1979	15,000
Harrison	1980	10,000
Harrison	1981	20,000
Harrison	1982	22,000
Harrison	1983	6,000
Harrison	1984	120,837
Harrison	1985	174,778
Harrison	1986	162,596
Harrison	1987	79,038
Harrison	1988	35,116
Harrison	1989	74,685
Harrison	1990	177,375
Harrison	1991	90,638
Harrison	1992	130,411
Harrison	1993	118,998
Harrison	1994	98,344
Harrison	1995	28,616
Harrison	1996	62,885
Harrison	1997	74,096
Harrison	1998	244,037
Harrison	1999	111,338
Harrison	2000	143,275
Harrison	2001	128,657
Harrison	2002	87,843
Harrison	2003	259,543
Harrison	2004	149,905
Harrison	2005	93,492
Harrison	2006	61,965
Harrison	2007	121,555
Harrison	2008	43,556

Appendix 2. Chum Salmon Escapements to the Harrison system.

Stock	Brood Year	Escapement
Big Silver	1953	25
Big Silver	1954	
Big Silver	1955	
Big Silver	1956	
Big Silver	1957	75
Big Silver	1958	
Big Silver	1959	
		None
Big Silver	1960	Observed
Big Silver	1961	25
Big Silver	1962	
Big Silver	1963	
Big Silver	1964	200
Big Silver	1965	25
Big Silver	1966	25
Big Silver	1967	25
Big Silver	1968	200
Big Silver	1969	
Big Silver	1970	
Big Silver	1971	25
Big Silver	1972	200
Big Silver	1973	25
Big Silver	1974	25
Big Silver	1975	25
Big Silver	1976	75
Big Silver	1977	75
Big Silver	1978	200
Big Silver	1979	75
Big Silver	1980	50
Big Silver	1981	100
Big Silver	1982	20
Big Silver	1983	
Big Silver	1984	
Big Silver	1985	150
Big Silver	1986	
		None
Big Silver	1987	Observed
Big Silver	1988	350
Big Silver	1989	
Big Silver	1990	
Big Silver	1991	100
Big Silver	1992	
Big Silver	1993	25
Big Silver	1994	
		None
Big Silver	1995	Observed
Chehalis	1953	7,500

Chehalis	1954	15,000
Chehalis	1955	35,000
Chehalis	1956	3,500
Chehalis	1957	3,500
Chehalis	1958	30,000
Chehalis	1959	50,000
Chehalis	1960	17,685
Chehalis	1961	18,159
Chehalis	1962	18,404
Chehalis	1963	29,882
Chehalis	1964	11,408
Chehalis	1965	11,851
Chehalis	1966	25,750
Chehalis	1967	13,237
Chehalis	1968	59,707
Chehalis	1969	43,072
Chehalis	1970	15,000
Chehalis	1971	35,000
Chehalis	1972	35,000
Chehalis	1973	52,000
Chehalis	1974	52,200
Chehalis	1975	52,100
Chehalis	1976	52,200
Chehalis	1977	56,700
Chehalis	1978	36,800
Chehalis	1979	23,400
Chehalis	1980	29,800
Chehalis	1981	63,150
Chehalis	1982	20,000
Chehalis	1983	26,000
Chehalis	1984	48,000
Chehalis	1985	117,519
Chehalis	1986	93,398
Chehalis	1987	56,812
Chehalis	1988	106,033
Chehalis	1989	121,727
Chehalis	1990	130,976
Chehalis	1991	63,602
Chehalis	1992	123,618
Chehalis	1993	83,336
Chehalis	1994	107,058
Chehalis	1995	83,589
Chehalis	1996	83,374
Chehalis	1997	82,356
Chehalis	1998	203,940
Chehalis	1999	175,966
Chehalis	2000	175,966
Chehalis	2001	86,374
Chehalis	2002	34,917
Harrison	1953	75,000

Harrison	1954	35,000
Harrison	1955	35,000
Harrison	1956	15,000
Harrison	1957	35,000
Harrison	1958	35,000
Harrison	1959	60,000
Harrison	1960	50,927
Harrison	1961	18,233
Harrison	1962	43,231
Harrison	1963	58,616
Harrison	1964	89,387
Harrison	1965	45,235
Harrison	1966	164,520
Harrison	1967	68,320
Harrison	1968	228,949
Harrison	1969	102,868
Harrison	1970	117,100
Harrison	1971	116,450
Harrison	1972	144,000
Harrison	1973	52,000
Harrison	1974	111,800
Harrison	1975	223,000
Harrison	1976	111,800
Harrison	1977	175,700
Harrison	1978	128,300
Harrison	1979	103,100
Harrison	1980	89,400
Harrison	1981	128,000
Harrison	1982	86,000
Harrison	1983	155,000
Harrison	1984	212,000
Harrison	1985	295,000
Harrison	1986	165,000
Harrison	1987	21,847
Harrison	1988	44,900
Harrison	1989	40,000
Harrison	1990	125,162
Harrison	1991	529,480
Harrison	1992	236,957
Harrison	1993	182,292
Harrison	1994	825,264
Harrison	1995	1,125,358
Harrison	1996	356,450
Weaver	1953	400
Weaver	1954	400
Weaver	1955	750
Weaver	1956	75
Weaver	1957	400
Weaver	1958	3,500
Weaver	1959	2,000

Weaver	1960	750
Weaver	1961	400
Weaver	1962	3,500
Weaver	1963	1,500
Weaver	1964	750
Weaver	1965	3,500
Weaver	1966	3,500
Weaver	1967	1,500
Weaver	1968	3,500
Weaver	1969	10,500
Weaver	1970	1,500
Weaver	1971	1,500
Weaver	1972	35,000
Weaver	1973	35,000
Weaver	1974	35,000
Weaver	1975	15,000
Weaver	1976	15,000
Weaver	1977	30,000
Weaver	1978	32,200
Weaver	1979	25,500
Weaver	1980	28,000
Weaver	1981	27,000
Weaver	1982	37,500
Weaver	1983	41,000
Weaver	1984	35,000
Weaver	1985	75,000
Weaver	1986	28,000
Weaver	1987	40,600
Weaver	1988	31,250
Weaver	1989	12,400
Weaver	1990	10,000
Weaver	1991	4,381
Weaver	1992	5,725
Weaver	1993	1,860
Weaver	1994	9,249
Weaver	1995	4,536
Weaver	1996	13,446
Weaver	1997	
Weaver	1998	4,859
Weaver	1999	6,789

Appendix 3. Coho Salmon escapements to the Harrison system

Stock	Brood Year	Escapement
Big Silver	1953	25
Big Silver	1954	
Big Silver	1955	75
Big Silver	1956	300
Big Silver	1957	
Big Silver	1958	
Big Silver	1959	
Big Silver	1960	
Big Silver	1961	
Big Silver	1962	
Big Silver	1963	
Big Silver	1964	
Big Silver	1965	
Big Silver	1966	
Big Silver	1967	75
Big Silver	1968	200
Big Silver	1969	200
Big Silver	1970	200
Big Silver	1971	200
Big Silver	1972	75
Big Silver	1973	75
Big Silver	1974	200
Big Silver	1975	75
Big Silver	1976	200
Big Silver	1977	200
Big Silver	1978	200
Big Silver	1979	75
Big Silver	1980	100
Big Silver	1981	50
Big Silver	1982	
Big Silver	1983	
Big Silver	1984	
Big Silver	1985	
Big Silver	1986	
Big Silver	1987	
Big Silver	1988	
Big Silver	1989	
Big Silver	1990	
Big Silver	1991	
Big Silver	1992	
Big Silver	1993	25
Birkenhead	1953	3,500
Birkenhead	1954	750
Birkenhead	1955	1,500
Birkenhead	1956	3,500
Birkenhead	1957	1,500
Birkenhead	1958	2,000

Birkenhead	1959	2,000
Birkenhead	1960	35,000
Birkenhead	1961	2,500
Birkenhead	1962	2,500
Birkenhead	1963	3,500
Birkenhead	1964	3,500
Birkenhead	1965	3,500
Birkenhead	1966	3,500
Birkenhead	1967	3,000
Birkenhead	1968	3,500
Birkenhead	1969	1,200
Birkenhead	1970	3,000
Birkenhead	1971	3,500
Birkenhead	1972	3,500
Birkenhead	1973	1,500
Birkenhead	1974	7,500
Birkenhead	1975	3,500
Birkenhead	1976	1,500
Birkenhead	1977	1,500
Birkenhead	1978	3,500
Birkenhead	1979	3,500
Birkenhead	1980	1,500
Birkenhead	1981	3,000
Birkenhead	1982	3,500
Birkenhead	1983	1,000
Birkenhead	1984	11,524
Birkenhead	1985	2,000
Birkenhead	1986	1,200
Birkenhead	1987	
Birkenhead	1988	4,000
Birkenhead	1989	4,500
Birkenhead	1990	1,000
Birkenhead	1991	3,000
Birkenhead	1992	
Birkenhead	1993	
Birkenhead	1994	
Birkenhead	1995	
Birkenhead	1996	750
Chehalis	1951	3,500
Chehalis	1952	7,500
Chehalis	1953	15,000
Chehalis	1954	7,500
Chehalis	1955	3,500
Chehalis	1956	2,500
Chehalis	1957	7,500
Chehalis	1958	3,500
Chehalis	1959	3,500
Chehalis	1960	7,500
Chehalis	1961	7,500
Chehalis	1962	15,000

Chehalis	1963	3,500
Chehalis	1964	8,000
Chehalis	1965	7,500
Chehalis	1966	15,000
Chehalis	1967	7,500
Chehalis	1968	3,500
Chehalis	1969	3,500
Chehalis	1970	7,500
Chehalis	1971	7,500
Chehalis	1972	1,500
Chehalis	1973	1,500
Chehalis	1974	1,500
Chehalis	1975	750
Chehalis	1976	750
Chehalis	1977	1,500
Chehalis	1978	1,500
Chehalis	1979	3,500
Chehalis	1980	800
Chehalis	1981	600
Chehalis	1982	1,000
Chehalis	1983	300
Chehalis	1984	6,500
Chehalis	1985	6,200
Chehalis	1986	9,500
Chehalis	1987	
Chehalis	1988	
Chehalis	1989	17,000
Chehalis	1990	7,500
Chehalis	1991	8,025
Chehalis	1992	
Chehalis	1993	6,000
		None
Harrison	1953	Observed
		None
Harrison	1954	Observed
		None
Harrison	1955	Observed
		None
Harrison	1956	Observed
		None
Harrison	1957	Observed
		None
Harrison	1958	Observed
		None
Harrison	1959	Observed
		None
Harrison	1960	Observed
		None
Harrison	1961	Observed
		None
Harrison	1962	Observed
		None
Harrison	1963	Observed

Harrison	1964	200
Harrison	1965	
Harrison	1966	
Harrison	1967	75
Harrison	1968	1,500
Harrison	1969	1,500
Harrison	1970	1,500
Harrison	1971	3,500
Harrison	1972	1,500
Harrison	1973	1,500
Harrison	1974	1,500
Harrison	1975	1,500
Harrison	1976	750
Harrison	1977	2,500
Harrison	1978	1,500
Harrison	1979	750
Harrison	1980	1,500
Harrison	1981	400
Harrison	1982	1,000
Harrison	1983	
Harrison	1984	2,500
Harrison	1985	3,000
Weaver	1951	750
Weaver	1952	7,500
Weaver	1953	3,500
Weaver	1954	1,500
Weaver	1955	1,500
Weaver	1956	750
Weaver	1957	750
Weaver	1958	1,500
Weaver	1959	750
Weaver	1960	400
Weaver	1961	2,100
Weaver	1962	1,500
Weaver	1963	400
Weaver	1964	1,000
Weaver	1965	1,620
Weaver	1966	1,580
Weaver	1967	750
Weaver	1968	750
Weaver	1969	750
Weaver	1970	1,500
Weaver	1971	3,500
Weaver	1972	400
Weaver	1973	3,500
Weaver	1974	3,500
Weaver	1975	7,500
Weaver	1976	750
Weaver	1977	3,000
Weaver	1978	750

Weaver	1979	750
Weaver	1980	1,500
Weaver	1981	800
Weaver	1982	625
Weaver	1983	600
Weaver	1984	900
Weaver	1985	8,000
Weaver	1986	2,750
Weaver	1987	6,500
Weaver	1988	6,500
Weaver	1989	3,500
Weaver	1990	496
Weaver	1991	75
Weaver	1992	210
Weaver	1993	250

Appendix 4. Pink Salmon Escapements to the Harrison system

Stock	Brood Year	Escapement
Chehalis	1957	9,336
Chehalis	1959	6,729
Chehalis	1961	11,921
Chehalis	1963	12,394
Chehalis	1965	7,621
Chehalis	1967	5,625
Chehalis	1969	7,147
Chehalis	1971	32,178
Chehalis	1973	14,300
Chehalis	1975	2,356
Chehalis	1977	2,613
Chehalis	1979	2,067
Chehalis	1981	169
Chehalis	1983	452
Chehalis	1985	0
Chehalis	1987	0
Chehalis	1989	0
Chehalis	1991	1,000
Harrison	1957	585,798
Harrison	1959	110,311
Harrison	1961	186,137
Harrison	1963	645,476
Harrison	1965	69,213
Harrison	1967	64,576
Harrison	1969	200
Harrison	1971	73,881
Harrison	1973	196,150
Harrison	1975	180,052
Harrison	1977	126,782
Harrison	1979	269,858
Harrison	1981	314,519
Harrison	1983	146,014
Harrison	1985	438,022
Harrison	1987	1,028,892
Harrison	1989	681,572
Harrison	1991	947,812
Weaver	1957	346
Weaver	1959	87
Weaver	1961	539
Weaver	1963	693
Weaver	1965	528
Weaver	1967	630
Weaver	1969	725
Weaver	1971	1,435
Weaver	1973	895

Weaver	1975	1,612
Weaver	1977	3,360
Weaver	1979	854
Weaver	1981	2,293
Weaver	1983	3,326
Weaver	1985	8,082
Weaver	1987	6,381
Weaver	1989	5,808
Weaver	1991	14,810

Appendix 5 Sockeye salmon stock status in the Harrison Basin.

Stock	Brood Year	Recruits	Total Escapement	Age-3 Escapement	Total Females	Spawner Success	Effective Female Spawners
Birkenhead	1948	191,990	122,424	38,637	59,278	92.37	54,755
Birkenhead	1949	281,706	74,085	3,581	44,622	97.10	43,328
Birkenhead	1950	227,915	72,567	8,127	44,484	93.00	41,370
Birkenhead	1951	204,962	42,063	20,767	14,457	94.00	13,589
Birkenhead	1952	228,843	77,386	30,345	28,679	86.28	24,744
Birkenhead	1953	127,082	55,823	13,332	23,417	69.55	16,287
Birkenhead	1954	158,842	40,453	22,240	9,720	88.84	8,635
Birkenhead	1955	263,453	24,450	9,897	8,609	95.08	8,185
Birkenhead	1956	271,698	57,899	8,145	30,926	87.81	27,156
Birkenhead	1957	46,422	24,168	9,632	7,495	94.30	7,068
Birkenhead	1958	107,184	33,055	17,889	6,136	89.80	5,510
Birkenhead	1959	251,361	38,604	12,445	12,683	89.79	11,388
Birkenhead	1960	158,699	39,848	3,010	21,462	89.45	19,198
Birkenhead	1961	106,359	49,627	17,946	16,359	64.49	10,550
Birkenhead	1962	95,763	52,146	25,777	16,047	89.18	14,311
Birkenhead	1963	425,731	67,151	18,258	31,468	66.00	20,769
Birkenhead	1964	350,271	69,939	21,031	28,637	97.70	27,978
Birkenhead	1965	154,405	30,008	13,778	10,643	91.79	9,769
Birkenhead	1966	272,938	81,134	61,018	14,547	92.54	13,462
Birkenhead	1967	465,511	58,036	18,160	22,798	77.11	17,580
Birkenhead	1968	274,802	83,750	25,803	40,952	75.80	31,042
Birkenhead	1969	764,351	64,527	27,145	22,758	62.94	14,324
Birkenhead	1970	681,121	72,760	42,104	20,809	92.52	19,252
Birkenhead	1971	354,560	32,672	8,043	16,798	96.10	16,143
Birkenhead	1972	514,438	113,097	58,581	29,507	88.80	26,202
Birkenhead	1973	209,443	139,295	82,642	30,711	92.39	28,374
Birkenhead	1974	688,177	173,463	53,826	88,413	96.70	85,495
Birkenhead	1975	114,496	92,928	31,390	36,619	53.67	19,653
Birkenhead	1976	604,912	108,121	30,816	51,343	97.43	50,023
Birkenhead	1977	400,461	43,139	19,294	14,185	90.23	12,799
Birkenhead	1978	651,657	99,857	5,075	48,400	99.50	48,158
Birkenhead	1979	407,966	78,088	17,100	39,276	90.34	35,168
Birkenhead	1980	487,209	90,922	12,309	43,604	75.19	32,786
Birkenhead	1981	266,159	65,495	16,472	28,447	95.53	27,175
Birkenhead	1982	1,801,159	128,771	9,033	73,388	98.59	72,353
Birkenhead	1983	790,348	48,841	4,812	23,873	88.44	21,069
Birkenhead	1984	440,278	42,849	2,604	24,352	95.38	23,226
Birkenhead	1985	228,532	37,612	25,707	6,060	95.01	5,757
Birkenhead	1986	1,208,548	348,294	12,664	200,219	98.84	197,841
Birkenhead	1987	983,569	168,841	3,992	93,587	95.56	89,492
Birkenhead	1988	894,954	177,327	10,736	89,201	84.68	75,537
Birkenhead	1989	1,145,574	46,703	17,369	15,908	98.94	15,690
Birkenhead	1990	235,136	170,262	3,489	97,473	99.63	97,108
Birkenhead	1991	116,359	316,469	22,843	154,713	98.30	152,077
Birkenhead	1992	98,485	218,533	32,625	94,444	98.94	93,445

Birkenhead	1993	569,086	250,425	5,471	151,520	99.72	151,089
Birkenhead	1994	58,071	39,445	211	22,360	99.80	22,315
Birkenhead	1995	151,375	43,010	3,139	20,033	92.00	18,407
Birkenhead	1996	76,316	64,123	8,011	30,312	91.87	27,824
Birkenhead	1997	28,315	50,872	670	24,562	94.76	23,274
Birkenhead	1998	616,621	296,038	369	181,370	95.41	172,997
Birkenhead	1999	71,946	49,586	670	27,033	97.17	26,220
Birkenhead	2000	81,508	13,842	0	8,926	93.36	8,333
Birkenhead	2001	190,763	44,727	277	29,041	97.66	28,361
Birkenhead	2002	633,414				98.70	107,481
Birkenhead	2003	13,154	310,530	652	154,209	98.99	152,657
Birkenhead	2004	NA	37,673	56	17,654	99.22	17,516
Birkenhead	2005	NA	54,444	898	27,206	99.67	27,117
Birkenhead	2006	NA	266,539	80	138,920	98.88	137,365
Birkenhead	2007	NA	93,527	47	56,920	95.38	54,290
Birkenhead	2008	NA	19,861	361	10,233	66.30	6,788
Weaver	1948		19,970	539	14,898	85.00	12,663
Weaver	1949		12,751	26	8,084	98.10	7,930
Weaver	1950		30,743	204	16,806	93.00	15,630
Weaver	1951		12,979	123	8,101	95.00	7,696
Weaver	1952		28,100	50	15,460	85.22	13,175
Weaver	1953		9,395	606	5,194	98.99	5,142
Weaver	1954		28,450	313	13,837	99.40	13,754
Weaver	1955		21,672	36	13,371	97.50	13,037
Weaver	1956		8,772	282	5,931	99.45	5,893
Weaver	1957		20,866	629	11,395	97.51	11,111
Weaver	1958		36,199	260	21,813	99.81	21,770
Weaver	1959		8,379	16	5,074	99.00	5,023
Weaver	1960		7,042	9	4,295	94.50	4,059
Weaver	1961		4,383	137	2,391	97.70	2,336
Weaver	1962		15,962	38	9,467	99.32	9,403
Weaver	1963		14,469	0	9,030	98.60	8,848
Weaver	1964		1,370	174	717	97.50	663
Weaver	1965		17,975	51	7,705	95.08	7,326
Weaver	1966	76,114	20,416	927	10,138	97.26	9,860
Weaver	1967	87,473	22,617	36	11,958	88.79	10,618
Weaver	1968	155,378	4,516	717	2,320	94.91	2,202
Weaver	1969	412,913	58,946	219	31,974	95.72	30,604
Weaver	1970	384,038	11,096	661	5,252	95.26	5,003
Weaver	1971	152,608	5,623	633	2,696	98.52	2,656
Weaver	1972	350,142	26,548	810	15,214	98.76	15,026
Weaver	1973	273,708	50,173	1,632	25,728	96.72	24,885
Weaver	1974	275,245	66,807	2,714	37,026	75.89	28,099
Weaver	1975	146,062	32,011	2,275	17,186	93.29	16,033
Weaver	1976	304,515	51,078	1,146	29,407	96.04	28,243
Weaver	1977	235,763	55,145	2,518	31,701	89.93	28,510
Weaver	1978	1,365,549	76,237	1,066	43,015	98.37	42,315
Weaver	1979	141,028	51,403	6,377	26,256	97.89	25,702
Weaver	1980	364,714	74,839	1,009	44,528	97.21	43,286
Weaver	1981	270,292	43,793	1,791	23,370	96.82	22,627

Weaver	1982	1,507,959	294,543	460	136,328	84.38	115,030
Weaver	1983	242,788	40,267	926	28,413	96.36	27,380
Weaver	1984	634,802	60,370	768	31,598	96.32	30,434
Weaver	1985	69,300	39,460	2,441	23,692	96.12	22,773
Weaver	1986	42,704	111,596	858	50,269	83.23	41,837
Weaver	1987	220,718	63,184	3,216	31,962	94.19	30,105
Weaver	1988	513,778	49,606	349	28,584	95.96	27,428
Weaver	1989	756,404	17,199	32	10,868	95.37	10,365
Weaver	1990	634,976	16,804	439	8,658	98.46	8,525
Weaver	1991	66,460	39,213	1,092	18,959	97.51	18,487
Weaver	1992	757,114	59,758	1,072	30,662	92.88	28,480
Weaver	1993	481,027	86,151	1,695	36,766	92.53	34,018
Weaver	1994	710,323	65,026	70	35,984	83.95	30,208
Weaver	1995	265,835	33,441	316	16,668	65.42	10,904
Weaver	1996	381,140	72,377	307	41,389	64.87	26,848
Weaver	1997	215,710	25,523	19	13,046	82.20	10,724
Weaver	1998	566,885	57,159	68	32,170	92.67	29,811
Weaver	1999	231,856	34,838	204	18,662	70.23	13,106
Weaver	2000	89,691	6,623	10	3,572	76.48	2,732
Weaver	2001	195,850	20,091	176	11,506	69.83	8,035
Weaver	2002	242,830	101,051	18	47,783	75.90	36,269
Weaver	2003	189,201	49,877	389	28,020	88.09	24,683
Weaver	2004	NA	25,429	50	14,543	96.05	13,968
Weaver	2005	NA	48,837	321	27,182	86.81	23,597
Weaver	2006	NA	39,804	23	21,427	63.56	13,618
Weaver	2007	NA	37,392	92	19,241	82.25	15,825
Weaver	2008	NA	2,813	57	1,463	42.17	617
Harrison	1948	43,283	26,186	24	14,577	100.00	14,577
Harrison	1949	37,073	8,000	0	4,400	99.36	4,372
Harrison	1950	78,099	33,864	820	18,333	99.36	18,216
Harrison	1951	122,022	17,145	0	13,266	99.36	13,181
Harrison	1952	23,054	25,794	0	17,244	99.83	17,215
Harrison	1953	9,784	21,328	298	7,861	97.20	7,641
Harrison	1954	14,797	28,800	0	17,486	96.47	16,869
Harrison	1955	141,038	5,595	0	3,412	99.80	3,405
Harrison	1956	96,858	2,586	0	1,266	100.00	1,266
Harrison	1957	60,153	3,812	19	1,824	99.79	1,820
Harrison	1958	59,892	14,701	0	6,454	99.23	6,404
Harrison	1959	41,545	27,885	17	17,740	99.73	17,657
Harrison	1960	29,451	17,280	70	7,147	99.00	7,076
Harrison	1961	13,225	42,778	5	21,944	99.00	21,725
Harrison	1962	50,812	8,162	0	4,205	98.80	4,155
Harrison	1963	87,825	22,287	29	9,803	100.00	9,803
Harrison	1964	51,177	2,202	0	1,102	99.90	1,101
Harrison	1965	20,345	15,034	0	7,795	99.80	7,779
Harrison	1966	55,444	32,672	26	9,337	99.55	9,295
Harrison	1967	50,935	20,577	29	12,760	99.31	12,672
Harrison	1968	17,811	5,391	12	2,861	99.74	2,854
Harrison	1969	7,302	15,006	47	7,700	98.17	7,559
Harrison	1970	39,763	12,675	9	6,519	99.26	6,471

Harrison	1971	84,459	3,790	0	1,970	100.00	1,970
Harrison	1972	1,963	1,399	53	794	100.00	794
Harrison	1973	37,681	3,060	0	1,575	99.77	1,571
Harrison	1974	40,338	16,920	0	8,709	100.00	8,709
Harrison	1975	79,156	5,987	0	3,460	97.72	3,381
Harrison	1976	24,781	5,130	0	2,975	98.60	2,933
Harrison	1977	24,058	2,246	0	1,380	99.59	1,374
Harrison	1978	41,193	19,747	30	10,521	99.69	10,488
Harrison	1979	10,895	45,706	91	20,266	99.84	20,234
Harrison	1980	14,393	5,092	0	2,262	100.00	2,262
Harrison	1981	17,869	3,193	0	1,788	100.00	1,788
Harrison	1982	28,956	9,189	0	4,697	99.76	4,686
Harrison	1983	17,850	4,239	0	2,167	98.39	2,132
Harrison	1984	5,196	1,267	0	690	99.81	689
Harrison	1985	14,476	5,097	0	2,269	80.43	1,825
Harrison	1986	9,607	7,290	25	4,302	96.34	4,145
Harrison	1987	45,048	5,297	69	2,824	95.12	2,686
Harrison	1988	3,976	1,544	0	947	100.00	947
Harrison	1989	13,423	2,934	0	2,044	97.73	1,997
Harrison	1990	125,888	4,615	100	1,888	100.00	1,888
Harrison	1991	38,081	15,000	0	8,083	98.45	7,958
Harrison	1992	3,880	313	0	172	100.00	172
Harrison	1993	17,582	3,265	7	2,277	99.76	2,271
Harrison	1994	20,366	9,515	0	6,232	97.67	6,087
Harrison	1995	49,859	16,760	142	6,823	99.04	6,758
Harrison	1996	7,544	15,379	0	8,296	99.50	8,255
Harrison	1997	82,229	1,418	0	1,091	99.34	1,084
Harrison	1998	64,217	4,496	0	3,043	99.00	3,012
Harrison	1999	91,329	8,577	0	5,600	99.85	5,592
Harrison	2000	10,468	4,343	0	1,745	100.00	1,745
Harrison	2001	366,667	15,309	0	8,376	99.51	8,335
Harrison	2002	276,264	41,717	175	24,600	99.12	24,384
Harrison	2003	103,286	8,609	350	6,061	99.70	6,043
Harrison	2004	142,216	2,106	0	986	100.00	986
Harrison	2005	NA	388,800	195	212,829	99.40	211,547
Harrison	2006	NA	169,020	761	91,034	99.90	90,944
Harrison	2007	NA	128,295	0	57,502	99.90	57,444
Harrison	2008	NA	6,750	33	4,415	99.90	4,409
Big Silver	1948		11,542	0	5,517	88.89	4,904
Big Silver	1949		2,100	0	1,050	87.50	919
Big Silver	1950		25	0	13	87.91	11
Big Silver	1951		211	1	83	87.91	73
Big Silver	1952		6,031	9	2,807	95.00	2,667
Big Silver	1953		432	2	216	30.23	65
Big Silver	1954		279	0	140	87.91	123
Big Silver	1955		191	0	96	87.91	84
Big Silver	1956		6,187	0	3,094	91.00	2,816
Big Silver	1957		389	0	195	87.91	171
Big Silver	1958		0	0	0	0.00	0
Big Silver	1959		64	29	22	100.00	22

Big Silver	1960	4,522	35	2,594	89.86	2,331
Big Silver	1961	398	0	199	87.91	175
Big Silver	1962	270	0	135	87.91	119
Big Silver	1963	74	0	38	87.91	33
Big Silver	1964	3,926	0	2,208	100.00	2,208
Big Silver	1965	596	0	358	87.91	315
Big Silver	1966	329	0	165	87.91	145
Big Silver	1967	0	0	0	0.00	0
Big Silver	1968	1,090	0	545	87.91	479
Big Silver	1969	85	0	43	87.91	38
Big Silver	1970	261	37	112	95.00	106
Big Silver	1971	0	0	0	0.00	0
Big Silver	1972	2,552	40	1,256	73.30	921
Big Silver	1973	270	0	146	87.91	128
Big Silver	1974	837	59	435	100.00	435
Big Silver	1975	31	0	16	100.00	16
Big Silver	1976	1,642	0	655	96.70	633
Big Silver	1977	349	156	115	90.23	104
Big Silver	1978	1,253	0	694	100.00	694
Big Silver	1979	119	26	60	90.54	54
Big Silver	1980	610	61	232	73.68	171
Big Silver	1981	173	0	100	66.67	67
Big Silver	1982	1,919	0	960	93.10	894
Big Silver	1983	230	15	108	54.55	59
Big Silver	1984	155	0	70	80.00	56
Big Silver	1985	106	0	53	75.00	40
Big Silver	1986	2,610	8	1,792	99.58	1,785
Big Silver	1987	589	51	305	91.74	280
Big Silver	1988	263	6	171	97.22	166
Big Silver	1989	65	0	33	100.00	33
Big Silver	1990	1,465	92	864	100.00	864
Big Silver	1991	2,083	5	1,177	100.00	1,177
Big Silver	1992	3,228	0	1,614	100.00	1,614
Big Silver	1993	1,204	35	745	100.00	745
Big Silver	1994	648	16	316	100.00	316
Big Silver	1995	1,562	49	744	86.89	646
Big Silver	1996	3,589	71	1,668	93.56	1,561
Big Silver	1997	1,559	0	935	100.00	935
Big Silver	1998	5,980	6	3,128	94.84	2,966
Big Silver	1999	814	72	543	91.91	499
Big Silver	2000	8,968	12	4,003	89.81	3,595
Big Silver	2001	11,470	44	6,308	91.79	5,790
Big Silver	2002	29,540	121	14,507	99.30	14,406
Big Silver	2003	11,081	119	5,917	98.10	5,805
Big Silver	2004	19,831	0	9,685	99.30	9,617
Big Silver	2005	4,667	201	2,864	99.05	2,837
Big Silver	2006	21,298	0	10,455	99.79	10,433
Big Silver	2007	4,797	13	2,752	89.42	2,461
Big Silver	2008	2,446	27	1,313	63.30	831

Appendix 6. Steelhead Harvest Analysis information for the Harrison Basin: 1968-2007

Year	Stream Name	Area	Sum of Anglers	Sum of days fished	Sum of wild kept	Sum of wild released	Sum of hatchery kept	Sum of hatchery released
1968	BIRKENHEAD RIVER	A	37	112	0	0	0	0
1968	CHEHALIS RIVER	A	583	1350	244	0	0	0
1968	HARRISON RIVER	A	53	148	22	0	0	0
1968	LILLOOET RIVER	A	55	202	13	0	0	0
1968	WEAVER CREEK	A	52	124	67	0	0	0
1969	BIRKENHEAD RIVER	A	8	17	0	0	0	0
1969	CHEAKAMUS RIVER	A	1462	6579	1132	0	0	0
1969	CHEHALIS RIVER	A	302	944	185	0	0	0
1969	HARRISON RIVER	A	59	114	12	0	0	0
1969	LILLOOET RIVER	A	25	59	4	0	0	0
1969	WEAVER CREEK	A	21	59	21	0	0	0
1970	BIRKENHEAD RIVER	A	27	43	5	0	0	0
1970	CHEHALIS RIVER	A	529	1623	126	0	0	0
1970	HARRISON RIVER	A	58	178	16	0	0	0
1970	LILLOOET RIVER	A	62	231	27	0	0	0
1970	WEAVER CREEK	A	54	103	21	0	0	0
1971	BIRKENHEAD RIVER	A	24	32	4	0	0	0
1971	CHEHALIS RIVER	A	599	2061	228	76	0	0
1971	HARRISON RIVER	A	24	56	24	8	0	0
1971	LILLOOET RIVER	A	65	227	8	8	0	0
1971	WEAVER CREEK	A	76	197	28	32	0	0
1972	CHEHALIS RIVER	A	338	1261	199	57	0	0
1972	HARRISON RIVER	A	35	132	0	3	0	0
1972	WEAVER CREEK	A	53	287	28	0	0	0
1973	BIRKENHEAD RIVER	A	26	63	0	0	0	0
1973	CHEHALIS RIVER	A	345	1326	148	89	0	0
1973	HARRISON RIVER	A	40	63	3	3	0	0
1973	LILLOOET RIVER	A	68	210	22	0	0	0
1973	WEAVER CREEK	A	30	57	0	0	0	0
1975	BIRKENHEAD RIVER	A	10	46	7	0	0	0
1975	CHEHALIS RIVER	A	288	1239	114	24	0	0
1975	COGBURN CREEK	A	17	32	3	0	0	0
1975	LILLOOET RIVER	A	88	337	14	10	0	0
1975	WEAVER CREEK	A	28	57	0	3	0	0
1977	BIG SILVER CREEK	A	22	22	0	0	0	0
1977	BIRKENHEAD RIVER	A	11	75	11	3	0	0
1977	CHEHALIS RIVER	A	311	1111	37	30	0	0
1977	COGBURN CREEK	A	7	7	0	0	0	0
1977	HARRISON RIVER	A	33	82	3	7	0	0
1978	BIG SILVER CREEK	A	27	34	0	3	0	0
1978	BIRKENHEAD RIVER	A	14	23	0	3	0	0
1978	CHEHALIS RIVER	A	258	820	72	44	0	0
1978	COGBURN CREEK	A	27	37	3	24	0	0
1978	HARRISON RIVER	A	37	83	1	1	0	0
1978	LILLOOET RIVER	A	47	165	24	6	0	0
1978	WEAVER CREEK	A	6	16	0	3	0	0

1979	BIG SILVER CREEK	A	16	19	0	0	0	0
1979	BIRKENHEAD RIVER	A	6	25	0	0	0	0
1979	CHEHALIS RIVER	A	296	1004	48	45	0	0
1979	COGBURN CREEK	A	6	19	6	3	0	0
1979	HARRISON RIVER	A	16	46	3	0	0	0
1979	LILLOOET RIVER	A	60	209	6	0	0	0
1979	WEAVER CREEK	A	19	80	6	9	0	0
1980	BIG SILVER CREEK	A	13	17	0	0	0	0
1980	BIRKENHEAD RIVER	A	6	13	3	0	0	0
1980	CHEHALIS RIVER	A	161	522	27	10	0	0
1980	COGBURN CREEK	A	6	17	6	0	0	0
1980	HARRISON RIVER	A	22	41	0	0	0	0
1980	LILLOOET RIVER	A	47	258	17	17	0	0
1980	WEAVER CREEK	A	13	47	0	6	0	0
1981	BIG SILVER CREEK	A	9	34	6	6	0	0
1981	BIRKENHEAD RIVER	A	7	72	0	1	0	0
1981	CHEHALIS RIVER	A	160	630	56	63	0	0
1981	COGBURN CREEK	A	22	41	9	6	0	0
1981	HARRISON RIVER	A	22	50	0	0	0	0
1981	LILLOOET RIVER	A	50	255	9	3	0	0
1981	WEAVER CREEK	A	9	25	3	0	0	0
1982	BIRKENHEAD RIVER	A	12	51	0	0	0	0
1982	CHEHALIS RIVER	A	152	515	59	113	0	0
1982	COGBURN CREEK	A	6	9	0	2	0	0
1982	HARRISON RIVER	A	15	42	0	5	0	0
1982	LILLOOET RIVER	A	30	119	5	0	0	0
1982	WEAVER CREEK	A	12	36	2	14	0	0
1983	BIRKENHEAD RIVER	A	4	15	0	4	0	0
1983	CHEHALIS RIVER	A	76	331	0	70	0	0
1983	COGBURN CREEK	A	8	8	0	0	0	0
1983	HARRISON RIVER	A	15	26	0	0	0	0
1983	LILLOOET RIVER	A	16	65	4	0	0	8
1983	WEAVER CREEK	A	12	35	0	43	0	0
1984	BIRKENHEAD RIVER	2	4	4	0	0	0	0
1984	CHEHALIS RIVER	2	94	338	0	75	0	0
1984	HARRISON RIVER	2	8	24	0	0	0	0
1984	LILLOOET RIVER	2	16	59	0	4	0	0
1984	WEAVER CREEK	2	20	47	0	16	0	0
1985	BIG SILVER CREEK	2	3	38	0	3	0	3
1985	BIRKENHEAD RIVER	1	3	17	0	0	0	0
1985	BIRKENHEAD RIVER	2	6	13	0	0	0	3
1985	CHEHALIS RIVER	1	3	3	0	0	0	0
1985	CHEHALIS RIVER	2	160	531	0	342	13	54
1985	COGBURN CREEK	2	6	16	0	3	0	0
1985	HARRISON RIVER	1	3	17	0	0	0	0
1985	HARRISON RIVER	2	19	35	0	0	0	0
1985	LILLOOET RIVER	1	3	17	0	0	0	0
1985	LILLOOET RIVER	2	10	22	0	3	0	0
1985	WEAVER CREEK	2	19	74	0	61	0	0
1986	BIG SILVER CREEK	2	6	16	0	0	0	0
1986	BIRKENHEAD RIVER	2	3	6	0	0	0	0
1986	BRUNETTE RIVER	2	13	19	0	6	0	0

1986	CHEHALIS RIVER	2	382	2821	3	697	270	1163
1986	CHEHALIS RIVER	5	3	3	0	3	0	0
1986	CHEHALIS RIVER	6	4	4	0	0	0	4
1986	COGBURN CREEK	2	10	10	0	3	0	0
1986	HARRISON RIVER	0	2	7	0	0	0	0
1986	HARRISON RIVER	2	29	74	0	6	0	6
1986	LILLOOET RIVER	2	10	16	0	6	0	0
1986	LILLOOET RIVER	3	3	3	0	0	0	0
1986	WEAVER CREEK	2	22	26	0	29	6	13
1986	WEAVER CREEK	5	3	3	0	3	0	0
1987	BIG SILVER CREEK	2	14	18	5	0	0	9
1987	BIRKENHEAD RIVER	2	18	60	0	5	0	0
1987	CHEHALIS RIVER	1	8	12	0	0	0	4
1987	CHEHALIS RIVER	2	1431	7559	0	1228	831	2281
1987	CHEHALIS RIVER	3	13	38	0	3	9	0
1987	CHEHALIS RIVER	5	7	7	0	3	0	0
1987	CHEHALIS RIVER	6	4	4	0	4	0	4
1987	CHEHALIS RIVER	7	3	23	0	0	0	0
1987	CHEHALIS RIVER	8	3	7	0	0	0	0
1987	CHEHALIS RIVER	9	2	15	0	8	4	0
1987	COGBURN CREEK	2	32	60	0	23	14	14
1987	COGBURN CREEK	5	3	3	0	3	0	3
1987	HARRISON RIVER	2	42	97	0	5	0	0
1987	LILLOOET RIVER	1	4	16	0	0	0	0
1987	LILLOOET RIVER	2	14	23	0	9	0	0
1987	WEAVER CREEK	2	32	46	0	14	0	5
1987	WEAVER CREEK	5	3	3	0	0	0	0
1988	BIRKENHEAD RIVER	2	8	12	0	0	0	0
1988	CHEHALIS RIVER	0	6	17	0	0	0	2
1988	CHEHALIS RIVER	2	973	4672	8	412	145	218
1988	CHEHALIS RIVER	3	3	3	0	0	0	0
1988	CHEHALIS RIVER	6	4	11	0	4	0	4
1988	CHEHALIS RIVER	7	3	17	0	0	0	0
1988	CHEHALIS RIVER	9	4	4	0	0	0	0
1988	COGBURN CREEK	2	4	8	0	0	0	0
1988	HARRISON RIVER	2	32	194	0	4	0	0
1988	LILLOOET RIVER	2	28	97	0	8	0	0
1988	WEAVER CREEK	2	20	52	0	40	8	0
1989	BIG SILVER CREEK	2	27	49	0	22	9	9
1989	BIRKENHEAD RIVER	2	4	4	0	0	0	0
1989	BIRKENHEAD RIVER	6	4	41	4	33	0	0
1989	CHEHALIS RIVER	0	2	4	0	2	2	0
1989	CHEHALIS RIVER	1	5	5	0	0	0	0
1989	CHEHALIS RIVER	2	1115	6017	0	855	228	537
1989	CHEHALIS RIVER	4	7	11	0	0	0	0
1989	CHEHALIS RIVER	5	3	3	0	0	0	0
1989	COGBURN CREEK	2	13	36	0	45	4	9
1989	HARRISON RIVER	2	40	148	0	13	0	4
1989	LILLOOET RIVER	2	18	49	0	27	0	0
1989	WEAVER CREEK	2	40	197	0	103	0	18
1990	BIG SILVER CREEK	2	24	36	0	24	4	0
1990	BIG SILVER CREEK	8	4	7	0	0	0	0

1990	BIRKENHEAD RIVER	2	20	244	0	36	0	36
1990	BIRKENHEAD RIVER	7	4	14	4	11	0	0
1990	BIRKENHEAD RIVER	9	2	2	0	0	0	0
1990	CHEHALIS RIVER	0	6	6	0	0	0	0
1990	CHEHALIS RIVER	1	28	57	0	9	14	14
1990	CHEHALIS RIVER	2	1348	6222	4	980	240	712
1990	CHEHALIS RIVER	3	7	10	0	0	0	0
1990	CHEHALIS RIVER	5	7	31	0	35	3	0
1990	CHEHALIS RIVER	7	4	4	0	0	0	0
1990	CHEHALIS RIVER	8	4	4	0	0	0	0
1990	CHEHALIS RIVER	9	2	2	0	0	0	0
1990	COGBURN CREEK	2	20	52	0	28	0	16
1990	HARRISON RIVER	2	28	132	0	0	0	0
1990	LILLOOET RIVER	2	28	200	0	80	0	0
1990	LILLOOET RIVER	5	3	3	0	0	0	0
1990	WEAVER CREEK	2	28	72	0	16	0	0
1991	BIG SILVER CREEK	2	16	16	0	4	0	0
1991	BIRKENHEAD RIVER	2	12	98	0	0	0	0
1991	CHEHALIS RIVER	0	11	24	0	0	0	0
1991	CHEHALIS RIVER	1	23	42	0	4	8	0
1991	CHEHALIS RIVER	2	1666	10195	4	1117	484	975
1991	CHEHALIS RIVER	3	7	17	0	0	0	0
1991	CHEHALIS RIVER	4	6	13	0	0	0	0
1991	CHEHALIS RIVER	7	4	4	0	0	0	0
1991	CHEHALIS RIVER	9	2	4	0	0	0	0
1991	COGBURN CREEK	2	8	16	0	0	4	0
1991	HARRISON RIVER	2	53	301	0	4	0	0
1991	HARRISON RIVER	4	3	3	0	3	0	0
1991	LILLOOET RIVER	2	24	69	0	0	0	0
1991	WEAVER CREEK	2	33	130	0	57	0	0
1992	BIG SILVER CREEK	2	38	48	0	0	0	0
1992	BIRKENHEAD RIVER	2	19	77	0	14	0	0
1992	CHEHALIS RIVER	0	4	17	2	7	0	0
1992	CHEHALIS RIVER	1	23	65	0	19	0	27
1992	CHEHALIS RIVER	2	1534	7681	19	1101	582	1472
1992	CHEHALIS RIVER	3	6	17	0	66	0	0
1992	CHEHALIS RIVER	4	7	37	0	7	0	4
1992	CHEHALIS RIVER	8	4	11	0	0	0	0
1992	COGBURN CREEK	2	29	48	0	5	5	0
1992	HARRISON RIVER	1	8	27	0	8	0	0
1992	HARRISON RIVER	2	82	553	0	5	0	0
1992	LILLOOET RIVER	2	10	48	0	0	0	0
1992	WEAVER CREEK	2	19	43	0	10	0	0
1993	BIG SILVER CREEK	2	24	49	0	4	0	4
1993	BIRKENHEAD RIVER	2	20	155	0	29	0	0
1993	BIRKENHEAD RIVER	9	2	2	0	0	0	0
1993	CHEHALIS RIVER	0	10	17	0	0	4	0
1993	CHEHALIS RIVER	1	26	67	0	15	0	0
1993	CHEHALIS RIVER	2	1824	11685	12	2539	645	1669
1993	CHEHALIS RIVER	3	7	7	0	0	0	0
1993	CHEHALIS RIVER	5	3	17	0	0	0	12
1993	CHEHALIS RIVER	8	14	31	0	0	0	0

1993	CHEHALIS RIVER	9	4	7	0	7	0	9
1993	COGBURN CREEK	2	4	4	0	0	0	4
1993	HARRISON RIVER	1	4	56	0	0	0	0
1993	HARRISON RIVER	2	53	282	0	24	0	86
1993	HARRISON RIVER	7	2	4	0	0	0	0
1993	LILLOOET RIVER	2	8	33	0	0	0	0
1993	WEAVER CREEK	0	2	6	0	8	0	0
1993	WEAVER CREEK	2	49	233	0	45	0	8
1994	BIG SILVER CREEK	2	22	82	0	0	0	0
1994	BIRKENHEAD RIVER	2	11	27	0	0	0	0
1994	CHEHALIS RIVER	0	11	32	0	2	0	2
1994	CHEHALIS RIVER	1	5	5	0	0	0	0
1994	CHEHALIS RIVER	2	1757	9284	0	1007	274	969
1994	CHEHALIS RIVER	3	9	18	0	5	0	0
1994	CHEHALIS RIVER	4	17	39	0	0	0	0
1994	CHEHALIS RIVER	5	14	23	0	5	0	0
1994	CHEHALIS RIVER	6	5	5	0	0	0	0
1994	CHEHALIS RIVER	8	21	77	0	26	0	21
1994	CHEHALIS RIVER	9	11	39	0	0	0	6
1994	COGBURN CREEK	2	5	5	0	5	0	0
1994	HARRISON RIVER	2	38	104	0	11	0	5
1994	LILLOOET RIVER	2	22	55	0	16	0	0
1994	WEAVER CREEK	2	11	66	0	16	0	0
1995	BIG SILVER CREEK	2	3	3	0	0	0	0
1995	BIRKENHEAD RIVER	2	13	22	0	0	0	0
1995	CHEHALIS RIVER	0	16	100	0	19	2	7
1995	CHEHALIS RIVER	1	22	56	0	9	3	6
1995	CHEHALIS RIVER	2	1686	8532	3	1348	341	803
1995	CHEHALIS RIVER	3	3	5	0	0	0	0
1995	CHEHALIS RIVER	5	3	3	0	0	0	0
1995	CHEHALIS RIVER	7	3	3	0	0	0	0
1995	CHEHALIS RIVER	8	3	6	0	0	0	0
1995	CHEHALIS RIVER	9	11	24	0	0	0	0
1995	COGBURN CREEK	2	19	25	0	13	0	3
1995	HARRISON RIVER	0	5	7	0	0	0	0
1995	HARRISON RIVER	1	3	6	0	0	0	0
1995	HARRISON RIVER	2	83	373	0	10	0	25
1995	HARRISON RIVER	3	3	3	0	0	0	3
1995	WEAVER CREEK	2	25	48	0	25	0	0
1996	BIG SILVER CREEK	2	45	120	0	26	0	3
1996	BIRKENHEAD RIVER	2	23	58	0	0	0	3
1996	CHEHALIS RIVER	0	12	97	0	15	2	5
1996	CHEHALIS RIVER	1	14	24	0	3	0	0
1996	CHEHALIS RIVER	2	1665	8199	13	1123	389	688
1996	CHEHALIS RIVER	4	4	4	0	0	0	0
1996	CHEHALIS RIVER	5	3	3	0	0	0	0
1996	CHEHALIS RIVER	7	6	8	0	0	0	0
1996	CHEHALIS RIVER	8	5	22	0	3	3	0
1996	CHEHALIS RIVER	9	3	10	0	0	0	0
1996	COGBURN CREEK	2	10	29	0	0	0	0
1996	HARRISON RIVER	1	3	10	0	3	0	0
1996	HARRISON RIVER	2	52	188	0	6	0	6

1996	LILLOOET RIVER	2	13	39	0	0	0	0
1996	WEAVER CREEK	2	16	39	0	10	0	6
1997	BIG SILVER CREEK	2	15	18.110656	0	0	0	0
1997	BIRKENHEAD RIVER	1	3	9.5354792	0	0	0	0
1997	BIRKENHEAD RIVER	2	9	21.129098	0	0	0	0
1997	CHEHALIS RIVER	0	28	133.41266	0	23.0021834	9.2008734	9.20087336
1997	CHEHALIS RIVER	2	1328	7567.2357	6.03689	1258.69057	588.59631	763.665984
1997	CHEHALIS RIVER	3	5	14.304878	0	2.38414634	0	0
1997	CHEHALIS RIVER	7	3	5.9166667	0	0	0	0
1997	CHEHALIS RIVER	8	10	26.074766	0	0	2.6074766	0
1997	COGBURN CREEK	2	12	15.092213	0	12.0737705	0	0
1997	HARRISON RIVER	0	5	4.6004367	0	0	0	0
1997	HARRISON RIVER	1	10	12.713972	0	3.17849305	0	0
1997	HARRISON RIVER	2	33	153.94057	0	6.03688525	0	9.05532787
1997	LILLOOET RIVER	2	12	84.516393	0	3.01844262	0	0
1997	WEAVER CREEK	2	6	72.442623	0	3.01844262	0	0
1998	BIG SILVER CREEK	2	17	30.306452	0	4.32949309	0	0
1998	CHEHALIS RIVER	1	10	19.227882	0	0	0	0
1998	CHEHALIS RIVER	2	1260	6329.7189	0	783.638249	406.97235	281.417051
1998	CHEHALIS RIVER	5	4	20.222222	0	8.08888889	8.0888889	0
1998	CHEHALIS RIVER	6	4	12.278846	0	0	0	0
1998	CHEHALIS RIVER	8	4	7.7108434	0	0	0	0
1998	CHEHALIS RIVER	9	8	11.322581	0	0	0	0
1998	COGBURN CREEK	2	4	4.3294931	0	4.32949309	0	0
1998	HARRISON RIVER	2	43	103.90783	0	12.9884793	0	0
1998	LILLOOET RIVER	1	5	4.8069705	0	0	0	0
1998	LILLOOET RIVER	2	13	77.930876	0	12.9884793	0	0
1998	WEAVER CREEK	2	17	56.28341	0	21.6474654	0	4.32949309
1999	BIG SILVER CREEK	1	4	12.589773	0	16.7863636	0	0
1999	BIG SILVER CREEK	2	10	20.319615	0	3.38660245	0	0
1999	BIRKENHEAD RIVER	2	7	13.54641	0	3.38660245	0	0
1999	CHEHALIS RIVER	0	16	28.487433	0	2.58976661	2.5897666	2.58976661
1999	CHEHALIS RIVER	1	84	524.57386	0	33.5727273	46.1625	29.3761364
1999	CHEHALIS RIVER	2	918	5330.5123	23.7062	785.691769	382.68608	413.165499
1999	CHEHALIS RIVER	3	0	6.4314354	0	0	0	0
1999	CHEHALIS RIVER	4	6	9.1578947	0	3.05263158	0	0
1999	CHEHALIS RIVER	5	3	5.7304965	0	0	0	0
1999	CHEHALIS RIVER	7	4	7.7534247	0	0	0	0
1999	CHEHALIS RIVER	8	3	2.8392857	0	0	0	5.67857143
1999	CHEHALIS RIVER	9	3	3.2868852	0	0	0	0
1999	COGBURN CREEK	2	14	27.09282	0	6.7732049	0	0
1999	HARRISON RIVER	1	8	88.128409	0	0	0	0
1999	HARRISON RIVER	2	20	71.118651	0	0	0	0
1999	HARRISON RIVER	7	4	3.8767123	0	0	0	0
1999	LILLOOET RIVER	2	10	30.479422	0	6.7732049	0	0
1999	WEAVER CREEK	2	7	13.54641	0	3.38660245	0	0
2000	BIG SILVER CREEK	1	9	55.323004	0	0	0	0
2000	BIG SILVER CREEK	2	17	17.216475	0	4.30411877	0	0
2000	BIRKENHEAD RIVER	2	17	47.345307	0	60.2576628	0	0
2000	CHEHALIS RIVER	0	24	71.466993	0	2.38223309	2.3822331	0
2000	CHEHALIS RIVER	1	51	198.24076	0	23.0512515	0	0
2000	CHEHALIS RIVER	2	1106	6770.3788	0	959.818487	447.62835	705.875479

2000	CHEHALIS RIVER	3	10	13.637795	0	0	6.8188976	0
2000	CHEHALIS RIVER	4	4	12.444444	0	0	0	0
2000	CHEHALIS RIVER	5	3	54.577778	0	0	0	20.4666667
2000	CHEHALIS RIVER	8	4	23.045455	0	0	0	0
2000	COGBURN CREEK	1	5	23.051251	0	0	0	0
2000	COGBURN CREEK	2	9	8.6082375	0	12.9123563	0	0
2000	HARRISON RIVER	0	12	28.586797	0	0	0	0
2000	HARRISON RIVER	1	9	9.2205006	0	0	0	0
2000	HARRISON RIVER	2	34	81.778257	0	0	0	0
2000	LILLOOET RIVER	1	9	13.830751	0	0	0	0
2000	LILLOOET RIVER	2	13	94.690613	0	34.4329502	0	0
2000	WEAVER CREEK	2	4	86.082375	0	4.30411877	0	0
2001	BIG SILVER CREEK	2	4	3.7228546	0	0	0	0
2001	BIRKENHEAD RIVER	2	15	85.625657	0	3.72285464	0	0
2001	CHEHALIS RIVER	0	24	154.37308	0	39.35	27.242308	51.4576923
2001	CHEHALIS RIVER	1	67	118.88742	0	18.5761589	3.7152318	7.43046358
2001	CHEHALIS RIVER	2	1091	7028.7496	22.3371	1358.84194	476.52539	915.822242
2001	CHEHALIS RIVER	3	6	15.594406	0	0	0	0
2001	CHEHALIS RIVER	4	4	3.7631579	0	0	0	0
2001	CHEHALIS RIVER	5	14	23.641509	0	3.37735849	3.3773585	3.37735849
2001	CHEHALIS RIVER	6	4	11.115861	0	0	0	0
2001	CHEHALIS RIVER	8	10	103.84906	0	48.6792453	6.490566	16.2264151
2001	CHEHALIS RIVER	9	4	14.289855	0	0	3.5724638	0
2001	COGBURN CREEK	2	4	37.228546	0	22.3371278	0	0
2001	HARRISON RIVER	0	6	30.269231	0	0	0	0
2001	HARRISON RIVER	1	7	11.145695	0	0	0	0
2001	HARRISON RIVER	2	63	443.0197	0	14.8914186	0	7.44570928
2001	LILLOOET RIVER	2	34	160.08275	0	7.44570928	0	0
2001	WEAVER CREEK	2	15	89.348511	0	26.0599825	0	0
2002	BIG SILVER CREEK	2	18	25.601422	0	10.9720379	0	0
2002	CHEHALIS RIVER	0	31	85.968436	0	6.14060258	0	15.3515065
2002	CHEHALIS RIVER	1	20	83.860382	0	13.4176611	6.7088305	46.9618138
2002	CHEHALIS RIVER	2	911	5277.5502	3.65735	1258.12701	413.28009	808.27346
2002	CHEHALIS RIVER	3	14	37.136752	0	6.75213675	0	10.1282051
2002	CHEHALIS RIVER	7	4	3.5537634	0	0	0	0
2002	CHEHALIS RIVER	8	6	25.941748	0	3.24271845	0	0
2002	CHEHALIS RIVER	9	4	15.496063	0	11.6220472	0	0
2002	COGBURN CREEK	2	4	3.657346	0	0	0	0
2002	HARRISON RIVER	0	12	27.632712	0	0	0	0
2002	HARRISON RIVER	1	3	30.189737	0	0	0	0
2002	HARRISON RIVER	2	40	402.30806	0	43.8881517	0	80.4616114
2002	HARRISON RIVER	7	4	3.5537634	0	0	0	0
2002	LILLOOET RIVER	0	6	9.2109039	0	3.07030129	0	0
2002	LILLOOET RIVER	1	3	13.417661	0	0	0	0
2002	LILLOOET RIVER	2	4	54.86019	0	3.65734597	0	0
2003	BIG SILVER CREEK	1	4	23.875325	0	15.9168831	0	0
2003	BIG SILVER CREEK	2	12	15.885877	0	0	0	0
2003	BIG SILVER CREEK	9	4	8.075188	0	0	0	0
2003	BIRKENHEAD RIVER	2	8	23.828816	0	0	0	0
2003	CHEHALIS RIVER	0	16	46.583009	0	0	0	4.43647701
2003	CHEHALIS RIVER	1	16	27.854545	0	3.97922078	0	0
2003	CHEHALIS RIVER	2	834	5067.5949	7.94294	1445.61484	341.54636	651.32097

2003	CHEHALIS RIVER	3	18	95.525926	0	9.24444444	0	15.4074074
2003	CHEHALIS RIVER	8	6	6.0612245	0	0	3.0306122	0
2003	CHEHALIS RIVER	9	16	32.300752	0	0	0	4.03759398
2003	COGBURN CREEK	2	4	7.9429387	0	3.97146933	0	0
2003	COGBURN CREEK	9	4	12.112782	0	0	0	0
2003	HARRISON RIVER	0	7	15.52767	0	0	0	0
2003	HARRISON RIVER	1	4	55.709091	0	0	0	0
2003	HARRISON RIVER	2	36	262.11698	0	0	0	23.828816
2003	LILLOOET RIVER	0	2	2.2182385	0	0	0	0
2003	LILLOOET RIVER	2	28	115.17261	0	7.94293866	0	0
2003	WEAVER CREEK	2	4	3.9714693	0	3.97146933	0	0
2004	BIG SILVER CREEK	2	11	14.395359	0	0	0	0
2004	BIRKENHEAD RIVER	2	4	35.988398	0	0	0	0
2004	CHEHALIS RIVER	0	7	17.2502	0	0	2.4643144	4.92862871
2004	CHEHALIS RIVER	1	8	7.5292308	0	0	0	0
2004	CHEHALIS RIVER	2	698	3559.2526	10.7965	640.593485	226.72691	413.866577
2004	CHEHALIS RIVER	3	5	14.414634	0	2.40243902	2.402439	0
2004	CHEHALIS RIVER	6	4	4.2795426	0	0	0	0
2004	CHEHALIS RIVER	8	2	4.6	2.3	2.3	2.3	0
2004	CHEHALIS RIVER	9	3	5.5638298	0	0	0	0
2004	COGBURN CREEK	2	11	25.191879	0	3.5988398	0	0
2004	HARRISON RIVER	0	2	4.9286287	0	0	0	0
2004	HARRISON RIVER	2	36	100.76751	0	3.5988398	0	0
2004	LILLOOET RIVER	2	14	28.790718	0	0	0	0
2004	WEAVER CREEK	2	7	21.593039	0	0	0	0
2006	BIG SILVER CREEK	2	13	47.246562	0	16.8737721	0	6.74950884
2006	BIRKENHEAD RIVER	2	3	3.3747544	0	0	0	0
2006	CHEHALIS RIVER	0	5	10.735707	0	0	0	0
2006	CHEHALIS RIVER	2	391	1478.1424	0	361.098723	97.867878	161.988212
2006	CHEHALIS RIVER	3	3	6.0412371	0	0	0	0
2006	CHEHALIS RIVER	5	3	2.875	0	2.875	0	0
2006	CHEHALIS RIVER	8	7	6.6888889	0	0	0	0
2006	CHEHALIS RIVER	9	6	11.851064	0	0	0	0
2006	COGBURN CREEK	2	7	16.873772	0	0	0	0
2006	HARRISON RIVER	0	5	8.0517799	0	0	0	0
2006	HARRISON RIVER	2	27	97.867878	0	13.4990177	0	3.37475442
2006	HARRISON RIVER	9	3	5.9255319	2.96277	0	0	0
2006	LANG CREEK	2	7	13.499018	0	0	0	0
2006	LILLOOET RIVER	2	17	74.244597	0	40.497053	0	0
2006	LILLOOET RIVER	5	3	5.75	0	5.75	0	0
2006	LILLOOET RIVER	9	3	5.9255319	0	0	0	0
2006	WEAVER CREEK	2	10	10.124263	0	3.37475442	0	0
2007	BIG SILVER CREEK		20	43	0	8	0	0
2007	BIRKENHEAD RIVER		8	23	0	4	4	0
2007	CHEHALIS RIVER		439	1948	0	367	78	176
2007	COGBURN CREEK		12	19	0	16	0	4
2007	HARRISON RIVER		36	93	0	0	0	0
2007	LILLOOET RIVER		68	174	0	13	0	0

Appendix 7. Enhancement Information for the Harrison System.

Project	Stock	Species	Brood Year	Release Year	Release Site	Total # Released
Chehalis Band	Airport Cr	Coho	1978	1979	Airport Cr	4,000
Chehalis R	Harrison R	Steelhead	1983	1984	Big Silver Cr	6,471
Chehalis R	Harrison R	Steelhead	1984	1985	Big Silver Cr	5,583
Chehalis R	Weaver Sp Ch	Steelhead	1984	1985	Big Silver Cr	10,055
Chehalis R	Chehalis R	Steelhead	1985	1986	Big Silver Cr	11,000
Chehalis R	Harrison R	Steelhead	1986	1987	Big Silver Cr	10,611
Chehalis R	Cheh+B Silver	Steelhead	1988	1989	Big Silver Cr	11,928
Chehalis R	Cheh+B Silver	Steelhead	1989	1990	Big Silver Cr	17,539
Chehalis R	Chehalis R	Steelhead	1991	1991	Big Silver Cr	11,000
Chehalis R	Big Silver Cr	Steelhead	1992	1992	Big Silver Cr	11,000
Chehalis Band	Harrison R	Chinook	1980	1981	Billy Harris S	39,298
Chehalis Band	Billy Harris S	Chum	1979	1980	Billy Harris S	1,010,000
Chehalis Band	Billy Harris S	Chum	1980	1981	Billy Harris S	1,059,436
Chehalis Band	Harrison R	Chum	1982	1983	Billy Harris S	106,825
Chehalis Band	Harrison R	Chum	1983	1984	Billy Harris S	242,189
Chehalis Band	Harrison R	Chum	1984	1985	Billy Harris S	287,000
Chehalis Band	Harrison R	Chum	1985	1986	Billy Harris S	1,153,434
Chehalis Band	Harrison R	Chum	1986	1987	Billy Harris S	499,200
Chehalis Band	Harrison R	Chum	1987	1988	Billy Harris S	900,600
Chehalis Band	Harrison R	Chum	1988	1989	Billy Harris S	1,008,000
Chehalis Band	Harrison R	Chum	1989	1990	Billy Harris S	668,440
Birkenhead R	Birkenhead R	Chinook	1977	1978	Birkenhead R	16,319
Birkenhead R	Birkenhead R	Chinook	1978	1979	Birkenhead R	12,963
Birkenhead R	Birkenhead R	Chinook	1979	1980	Birkenhead R	34,111
Birkenhead R	Birkenhead R	Chinook	1979	1981	Birkenhead R	14,417
Birkenhead R	Birkenhead R	Chinook	1980	1981	Birkenhead R	72,413
Birkenhead R	Birkenhead R	Chinook	1980	1982	Birkenhead R	9,754
Birkenhead R	Birkenhead R	Chinook	1981	1982	Birkenhead R	36,334
Birkenhead R	Birkenhead R	Chinook	1982	1983	Birkenhead R	141,535
Birkenhead R	Birkenhead R	Chinook	1983	1984	Birkenhead R	196,922
Birkenhead R	Birkenhead R	Chinook	1984	1985	Birkenhead R	115,966
Birkenhead R	Birkenhead R	Chinook	1985	1986	Birkenhead R	108,979
Birkenhead R	Birkenhead R	Chinook	1986	1987	Birkenhead R	173,000
Birkenhead R	Birkenhead R	Chinook	1987	1988	Birkenhead R	84,863
Birkenhead R	Birkenhead R	Chinook	1988	1989	Birkenhead R	157,637
Birkenhead R	Birkenhead R	Chinook	1989	1990	Birkenhead R	124,129
Birkenhead R	Birkenhead R	Chinook	1990	1991	Birkenhead R	87,357
Pemberton F&G	Birkenhead R	Chinook	1994	1995	Birkenhead R	9,823
Pemberton F&G	Birkenhead R	Chinook	1994	1996	Birkenhead R	6,350
Pemberton F&G	Birkenhead R	Chinook	1995	1996	Birkenhead R	8,000
Pemberton F&G	Birkenhead R	Chinook	1995	1997	Birkenhead R	40,800
Pemberton F&G	Birkenhead R	Chinook	1996	1997	Birkenhead R	62,000
Pemberton F&G	Birkenhead R	Chinook	1997	1998	Birkenhead R	65,000
Pemberton F&G	Birkenhead R	Chinook	1998	1999	Birkenhead R	50,000
Pemberton F&G	Birkenhead R	Chinook	1999	2000	Birkenhead R	46,000

Pemberton F&G	Birkenhead R	Chinook	2000	2001	Birkenhead R	50,000
Pemberton F&G	Birkenhead R	Chinook	2001	2002	Birkenhead R	64,500
Pemberton F&G	Birkenhead R	Chinook	2002	2003	Birkenhead R	78,000
Pemberton F&G	Birkenhead R	Chinook	2003	2004	Birkenhead R	8,000
Birkenhead R	Birkenhead R	Coho	1983	1985	Birkenhead R	27,700
Birkenhead R	Birkenhead R	Coho	1984	1985	Birkenhead R	29,000
Birkenhead R	Birkenhead R	Coho	1986	1987	Birkenhead R	25,600
Pemberton F&G	Birkenhead R	Coho	1986	1987	Birkenhead R	16,653
Pemberton F&G	Birkenhead R	Coho	2000	2001	Birkenhead R	60,000
Pemberton F&G	Birkenhead R	Coho	2003	2004	Birkenhead R	5,550
Birkenhead R	Birkenhead R	Steelhead	1986	1986	Birkenhead R	7,805
Pemberton F&G	Birkenhead R	Steelhead	1986	1986	Birkenhead R	8,000
Pemberton F&G	Birkenhead R	Steelhead	1987	1987	Birkenhead R	6,553
Birkenhead R	Birkenhead R	Steelhead	1988	1989	Birkenhead R	8,091
Pemberton F&G	Lillooet R Low	Steelhead	1988	1989	Birkenhead R	8,090
Pemberton F&G	Birkenhead R	Steelhead	1989	1990	Birkenhead R	9,174
Chehalis R	Cheh+Squakum	Chum	1987	1988	Cheh+Squakum	12,266,948
Chehalis R	Weaver Sp Ch	Steelhead	1983	1984	Cheh+Weaver	20,579
Chehalis R	Chehalis R	Chum	2001	2002	Chehalis Ch	91,327
Chehalis R	Harrison R	Chinook	1982	1983	Chehalis R	683,630
Chehalis R	Chehalis R	Chinook	1983	1985	Chehalis R	2,157
Chehalis R	Harrison R	Chinook	1983	1984	Chehalis R	1,641,491
Chehalis R	Harrison R	Chinook	1984	1985	Chehalis R	415,942
Chehalis R	Harrison R	Chinook	1984	1986	Chehalis R	19,285
Chehalis R	Harrison+Cheh	Chinook	1985	1986	Chehalis R	370,081
Chehalis R	Harrison+Cheh	Chinook	1985	1987	Chehalis R	40,384
Chehalis R	Harrison+Cheh	Chinook	1986	1987	Chehalis R	543,355
Chehalis R	Harrison R	Chinook	1987	1988	Chehalis R	1,228,004
Chehalis R	Harrison R	Chinook	1988	1989	Chehalis R	290,273
Chehalis R	Slim Cr	Chinook	1988	1989	Chehalis R	105,664
Chehalis R	Slim Cr	Chinook	1988	1990	Chehalis R	47,703
Chehalis R	Harrison R	Chinook	1989	1990	Chehalis R	1,608,367
Chehalis R	Harrison R	Chinook	1989	1991	Chehalis R	40,528
Chehalis R	Chilliwack R	Chinook	1990	1991	Chehalis R	193,415
Chehalis R	Harrison R	Chinook	1990	1991	Chehalis R	2,280,810
Chehalis R	Harrison R	Chinook	1990	1992	Chehalis R	18,819
Chehalis R	Chilliwack R	Chinook	1991	1992	Chehalis R	133,548
Chehalis R	Harrison R	Chinook	1991	1992	Chehalis R	2,305,361
Chehalis R	Harrison R	Chinook	1991	1993	Chehalis R	23,050
Chehalis R	Chilliwack R	Chinook	1992	1993	Chehalis R	150,834
Chehalis R	Harrison R	Chinook	1992	1993	Chehalis R	3,184,390
Chehalis R	Chilliwack R	Chinook	1993	1994	Chehalis R	214,735
Chehalis R	Harrison R	Chinook	1993	1994	Chehalis R	2,032,254
Chehalis R	Chilliwack R	Chinook	1994	1995	Chehalis R	215,590
Chehalis R	Harrison R	Chinook	1994	1995	Chehalis R	2,406,890
Chehalis R	Chehalis R	Chinook	1995	1996	Chehalis R	273,413
Chehalis R	Harrison R	Chinook	1995	1996	Chehalis R	337,097
Chehalis R	Chehalis R	Chinook	1996	1997	Chehalis R	562,941
Chehalis R	Chehalis R	Chinook	1996	1998	Chehalis R	18,092
Chehalis R	Chilliwack R	Chinook	1996	1997	Chehalis R	1,244,086

Chehalis R	Harrison R	Chinook	1996	1997	Chehalis R	1,686,894
Chehalis R	Chehalis R	Chinook	1997	1998	Chehalis R	291,337
Chehalis R	Chehalis R	Chinook	1997	1999	Chehalis R	29,962
Chehalis R	Harrison R	Chinook	1997	1998	Chehalis R	2,762,976
Chehalis R	Harrison R	Chinook	1997	1999	Chehalis R	29,043
Chehalis R	Chehalis R	Chinook	1998	1999	Chehalis R	660,647
Chehalis R	Harrison R	Chinook	1998	1999	Chehalis R	2,866,239
Chehalis R	Harrison R	Chinook	1998	2000	Chehalis R	91,740
Chehalis R	Chehalis R	Chinook	1999	2000	Chehalis R	189,390
Chehalis R	Harrison R	Chinook	1999	2000	Chehalis R	2,146,882
Chehalis R	Harrison R	Chinook	1999	2001	Chehalis R	67,040
Chehalis R	Chehalis R	Chinook	2000	2001	Chehalis R	186,230
Chehalis R	Chilliwack R	Chinook	2000	2001	Chehalis R	72,670
Chehalis R	Harrison R	Chinook	2000	2001	Chehalis R	1,851,692
Chehalis R	Harrison R	Chinook	2000	2002	Chehalis R	26,463
Chehalis R	Chehalis R	Chinook	2001	2002	Chehalis R	389,678
Chehalis R	Harrison R	Chinook	2001	2002	Chehalis R	2,321,045
Chehalis R	Chehalis R	Chinook	2002	2003	Chehalis R	575,775
Chehalis R	Harrison R	Chinook	2002	2003	Chehalis R	1,986,702
Chehalis R	Chehalis R	Chinook	2003	2004	Chehalis R	256,002
Chehalis R	Harrison R	Chinook	2003	2004	Chehalis R	1,337,997
Chehalis R	Chehalis R	Chinook	2004	2005	Chehalis R	554,500
Chehalis R	Harrison R	Chinook	2004	2005	Chehalis R	2,491,742
Chehalis R	Chilliwack R	Chinook	2005	2006	Chehalis R	374,501
Chehalis R	Harrison R	Chinook	2005	2006	Chehalis R	116,854
Chehalis R	Chilliwack R	Chinook	2006	2007	Chehalis R	219,900
Chehalis R	Harrison R	Chinook	2006	2007	Chehalis R	72,221
Chehalis R	Chehalis R	Chinook	2007	2008	Chehalis R	484,867
Chehalis R	Harrison R	Chinook	2007	2008	Chehalis R	69,589
Chehalis R	Chehalis R	Chum	1982	1983	Chehalis R	1,107,307
Chehalis R	Harrison R	Chum	1982	1983	Chehalis R	738,922
Chehalis R	Weaver Sp Ch	Chum	1982	1983	Chehalis R	550,110
Chehalis R	Chehalis R	Chum	1983	1984	Chehalis R	2,818,361
Chehalis R	Harrison R	Chum	1983	1984	Chehalis R	2,662,175
Chehalis R	Weaver Sp Ch	Chum	1983	1984	Chehalis R	514,503
Chehalis R	Chehalis R	Chum	1984	1985	Chehalis R	2,220,500
Chehalis R	Harrison R	Chum	1984	1985	Chehalis R	1,528,542
Chehalis R	Squakum Cr	Chum	1984	1985	Chehalis R	2,783,426
Chehalis R	Chehalis R	Chum	1985	1986	Chehalis R	9,268,011
Chehalis R	Squakum Cr	Chum	1985	1986	Chehalis R	127,950
Chehalis R	Chehalis R	Chum	1986	1987	Chehalis R	13,539,833
Chehalis R	Chehalis R	Chum	1988	1989	Chehalis R	14,238,930
Chehalis R	Chehalis R	Chum	1989	1990	Chehalis R	11,018,844
Chehalis R	Chehalis R	Chum	1990	1991	Chehalis R	12,821,205
Chehalis R	Chehalis R	Chum	1991	1992	Chehalis R	12,430,379
Chehalis R	Chehalis R	Chum	1992	1993	Chehalis R	10,377,447
Chehalis R	Chehalis R	Chum	1993	1994	Chehalis R	10,875,450
Chehalis R	Chehalis R	Chum	1994	1995	Chehalis R	8,912,215
Chehalis R	Chehalis R	Chum	1995	1996	Chehalis R	10,989,337
Chehalis R	Chehalis R	Chum	1996	1997	Chehalis R	9,244,454

Chehalis R	Chehalis R	Chum	1997	1998	Chehalis R	8,792,884
Chehalis R	Chehalis R	Chum	1998	1999	Chehalis R	4,004,884
Chehalis R	Chehalis R	Chum	1999	2000	Chehalis R	1,226,653
Chehalis R	Chehalis R	Chum	2000	2001	Chehalis R	3,949,094
Chehalis R	Chehalis R	Chum	2001	2002	Chehalis R	5,793,868
Chehalis R	Chehalis R	Chum	2002	2003	Chehalis R	5,853,743
Chehalis R	Chehalis R	Chum	2003	2004	Chehalis R	5,912,133
Chehalis R	Chehalis R	Chum	2004	2005	Chehalis R	6,162,391
Chehalis R	Chehalis R	Chum	2005	2006	Chehalis R	3,051,646
Chehalis R	Chehalis R	Chum	2006	2007	Chehalis R	7,406,243
Chehalis R	Chehalis R	Chum	2007	2008	Chehalis R	6,087,316
Chehalis Band	Three B Ch	Coho	1979	1980	Chehalis R	685
Chehalis Band	Three B Ch	Coho	1979	1981	Chehalis R	2,992
Chehalis R	Chehalis R	Coho	1982	1984	Chehalis R	26,920
Chehalis R	Coho Cr/LWFR	Coho	1982	1984	Chehalis R	31,466
Chehalis R	Evans Cr	Coho	1982	1984	Chehalis R	70,524
Chehalis R	Weaver Sp Ch	Coho	1982	1984	Chehalis R	3,121
Chehalis R	Chehalis R	Coho	1983	1985	Chehalis R	278,398
Chehalis R	Evans Cr	Coho	1983	1985	Chehalis R	17,223
Chehalis R	Chehalis R	Coho	1984	1986	Chehalis R	639,523
Chehalis R	Coho Cr/LWFR	Coho	1984	1986	Chehalis R	36,779
Chehalis R	Weaver Sp Ch	Coho	1984	1986	Chehalis R	108,415
Chehalis R	Chehalis R	Coho	1985	1987	Chehalis R	477,680
Chehalis R	Coho Cr/LWFR	Coho	1985	1987	Chehalis R	1,604
Chehalis R	Weaver Sp Ch	Coho	1985	1987	Chehalis R	77,627
Chehalis R	Chehalis R	Coho	1986	1988	Chehalis R	601,878
Chehalis R	Coho Cr/LWFR	Coho	1986	1988	Chehalis R	35,051
Chehalis R	Chehalis R	Coho	1987	1989	Chehalis R	891,405
Chehalis R	Chehalis R	Coho	1988	1989	Chehalis R	135,684
Chehalis R	Chehalis R	Coho	1988	1990	Chehalis R	664,426
Chehalis R	Chehalis R	Coho	1989	1991	Chehalis R	1,189,729
Chehalis R	Chehalis R	Coho	1990	1992	Chehalis R	985,766
Chehalis R	Chehalis R	Coho	1991	1993	Chehalis R	1,006,624
Chehalis R	Chehalis R	Coho	1992	1994	Chehalis R	1,122,329
Chehalis R	Chehalis R	Coho	1993	1995	Chehalis R	1,076,869
Chehalis R	Chehalis R	Coho	1994	1996	Chehalis R	1,044,907
Chehalis R	Chehalis R	Coho	1995	1997	Chehalis R	886,578
Chehalis R	Chehalis R	Coho	1996	1998	Chehalis R	1,171,184
Chehalis R	Chehalis R	Coho	1997	1999	Chehalis R	1,077,276
Chehalis R	Chehalis R	Coho	1998	2000	Chehalis R	1,162,852
Chehalis R	Chehalis R	Coho	1999	2001	Chehalis R	1,232,761
Chehalis R	Chehalis R	Coho	2000	2002	Chehalis R	1,154,858
Chehalis R	Chehalis R	Coho	2001	2003	Chehalis R	1,032,528
Chehalis R	Chehalis R	Coho	2002	2004	Chehalis R	975,835
Chehalis R	Chehalis R	Coho	2003	2005	Chehalis R	1,021,311
Chehalis R	Chehalis R	Coho	2004	2006	Chehalis R	815,197
Chehalis R	Chehalis R	Coho	2005	2007	Chehalis R	748,454
Chehalis R	Chehalis R	Coho	2006	2008	Chehalis R	898,789
Chehalis R	Chehalis R	Coho	2007	2009	Chehalis R	926,270
Chehalis R	Fraser R Low	Cutthroat	1986	1987	Chehalis R	200

Chehalis R	Fraser R Low	Cutthroat	1987	1988	Chehalis R	4,208
Chehalis R	Fraser R Low	Cutthroat	1988	1989	Chehalis R	1,644
Chehalis R	Fraser R Low	Cutthroat	1989	1990	Chehalis R	1,504
Chehalis R	Fraser R Low	Cutthroat	1990	1991	Chehalis R	1,723
Chehalis R	Fraser R Low	Cutthroat	1991	1992	Chehalis R	1,519
Chehalis R	Fraser R Low	Cutthroat	1992	1993	Chehalis R	5,242
Chehalis R	Fraser R Low	Cutthroat	1993	1994	Chehalis R	1,606
Chehalis R	Fraser R Low	Cutthroat	1994	1995	Chehalis R	1,409
Chehalis R	Fraser R Low	Cutthroat	1995	1996	Chehalis R	1,428
Chehalis R	Fraser R Low	Cutthroat	1996	1997	Chehalis R	1,062
Chehalis R	Fraser R Low	Cutthroat	1997	1998	Chehalis R	5,556
Chehalis R	Fraser R Low	Cutthroat	1998	1999	Chehalis R	5,746
Chehalis R	Fraser R Low	Cutthroat	1999	2000	Chehalis R	4,304
Chehalis R	Fraser R Low	Cutthroat	2000	2001	Chehalis R	5,075
Chehalis R	Fraser R Low	Cutthroat	2001	2002	Chehalis R	5,000
Chehalis R	Fraser R Low	Cutthroat	2002	2003	Chehalis R	3,500
Chehalis R	Chehalis R	Cutthroat	2003	2004	Chehalis R	5,074
Chehalis R	Chehalis R	Cutthroat	2004	2005	Chehalis R	3,424
Chehalis R	Chehalis R	Cutthroat	2005	2006	Chehalis R	3,000
Chehalis R	Chehalis R	Cutthroat	2006	2007	Chehalis R	3,052
Chehalis R	Chehalis R	Cutthroat	2007	2008	Chehalis R	3,000
Chehalis R	Chehalis R	Pink	2003	2004	Chehalis R	330,579
Chehalis R	Chehalis R	Pink	2005	2006	Chehalis R	313,311
Chehalis R	Chehalis R	Pink	2007	2008	Chehalis R	706,452
Chehalis R	Chehalis R	Steelhead	1983	1984	Chehalis R	40,639
Chehalis R	Chehalis R	Steelhead	1984	1985	Chehalis R	59,761
Chehalis R	Chehalis R	Steelhead	1985	1986	Chehalis R	58,714
Chehalis R	Coquihalla R	Steelhead	1985	1986	Chehalis R	28,611
Chehalis R	Chehalis R	Steelhead	1986	1987	Chehalis R	68,592
Chehalis R	Coquihalla R	Steelhead	1986	1987	Chehalis R	39,470
Chehalis R	Chehalis R	Steelhead	1987	1988	Chehalis R	42,663
Chehalis R	Coquihalla R	Steelhead	1987	1988	Chehalis R	38,461
Chehalis R	Cheh+B Silver	Steelhead	1988	1989	Chehalis R	250
Chehalis R	Chehalis R	Steelhead	1988	1989	Chehalis R	46,598
Chehalis R	Chehalis R	Steelhead	1989	1990	Chehalis R	46,042
Chehalis R	Coquihalla R	Steelhead	1989	1990	Chehalis R	37,045
Chehalis R	Chehalis R	Steelhead	1990	1991	Chehalis R	34,909
Chehalis R	Coquihalla R	Steelhead	1990	1991	Chehalis R	30,809
Chehalis R	Chehalis R	Steelhead	1991	1992	Chehalis R	59,192
Chehalis R	Chehalis R	Steelhead	1992	1993	Chehalis R	62,786
Chehalis R	Chehalis R	Steelhead	1993	1994	Chehalis R	64,234
Chehalis R	Chehalis R	Steelhead	1994	1995	Chehalis R	33,036
Chehalis R	Chehalis R	Steelhead	1994	1996	Chehalis R	2,352
Chehalis R	Coquihalla R	Steelhead	1994	1996	Chehalis R	1,466
Chehalis R	Chehalis R	Steelhead	1995	1996	Chehalis R	42,868
Chehalis R	Chehalis R	Steelhead	1995	1997	Chehalis R	4,141
Chehalis R	Chehalis R	Steelhead	1996	1997	Chehalis R	49,897
Chehalis R	Chehalis R	Steelhead	1996	1998	Chehalis R	7,227
Chehalis R	Chehalis R	Steelhead	1997	1998	Chehalis R	79,478
Chehalis R	Chehalis R	Steelhead	1997	1999	Chehalis R	10,270

Chehalis R	Chehalis R	Steelhead	1998	1999	Chehalis R	28,430
Chehalis R	Chehalis R	Steelhead	1998	2000	Chehalis R	4,217
Chehalis R	Chehalis R	Steelhead	1998	2001	Chehalis R	114
Chehalis R	Coquihalla R	Steelhead	1998	2001	Chehalis R	97
Chehalis R	Chehalis R	Steelhead	1999	2000	Chehalis R	31,123
Chehalis R	Chehalis R	Steelhead	1999	2001	Chehalis R	11,245
Chehalis R	Coquihalla R	Steelhead	1999	2000	Chehalis R	15,469
Chehalis R	Chehalis R	Steelhead	2000	2001	Chehalis R	41,394
Chehalis R	Chehalis R	Steelhead	2000	2002	Chehalis R	9,545
Chehalis R	Chehalis R	Steelhead	2001	2002	Chehalis R	54,426
Chehalis R	Chehalis R	Steelhead	2001	2003	Chehalis R	10,969
Chehalis R	Chehalis R	Steelhead	2002	2003	Chehalis R	77,616
Chehalis R	Chehalis R	Steelhead	2002	2004	Chehalis R	11,551
Chehalis R	Chehalis R	Steelhead	2003	2004	Chehalis R	57,874
Chehalis R	Chehalis R	Steelhead	2003	2005	Chehalis R	10,888
Chehalis R	Chehalis R	Steelhead	2004	2005	Chehalis R	34,260
Chehalis R	Chehalis R	Steelhead	2004	2006	Chehalis R	8,133
Chehalis R	Chehalis R	Steelhead	2005	2006	Chehalis R	29,214
Chehalis R	Chehalis R	Steelhead	2005	2007	Chehalis R	5,501
Chehalis R	Chehalis R	Steelhead	2006	2007	Chehalis R	46,967
Chehalis R	Chehalis R	Steelhead	2007	2008	Chehalis R	56,382
Chehalis R	Chehalis R	Steelhead	1991	1991	Clear Cr/LWFR	1,500
Chehalis R	Big Silver Cr	Steelhead	1992	1992	Clear Cr/LWFR	1,500
Chehalis R	Chehalis R	Coho	1998	2000	Cogburn Cr	8,820
Chehalis R	Chehalis R	Coho	1999	2001	Cogburn Cr	10,000
Chehalis R	Chehalis R	Coho	2000	2002	Cogburn Cr	9,440
Chehalis R	Chehalis R	Coho	2001	2003	Cogburn Cr	10,000
Chehalis R	Chehalis R	Coho	2002	2004	Cogburn Cr	9,479
Chehalis R	Chehalis R	Coho	2003	2005	Cogburn Cr	10,507
Chehalis R	Chehalis R	Coho	2004	2006	Cogburn Cr	3,280
Chehalis R	Weaver Sp Ch	Steelhead	1984	1985	Cogburn Cr	6,183
Chehalis R	Chehalis R	Steelhead	1985	1986	Cogburn Cr	5,000
Chehalis R	Weaver Sp Ch	Steelhead	1986	1987	Cogburn Cr	9,250
Chehalis R	Harrison R	Steelhead	1987	1988	Cogburn Cr	14,128
Chehalis R	Cheh+B Silver	Steelhead	1988	1989	Cogburn Cr	12,232
Chehalis R	Cheh+B Silver	Steelhead	1989	1990	Cogburn Cr	9,030
Chehalis R	Big Silver Cr	Steelhead	1992	1992	Cogburn Cr	13,000
Chehalis R	Weaver Sp Ch	Steelhead	1983	1984	Cogburn+B Silv	15,041
Chehalis R	Coho Cr/LWFR	Coho	1982	1984	Coho Cr/LWFR	40,772
Chehalis R	Coho Cr/LWFR	Coho	1983	1985	Coho Cr/LWFR	54,323
Chehalis R	Coho Cr/LWFR	Coho	1985	1987	Coho Cr/LWFR	17,415
Chehalis R	Coho Cr/LWFR	Coho	1986	1988	Coho Cr/LWFR	41,096
Cst Mtn Out Sc	Salmon Sl	Coho	1990	1991	Cottonwood Cr	14,000
Cst Mtn Out Sc	Lillooet R Up	Coho	1991	1992	Cottonwood Cr	22,000
Cst Mtn Out Sc	Lillooet R Up	Coho	1992	1993	Cottonwood Cr	25,000
Cst Mtn Out Sc	Cottonwd/Lill	Coho	1994	1995	Cottonwood Cr	10,500
Pemberton F&G	Cottonwd/Lill	Coho	1995	1996	Cottonwood Cr	27,300
Pemberton F&G	Birknhd+Cotnwd	Coho	1996	1997	Cottonwood Cr	5,000
Pemberton F&G	Cottonwd/Lill	Coho	1997	1998	Cottonwood Cr	20,000
Pemberton F&G	Cottonwd/Lill	Coho	1999	2000	Cottonwood Cr	5,000

Pemberton F&G	Cottonwd/Lill	Coho	2000	2001	Cottonwood Cr	9,000
Pemberton F&G	Cottonwd/Lill	Coho	2001	2002	Cottonwood Cr	5,000
Chehalis Band	Ed Leon Sl	Chum	1980	1981	Ed Leon Sl	484,190
Chehalis Band	Harrison R	Chum	1981	1982	Ed Leon Sl	1,736,012
Chehalis Band	Harrison R	Chum	1982	1983	Ed Leon Sl	11,839
Chehalis Band	Harrison R	Chum	1983	1984	Ed Leon Sl	49,123
Chehalis Band	Harrison R	Chum	1984	1985	Ed Leon Sl	100,900
Chehalis Band	Harrison R	Chum	1985	1986	Ed Leon Sl	86,818
Chehalis Band	Harrison R	Chum	1986	1987	Ed Leon Sl	1,076,800
Chehalis Band	Harrison R	Chum	1987	1988	Ed Leon Sl	630,800
Chehalis Band	Harrison R	Chum	1988	1989	Ed Leon Sl	1,192,500
Chehalis Band	Harrison R	Chum	1989	1990	Ed Leon Sl	173,210
Chehalis R	Fraser R Low	Cutthroat	1986	1987	Elbow Cr	1,025
Chehalis R	Fraser R Low	Cutthroat	1987	1988	Elbow Cr	1,000
Chehalis R	Fraser R Low	Cutthroat	1988	1989	Elbow Cr	1,040
Chehalis R	Fraser R Low	Cutthroat	1989	1990	Elbow Cr	1,504
Chehalis R	Fraser R Low	Cutthroat	1990	1991	Elbow Cr	1,723
Chehalis R	Fraser R Low	Cutthroat	1991	1992	Elbow Cr	1,504
Chehalis R	Fraser R Low	Cutthroat	1993	1994	Elbow Cr	1,532
Chehalis R	Fraser R Low	Cutthroat	1994	1995	Elbow Cr	1,504
Chehalis R	Fraser R Low	Cutthroat	1995	1996	Elbow Cr	900
Pemberton F&G	Birkenhead R	Chinook	1991	1993	Fee Ch	35,000
Pemberton F&G	Birkenhead R	Chinook	1992	1994	Fee Ch	22,500
Pemberton F&G	Birkenhead R	Chinook	1993	1995	Fee Ch	40,922
Pemberton F&G	Birkenhead R	Coho	1990	1992	Fee Ch	11,173
Pemberton F&G	Birkenhead R	Coho	1990	1991	Fee Cr	21,730
Pemberton F&G	Birkenhead R	Coho	1991	1992	Fee Cr	36,800
Pemberton F&G	Birkenhead R	Coho	1992	1993	Fee Cr	28,500
Pemberton F&G	Birkenhead R	Coho	1999	2000	Fee Cr	28,000
Pemberton F&G	Birkenhead R	Coho	2002	2003	Fee Cr	27,000
Chehalis Band	Harrison R	Chinook	1981	1982	Harrison R	79,591
Chehalis Band	Harrison R	Chinook	1982	1983	Harrison R	70,138
Chehalis Band	Harrison R	Chinook	1985	1986	Harrison R	61,661
Chehalis R	Harrison R	Chinook	2005	2006	Harrison R	108,054
Chehalis R	Harrison R	Chinook	2006	2007	Harrison R	206,723
Chehalis R	Harrison R	Chinook	2007	2008	Harrison R	209,633
Chehalis Band	Harrison R	Chum	1980	1981	Harrison R	1,726
Chehalis Band	Deadmans Cr	Chum	1982	1983	Harrison R	13
Chehalis R	Harrison R	Chum	1982	1983	Harrison R	4,523,944
Chehalis R	Harrison R	Chum	1983	1984	Harrison R	6,953,802
Chehalis R	Harrison R	Chum	1984	1985	Harrison R	6,288,013
Chehalis R	Harrison R	Chum	1985	1986	Harrison R	6,450,378
Chehalis R	Harrison R	Coho	1982	1984	Harrison R	55,106
Chehalis R	Harrison R	Coho	1983	1985	Harrison R	14,903
Chehalis R	Harrison R	Coho	1984	1986	Harrison R	56,975
Chehalis R	Harrison R	Coho	1985	1987	Harrison R	11,686
Chehalis R	Weaver Sp Ch	Cutthroat	1983	1985	Harrison R	5,912
Chehalis R	Fraser R Low	Cutthroat	1984	1986	Harrison R	3,399
Chehalis R	Fraser R Low	Cutthroat	1985	1986	Harrison R	9,310
Chehalis R	Fraser R Low	Cutthroat	1986	1987	Harrison R	32,113

Chehalis R	Fraser R Low	Cutthroat	1987	1988	Harrison R	16,262
Chehalis R	Fraser R Low	Cutthroat	1988	1989	Harrison R	12,306
Chehalis R	Fraser R Low	Cutthroat	1989	1990	Harrison R	20,326
Chehalis R	Fraser R Low	Cutthroat	1990	1991	Harrison R	11,070
Chehalis R	Fraser R Low	Cutthroat	1991	1992	Harrison R	13,280
Chehalis R	Fraser R Low	Cutthroat	1992	1993	Harrison R	15,008
Chehalis R	Fraser R Low	Cutthroat	1993	1994	Harrison R	8,903
Chehalis R	Fraser R Low	Cutthroat	1994	1995	Harrison R	10,918
Chehalis R	Fraser R Low	Cutthroat	1995	1996	Harrison R	13,000
Chehalis R	Fraser R Low	Cutthroat	1996	1997	Harrison R	17,556
Chehalis R	Fraser R Low	Cutthroat	1997	1998	Harrison R	12,963
Chehalis R	Fraser R Low	Cutthroat	1998	1999	Harrison R	14,718
Chehalis R	Fraser R Low	Cutthroat	1999	2000	Harrison R	13,566
Chehalis R	Fraser R Low	Cutthroat	2000	2001	Harrison R	11,084
Chehalis R	Fraser R Low	Cutthroat	2001	2002	Harrison R	12,695
Chehalis R	Fraser R Low	Cutthroat	2002	2003	Harrison R	7,995
Chehalis R	Chehalis R	Cutthroat	2003	2004	Harrison R	12,000
Chehalis R	Chehalis R	Cutthroat	2004	2005	Harrison R	8,217
Chehalis R	Chehalis R	Cutthroat	2005	2006	Harrison R	6,049
Chehalis R	Chehalis R	Cutthroat	2006	2007	Harrison R	11,900
Chehalis R	Chehalis R	Cutthroat	2007	2008	Harrison R	10,672
Chehalis Band	Jimmy Charlie	Chum	1979	1980	Jimmy Charlie	230,000
Chehalis Band	Harrison R	Chum	1980	1981	Jimmy Charlie	4,826
Chehalis Band	Harrison R	Chum	1981	1982	Jimmy Charlie	480,090
Chehalis Band	Harrison R	Chum	1982	1983	Jimmy Charlie	399,995
Chehalis Band	Harrison R	Chum	1983	1984	Jimmy Charlie	205,632
Chehalis Band	Harrison R	Chum	1984	1985	Jimmy Charlie	261,300
Chehalis Band	Harrison R	Chum	1985	1986	Jimmy Charlie	216,975
Chehalis Band	Harrison R	Chum	1986	1987	Jimmy Charlie	400,000
Chehalis Band	Harrison R	Chum	1987	1988	Jimmy Charlie	582,350
Chehalis Band	Harrison R	Chum	1989	1990	Jimmy Charlie	598,808
Chehalis Band	Harrison R	Chum	1980	1981	John Mack Sl	15,112
Chehalis Band	Harrison R	Chum	1981	1982	John Mack Sl	61,019
Chehalis Band	Harrison R	Chum	1982	1983	John Mack Sl	108,634
Chehalis Band	Harrison R	Chum	1983	1984	John Mack Sl	120,912
Chehalis Band	Harrison R	Chum	1984	1985	John Mack Sl	263,000
Chehalis Band	Harrison R	Chum	1985	1986	John Mack Sl	173,620
Chehalis Band	Harrison R	Chum	1986	1987	John Mack Sl	480,000
Chehalis Band	Harrison R	Chum	1987	1988	John Mack Sl	570,000
Chehalis Band	Harrison R	Chum	1988	1989	John Mack Sl	587,700
Chehalis Band	Harrison R	Chum	1989	1990	John Mack Sl	452,645
Birkenhead R	Birkenhead R	Steelhead	1987	1987	Lillooet R Low	6,553
Cst Mtn Out Sc	Christian Cr	Coho	1986	1987	Lillooet R Up	2,700
Cst Mtn Out Sc	Lillooet R Up	Coho	1988	1989	Lillooet R Up	9,000
Chehalis Band	Harrison R	Chum	1982	1983	Log Dump Ch	2,449
Chehalis Band	Harrison R	Chum	1983	1984	Log Dump Ch	42,269
Pemberton F&G	Birkenhead R	Coho	1985	1986	One Mile Lk	5,000
Pemberton F&G	One Mile Lk	Coho	1989	1990	One Mile Lk	4,780
Pemberton F&G	Birkenhead R	Coho	1990	1991	One Mile Lk	30,090
Pemberton F&G	Birkenhead R	Coho	1991	1992	One Mile Lk	10,000

Pemberton F&G	Birkenhead R	Coho	1992	1993	One Mile Lk	29,300
Pemberton F&G	Birkenhead R	Coho	1993	1994	One Mile Lk	34,000
Pemberton F&G	Birkenhead R	Coho	1994	1995	One Mile Lk	70,000
Pemberton F&G	Birknhd+Cotnwd	Coho	1996	1997	One Mile Lk	24,000
Cst Mtn Out Sc	Pemberton Cr	Coho	1985	1986	Pemberton Cr	200
Pemberton F&G	Birkenhead R	Coho	1985	1986	Pemberton Cr	4,500
Birkenhead R	Birkenhead R	Coho	1986	1987	Pemberton Cr	16,653
Pemberton F&G	Cottonwd/Lill	Coho	1995	1996	Pemberton Cr	28,600
Pemberton F&G	Birkenhead R	Coho	1998	1999	Pemberton Cr	63,000
Pemberton F&G	Cottonwd/Lill	Coho	1998	1999	Pemberton Cr	10,000
Pemberton F&G	Birkenhead R	Coho	2001	2002	Pemberton Cr	58,000
Pemberton F&G	Birkenhead R	Coho	1999	2000	Rohb Ch	21,000
Pemberton F&G	Cottonwd/Lill	Coho	1999	2000	Rohb Ch	5,000
Birkenhead R	Birkenhead R	Coho	1985	1987	Salmon Sl	12,000
Cst Mtn Out Sc	Salmon Sl	Coho	1990	1991	Salmon Sl	10,000
Cst Mtn Out Sc	Lillooet R Up	Coho	1991	1992	Salmon Sl	8,000
Birkenhead R	Birkenhead R	Coho	1985	1987	Samson Cr	8,600
Chehalis Band	Harrison R	Chum	1986	1987	Smokehouse Ch	480,000
Chehalis Band	Harrison R	Chum	1987	1988	Smokehouse Ch	380,000
Chehalis Band	Harrison R	Chum	1988	1989	Smokehouse Ch	794,300
Chehalis Band	Harrison R	Chum	1989	1990	Smokehouse Ch	647,490
Chehalis R	Squakum Cr	Chum	1982	1983	Squakum Cr	1,343,667
Chehalis R	Squakum Cr	Chum	1983	1984	Squakum Cr	681,135
Chehalis R	Squakum Cr	Chum	1984	1985	Squakum Cr	1,170,244
Chehalis R	Squakum Cr	Chum	1985	1986	Squakum Cr	1,118,300
Chehalis R	Squakum Cr	Coho	1983	1985	Squakum Cr	2,633
Chehalis R	Squakum Cr	Coho	1985	1987	Squakum Cr	31,239
Chehalis R	Squakum Cr	Coho	1986	1988	Squakum Cr	10,465
Chehalis R	Fraser R Low	Cutthroat	1986	1987	Squakum Cr	2,050
Chehalis R	Fraser R Low	Cutthroat	1987	1988	Squakum Cr	5,012
Chehalis R	Fraser R Low	Cutthroat	1988	1989	Squakum Cr	5,012
Chehalis R	Fraser R Low	Cutthroat	1989	1990	Squakum Cr	7,000
Chehalis R	Fraser R Low	Cutthroat	1990	1991	Squakum Cr	8,040
Chehalis R	Fraser R Low	Cutthroat	1991	1992	Squakum Cr	6,996
Chehalis R	Fraser R Low	Cutthroat	1992	1993	Squakum Cr	5,001
Chehalis R	Fraser R Low	Cutthroat	1993	1994	Squakum Cr	4,832
Chehalis R	Fraser R Low	Cutthroat	1994	1995	Squakum Cr	4,994
Chehalis R	Fraser R Low	Cutthroat	1995	1996	Squakum Cr	4,124
Chehalis R	Fraser R Low	Cutthroat	1996	1997	Squakum Cr	3,000
Chehalis Band	Chehalis R	Coho	1978	1979	Three B Ch	8,900
Chehalis Band	Three B Ch	Coho	1979	1980	Three B Ch	8,000
Chehalis R	Trout Cr/LWFR	Coho	1984	1986	Trout Cr/LWFR	4,631
Chehalis R	Trout Cr/LWFR	Coho	1985	1987	Trout Cr/LWFR	2,320
Chehalis R	Trout Cr/LWFR	Coho	1986	1988	Trout Cr/LWFR	1,634
Chehalis R	Trout Cr/LWFR	Coho	1987	1989	Trout Cr/LWFR	15,075
Chehalis R	Trout Cr/LWFR	Coho	1988	1990	Trout Cr/LWFR	15,194
Chehalis R	Trout Cr/LWFR	Coho	1989	1991	Trout Cr/LWFR	14,212
Chehalis R	Trout Cr/LWFR	Coho	1990	1992	Trout Cr/LWFR	22,350
Chehalis R	Trout Cr/LWFR	Coho	1991	1993	Trout Cr/LWFR	5,900
Chehalis R	Trout Cr/LWFR	Coho	1992	1994	Trout Cr/LWFR	5,074

Chehalis R	Trout Cr/LWFR	Coho	1993	1995	Trout Cr/LWFR	11,857
Chehalis R	Chehalis R	Coho	2004	2006	Trout Lk Cr	6,562
Weaver Sp Ch	Weaver Sp Ch	Chum	1965	1966	Weaver Sp Ch	982,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1966	1967	Weaver Sp Ch	227,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1967	1968	Weaver Sp Ch	471,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1968	1969	Weaver Sp Ch	2,703,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1969	1970	Weaver Sp Ch	3,230,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1970	1971	Weaver Sp Ch	1,240,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1971	1972	Weaver Sp Ch	1,758,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1972	1973	Weaver Sp Ch	12,507,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1973	1974	Weaver Sp Ch	4,294,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1974	1975	Weaver Sp Ch	6,182,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1975	1976	Weaver Sp Ch	6,239,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1976	1977	Weaver Sp Ch	5,862,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1977	1978	Weaver Sp Ch	1,649,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1978	1979	Weaver Sp Ch	2,390,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1979	1980	Weaver Sp Ch	3,060,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1980	1981	Weaver Sp Ch	1,872,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1981	1982	Weaver Sp Ch	2,810,000
Chehalis Band	Evans Cr	Chum	1982	1983	Weaver Sp Ch	10,001
Weaver Sp Ch	Weaver Sp Ch	Chum	1982	1983	Weaver Sp Ch	3,670,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1983	1984	Weaver Sp Ch	4,430,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1984	1985	Weaver Sp Ch	1,684,893
Weaver Sp Ch	Weaver Sp Ch	Chum	1985	1986	Weaver Sp Ch	1,978,135
Weaver Sp Ch	Weaver Sp Ch	Chum	1986	1987	Weaver Sp Ch	234,765
Weaver Sp Ch	Weaver Sp Ch	Chum	1987	1988	Weaver Sp Ch	774,942
Weaver Sp Ch	Weaver Sp Ch	Chum	1988	1989	Weaver Sp Ch	579,715
Weaver Sp Ch	Weaver Sp Ch	Chum	1989	1990	Weaver Sp Ch	931,467
Weaver Sp Ch	Weaver Sp Ch	Chum	1990	1991	Weaver Sp Ch	1,971,547
Weaver Sp Ch	Weaver Sp Ch	Chum	1991	1992	Weaver Sp Ch	364,458
Weaver Sp Ch	Weaver Sp Ch	Chum	1992	1993	Weaver Sp Ch	1,394,386
Weaver Sp Ch	Weaver Sp Ch	Chum	1993	1994	Weaver Sp Ch	2,669,594
Weaver Sp Ch	Weaver Sp Ch	Chum	1994	1995	Weaver Sp Ch	2,743,046
Weaver Sp Ch	Weaver Sp Ch	Chum	1995	1996	Weaver Sp Ch	2,501,500
Weaver Sp Ch	Weaver Sp Ch	Chum	1996	1997	Weaver Sp Ch	1,852,603
Weaver Sp Ch	Weaver Sp Ch	Chum	1997	1998	Weaver Sp Ch	3,308,542
Weaver Sp Ch	Weaver Sp Ch	Chum	1998	1999	Weaver Sp Ch	3,227,000
Weaver Sp Ch	Weaver Sp Ch	Chum	1999	2000	Weaver Sp Ch	3,224,000
Weaver Sp Ch	Weaver Sp Ch	Chum	2000	2001	Weaver Sp Ch	2,500,917
Weaver Sp Ch	Weaver Sp Ch	Chum	2001	2002	Weaver Sp Ch	1,484,980
Weaver Sp Ch	Weaver Sp Ch	Chum	2002	2003	Weaver Sp Ch	1,910,384
Weaver Sp Ch	Weaver Sp Ch	Chum	2003	2004	Weaver Sp Ch	1,658,827
Weaver Sp Ch	Weaver Sp Ch	Chum	2004	2005	Weaver Sp Ch	1,557,606
Weaver Sp Ch	Weaver Sp Ch	Chum	2005	2006	Weaver Sp Ch	1,743,583
Weaver Sp Ch	Weaver Sp Ch	Chum	2006	2007	Weaver Sp Ch	3,392,490
Weaver Sp Ch	Weaver Sp Ch	Chum	2007	2008	Weaver Sp Ch	3,435,397
Chehalis Band	Weaver Sp Ch	Coho	1980	1981	Weaver Sp Ch	363
Chehalis R	Weaver Sp Ch	Coho	1982	1984	Weaver Sp Ch	129,452
Chehalis R	Weaver Sp Ch	Coho	1983	1985	Weaver Sp Ch	242,093
Chehalis R	Weaver Sp Ch	Coho	1984	1986	Weaver Sp Ch	132,682

Chehalis R	Weaver Sp Ch	Coho	1985	1987	Weaver Sp Ch	98,875
Chehalis R	Fraser R Low	Cutthroat	1986	1987	Weaver Sp Ch	2,050
Chehalis R	Fraser R Low	Cutthroat	1987	1988	Weaver Sp Ch	2,000
Chehalis R	Fraser R Low	Cutthroat	1988	1989	Weaver Sp Ch	2,080
Chehalis R	Fraser R Low	Cutthroat	1989	1990	Weaver Sp Ch	2,997
Chehalis R	Fraser R Low	Cutthroat	1990	1991	Weaver Sp Ch	3,445
Chehalis R	Fraser R Low	Cutthroat	1991	1992	Weaver Sp Ch	3,007
Chehalis R	Fraser R Low	Cutthroat	1993	1994	Weaver Sp Ch	2,990
Chehalis R	Fraser R Low	Cutthroat	1994	1995	Weaver Sp Ch	2,992
Chehalis R	Fraser R Low	Cutthroat	1995	1996	Weaver Sp Ch	3,000
Chehalis R	Fraser R Low	Cutthroat	1996	1997	Weaver Sp Ch	3,000
Chehalis R	Fraser R Low	Cutthroat	1997	1998	Weaver Sp Ch	2,972
Chehalis R	Fraser R Low	Cutthroat	1998	1999	Weaver Sp Ch	2,820
Chehalis R	Fraser R Low	Cutthroat	1999	2000	Weaver Sp Ch	3,018
Chehalis R	Fraser R Low	Cutthroat	2000	2001	Weaver Sp Ch	3,000
Chehalis R	Fraser R Low	Cutthroat	2001	2002	Weaver Sp Ch	3,000
Chehalis R	Fraser R Low	Cutthroat	2002	2003	Weaver Sp Ch	2,295
Chehalis R	Chehalis R	Cutthroat	2003	2004	Weaver Sp Ch	3,000
Chehalis R	Chehalis R	Cutthroat	2004	2005	Weaver Sp Ch	2,054
Chehalis R	Chehalis R	Cutthroat	2005	2006	Weaver Sp Ch	2,000
Chehalis R	Chehalis R	Cutthroat	2006	2007	Weaver Sp Ch	2,000
Chehalis R	Chehalis R	Cutthroat	2007	2008	Weaver Sp Ch	2,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1965	1966	Weaver Sp Ch	43,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1967	1968	Weaver Sp Ch	109,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1969	1970	Weaver Sp Ch	187,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1971	1972	Weaver Sp Ch	235,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1973	1974	Weaver Sp Ch	536,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1975	1976	Weaver Sp Ch	387,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1977	1978	Weaver Sp Ch	281,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1979	1980	Weaver Sp Ch	105,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1981	1982	Weaver Sp Ch	263,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1983	1984	Weaver Sp Ch	1,170,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1985	1986	Weaver Sp Ch	918,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1987	1988	Weaver Sp Ch	810,000
Weaver Sp Ch	Weaver Sp Ch	Pink	1989	1990	Weaver Sp Ch	920,939
Weaver Sp Ch	Weaver Sp Ch	Pink	1991	1992	Weaver Sp Ch	1,475,322
Weaver Sp Ch	Weaver Sp Ch	Pink	1993	1994	Weaver Sp Ch	1,358,194
Weaver Sp Ch	Weaver Sp Ch	Pink	1995	1996	Weaver Sp Ch	848,842
Weaver Sp Ch	Weaver Sp Ch	Pink	1997	1998	Weaver Sp Ch	973,816
Weaver Sp Ch	Weaver Sp Ch	Pink	1999	2000	Weaver Sp Ch	2,742,000
Weaver Sp Ch	Weaver Sp Ch	Pink	2001	2002	Weaver Sp Ch	2,771,662
Weaver Sp Ch	Weaver Sp Ch	Pink	2003	2004	Weaver Sp Ch	693,165
Weaver Sp Ch	Weaver Sp Ch	Pink	2005	2006	Weaver Sp Ch	1,106,821
Weaver Sp Ch	Weaver Sp Ch	Pink	2007	2008	Weaver Sp Ch	1,741,808
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1965	1966	Weaver Sp Ch	10,471,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1966	1967	Weaver Sp Ch	14,493,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1967	1968	Weaver Sp Ch	7,002,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1968	1969	Weaver Sp Ch	3,584,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1969	1970	Weaver Sp Ch	37,132,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1970	1971	Weaver Sp Ch	9,843,000

Weaver Sp Ch	Weaver Sp Ch	Sockeye	1971	1972	Weaver Sp Ch	5,233,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1972	1973	Weaver Sp Ch	19,400,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1973	1974	Weaver Sp Ch	38,817,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1974	1975	Weaver Sp Ch	43,627,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1975	1976	Weaver Sp Ch	25,961,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1976	1977	Weaver Sp Ch	57,578,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1977	1978	Weaver Sp Ch	19,859,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1978	1979	Weaver Sp Ch	43,047,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1979	1980	Weaver Sp Ch	27,036,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1980	1981	Weaver Sp Ch	53,003,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1981	1982	Weaver Sp Ch	27,213,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1982	1983	Weaver Sp Ch	58,644,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1983	1984	Weaver Sp Ch	31,375,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1984	1985	Weaver Sp Ch	45,937,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1985	1986	Weaver Sp Ch	20,269,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1986	1987	Weaver Sp Ch	21,771,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1987	1988	Weaver Sp Ch	29,529,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1988	1989	Weaver Sp Ch	22,201,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1989	1990	Weaver Sp Ch	21,662,845
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1990	1991	Weaver Sp Ch	18,219,445
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1991	1992	Weaver Sp Ch	42,913,516
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1992	1993	Weaver Sp Ch	46,090,486
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1993	1994	Weaver Sp Ch	38,820,100
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1994	1995	Weaver Sp Ch	42,217,881
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1995	1996	Weaver Sp Ch	21,962,365
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1996	1997	Weaver Sp Ch	45,048,098
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1997	1998	Weaver Sp Ch	13,702,817
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1998	1999	Weaver Sp Ch	47,767,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	1999	2000	Weaver Sp Ch	30,929,000
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2000	2001	Weaver Sp Ch	6,569,313
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2001	2002	Weaver Sp Ch	21,243,014
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2002	2003	Weaver Sp Ch	45,738,773
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2003	2004	Weaver Sp Ch	45,230,512
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2004	2005	Weaver Sp Ch	28,361,961
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2005	2006	Weaver Sp Ch	33,921,922
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2006	2007	Weaver Sp Ch	46,285,610
Weaver Sp Ch	Weaver Sp Ch	Sockeye	2007	2008	Weaver Sp Ch	28,493,605
Chehalis R	Weaver Sp Ch	Steelhead	1984	1985	Weaver Sp Ch	5,183
Chehalis R	Weaver Sp Ch	Steelhead	1985	1986	Weaver Sp Ch	6,969