

# STEELHEAD HARVEST, EFFORT, AND RELEASE ESTIMATES IN IDAHO SPORT FISHERIES FOR CALENDAR YEARS 1954 TO 1986

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# **ABSTRACT**

This report summarizes the steelhead sport harvest, effort, and released fish estimates from previously published Idaho Department of Fish and Game calendar year harvest reports from 1954 to 1986, however released fish estimates were not routinely made until 1983. The surveys used to generate these estimates were designed to provide a harvest, effort, and released fish estimate at the statewide spatial scale, however the authors of these reports also provided estimates at finer spatial and time scales. The estimates from 1954 to 1959 were made for the full calendar year. Beginning in 1960, harvest estimates were also reported for the spring and fall season and beginning in 1970 monthly harvest estimates were also reported. Harvest, effort, and released fish estimates were entered into a statewide harvest database as integers at the finest spatial and time scale possible. These finer spatial and time scale estimates were adjusted so the sum of all river section estimates equaled the statewide estimate.

## INTRODUCTION

Sport fishing for steelhead in Idaho occurs every month except June. Nearly all steelhead that enter Idaho pass Bonneville Dam between July 1 and November 30. These fish provide anglers with fishing opportunities in Idaho from July through May of the following year, hence within a calendar year (CY) anglers can harvest steelhead from two return years. Since steelhead enter freshwater in the summer and fall, over-winter, and spawn the following spring, harvest in recent years has been reported by the Run Year, hereafter referred to as the Spawn Year (SY). Fish harvested in Spawn Year x is the sum of the fall season in year x - 1 and the spring season in year x. The number of steelhead returning to Idaho declined after the completion of four dams on the Snake River downstream of Lewiston. Ice Harbor Dam was the first dam constructed and it was completed in 1961. Lower Granite Dam was the last dam constructed and it was completed in June 1975. Following the construction of the four Lower Snake River dams, the total steelhead return declined to 13,829 in SY1975 and 16,608 in SY1976. To compensate for the construction of four dams downstream of Lewiston, hatcheries were constructed under the Lower Snake River Compensation Plan to provide anglers with steelhead for harvest. Idaho Power Company also provides funding to operate steelhead hatcheries built to compensate for the construction of the Snake River Hells Canyon dams.

A previously published report presented the Idaho sport steelhead harvest for Spawn Years 1987 to 2021 (Byrne 2022). During this time frame the statewide harvest, effort, and released fish estimates were estimated in river location codes whose boundaries did not change and the survey methodology was consistent. Although the purpose of the survey was to obtain total harvest, effort, and released fish estimates at the statewide spatial scale for each season, monthly harvest estimates for each river location code were also made.

This report summarizes harvest, and when possible, effort and released fish from 1954 to 1986. The survey methodology and the stratification used to make estimates varied and estimates that were made at a finer spatial scale did not have consistent river section boundaries. During this time period, all harvest reports covered one CY (hence two SYs). From 1954 to 1959 harvest and effort estimates were made for the CY only and it was not possible to report harvest by SY. Beginning with the CY1960 report, harvest and effort estimates were also made for the spring season (January 1 to June 30, although most waters were closed to steelhead fishing after April 30) and the fall season (July 1 to December 31, although most waters were closed to steelhead fishing until September 1). Effort estimates were not made every year and the spatial scale of the effort estimates varied from a statewide estimate to river section estimates. Different measurement units were used in this time period for the effort estimates including: angler trips, number of anglers, number of successful anglers, number of steelhead permits sold, and days fished (angler days). Released fish were not estimated until 1983 except in the fall 1976 catch-and-release season in the Clearwater River. Released fish estimates were not classified as hatchery or wild or adipose clipped/unclipped until 1986.

Recent steelhead hatchery production began in the mid-1960s. Idaho Power Company constructed Oxbow Hatchery in 1961, however steelhead were not collected for broodstock until 1965. Niagara Springs Hatchery was built in 1966 to rear steelhead that were collected at Oxbow Hatchery and later at Pahsimeroi Hatchery. Pahsimeroi Hatchery was built in 1967 and was first used as an acclimation site for steelhead releases. These facilities were built to mitigate for the construction of the Hells Canyon dams. Steelhead broodstock were collected in 1965 at Oxbow and smolts were released at Pahsimeroi Hatchery in the spring 1967 (Reingold 1968). The first adult returns from this release were in the fall 1968. Additional steelhead hatcheries were

constructed to mitigate for dams on the lower Snake River and the North Fork Clearwater River: Dworshak (1969), Hagerman (converted from a rainbow trout hatchery to rear steelhead in 1979), Sawtooth (1985), and Clearwater (1991).

A brief history of sport fishing for steelhead from 1954 to 1986 in Idaho follows:

- 1954 to 1986: open sport season in some rivers every year except 1975.
- 1958: Brownlee Dam completed followed by Oxbow Dam in 1961 and Hells Canyon Dam in 1967 in the Snake River which blocked fish passage.
- 1961: Ice Harbor Dam completed. This was the first dam constructed in the Snake River downstream of Lewiston, Idaho.
- 1963: Harpster Dam on the SF Clearwater River was removed restoring fish passage upstream of the dam. It was built in 1903 by Grangeville Power and Light Company.
- 1973: Dworshak Dam completed on the North Fork (NF) Clearwater River which blocked fish passage.
- 1973: last sport season in Middle Fork (MF) and SF Salmon River drainages.
- 1973: Lewiston Dam on the Clearwater River was removed. It was built in 1927 by Inland Power and Light Company. Fish ladders were built but they were not effective for Chinook Salmon.
- 1975: Lower Granite Dam completed. This was the last of four dams built in the Snake River downstream of Lewiston, Idaho. No open sport season in the spring or fall statewide.
- 1976: no open spring season statewide. Fall season in Clearwater drainage was catchand-release.
- 1977: no open spring season in the Clearwater drainage.
- 1978: fall season was catch-and-release statewide.
- 1979: no open spring season in Snake River. No open fall season in the Clearwater drainage.
- 1980: no open spring season in the Clearwater drainage.
- 1981: fall season in Clearwater drainage was catch-and-release.

## METHODOLOGY FOR HARVEST, EFFORT, AND RELEASED FISH ESTIMATES

Harvest and effort estimates for 1954 to 1986 were published as Idaho Department of Fish and Game (IDFG) CY harvest reports. Most reports did not have variance and confidence intervals on the estimates and released fish estimates were only made in 1976 and from 1982 to 1986. The original data used for each CY report is no longer available, however all original reports are available to download as a pdf file from the IDFG website.

The first available sport harvest estimate for steelhead in Idaho is from 1954 (Table 1). The statewide steelhead harvest estimates from 1954 to 1963 were based on a postal survey. Bjornn (1967 and 1968) found that these voluntarily returned postal survey harvest estimates were biased high. The original 1954 to 1963 steelhead harvest estimates were reduced by about 50% and rounded to the nearest one-thousand fish (Keating 1969a) to account for the bias. IDFG has reported the Keating adjusted estimates as the statewide CY sport steelhead harvest from 1954 to 1963 since he made the adjustment. The 1954 to 1963 harvest estimates shown in Table 1 are the original postal-derived estimates reduced by 50% and may not equal the Keating adjusted values when rounded to the nearest one-thousand fish. Beginning in CY1960, harvest estimates were also made for the spring and fall seasons allowing harvest to be reported by SY in addition to CY.

The steelhead harvest estimates from 1964 to 1982 were derived from a postal survey of randomly chosen permit buyers. The steelhead harvest estimates from 1983 to 1986 were derived from a telephone survey using a random sample of steelhead permit buyers. The harvest estimates made after CY1963 do not require an adjustment for survey bias.

The postal survey was done once a year and it was designed to get statewide estimates for the CY from 1954 to 1982. Beginning in 1983, a telephone survey was done after each spring and fall season. Harvest estimates for both the postal and telephone surveys were based on a stratified survey design where the population total of each stratum was known and the survey estimated the mean catch per angler for the CY (or season) within each stratum. Since the total number of individuals in each stratum was known, the total statewide harvest for each CY (season from 1983 to 1986) was:

$$H_T = \sum_{i=1}^{i} N_i * c_i$$

 $H_T$  = statewide harvest total,

*i* = number of strata,

 $N_i$  = total number of steelhead anglers (or steelhead permit buyers) in stratum *i*,  $C_i$  = mean catch of steelhead per angler (or steelhead permit buyer) in stratum *i*.

Effort and released fish estimates used the same method except that mean effort per angler or mean number of released fish per angler replaced the mean catch per angler in the above equation. The methodology to make estimates at finer spatial and/or temporal scales was not often provided in the annual reports. I scaled the finer spatial and/or temporal scale river section estimates so the sum of all river section estimates equals the statewide estimates.

Prior to the fall 1982 season, the steelhead sport fishery was not mark selective. From the fall 1982 season to spring 1986 season (and the fall 1986 and spring 1987 seasons in the Snake only) anglers were encouraged and then required, beginning in the fall 1984 season, to release steelhead with a dorsal fin that was more than 2 ¼ inches in height when fully extended. Retention of only hatchery origin fish with a clipped adipose fin began in the Clearwater and Salmon drainages in the fall 1986 season and in the Snake drainage in the fall 1987 season. The fall 1987 season was the first time all steelhead kept in all Idaho waters had to have a clipped adipose fin. Anglers have been required to release all steelhead with an unclipped adipose fin since the fall 1987 season. The steelhead harvest from 1954 to 1986 was not classified as hatchery or wild origin or adipose clipped/unclipped, except in the Clearwater and Salmon drainages in the 1986 fall season.

I entered the harvest, effort, and released fish estimates into the statewide harvest database as integers at the finest spatial/time scale possible for each season, month, or CY from the IDFG published reports. Estimates were adjusted so the sum of all river sections equals (1) the statewide total for the CY and (2) the sum of the spring and fall seasons equals the CY statewide total. Section boundaries were assigned a numbered zone when data was entered in the statewide harvest database. The zone numbers are specific to the Clearwater, Salmon (includes the Middle Fork and South Fork Salmon), and Snake drainages (for example, there can be a zone *x* in each drainage but only one zone *x* within a drainage each CY). Zone numbers and boundaries can change from year to year. A description of the zones used and their boundaries for each year can be found in Appendices A and B.

In the remainder of this methodology section the table and page numbers refer to those in the harvest report(s) cited for each time period.

## 1954 to 1959

Hauck (1956a, 1956b, 1957, 1958, 1959, 1960) estimated the CY harvest for steelhead, Chinook Salmon, trout, and other species using voluntarily returned postal survey responses. Hauck also reported the percentage of the statewide harvest that was from counties from CY1954 to CY1958 for each species. To calculate the CY1954 to CY1958 steelhead harvest by county, I multiplied the percentage of steelhead harvest in each county by the statewide steelhead harvest estimate. I then rounded all estimates and adjusted for round error so sum of all counties equaled the CY statewide harvest estimate. In CY1959 Hauck reported steelhead harvest by river sections and the sum of all river sections equaled the statewide harvest estimate of 62,000. I added or subtracted fish from the "Unknown" county or river to account for the rounding error so the sum of all counties/rivers equals the statewide total (Appendix C).

I entered Hauck's original estimates in the statewide harvest database. The database queries that output the harvest estimates for CY1954 to CY1959 and the harvest estimates in this report are the bias adjusted (reduced by 50% and rounded to nearest integer) values and may not equal the bias adjusted estimates reported by Keating (1969a) when rounded to the nearest one-thousandth fish.

Effort was estimated statewide each year and it was not adjusted for bias in the database or this report.

# 1960 to 1966

Bjornn (1961, 1962, 1964a, 1964b, 1966, 1967, 1968) estimated the statewide steelhead harvest and effort for the CY. He also estimated harvest in river sections for the spring and fall seasons each year. Bjornn used a postal survey to generate the estimates and the responses were voluntary for CY1960 to CY1963, which he later judged to be biased high (Bjornn 1967 and 1968). Beginning in CY1964, the estimates were based on a random sample of responses and do not require an adjustment for bias.

The sum of Bjornn's spring and fall season estimates do not equal the statewide CY estimate due to the different spatial scales the estimates were made and required an adjustment.

#### Adjustments to re-scale the harvest and effort estimates

- 1. Use the statewide entire year estimated catch for all anglers as the CY harvest. Check if the statewide CY harvest total equals the sum of the reported fall and spring seasons harvest.
- 2. If the sum of fall and spring seasons does not equal the statewide total CY estimate, then
- 3. Calculate the percent of harvest in spring as: spring season estimate / (spring season estimate + fall season estimate). The percent of harvest in fall season is: 1- spring season harvest percentage.
- 4. The total spring season harvest equals: spring harvest percentage \* statewide CY total harvest.
- 5. The total fall season harvest equals: statewide CY total harvest spring season total harvest.
- 6. Scale each river section's spring (and fall) season harvest estimate to the statewide seasonal total from #4 and #5 as:
- a. calculate the percent of harvest in each river section for spring and fall seasons as: the reported harvest in river section / sum of the reported harvest in all river sections.
- b. multiply percentage from 6a by seasonal statewide total from #4 or #5 and round to nearest fish.
- c. check that sum of all river sections equals the seasonal total. Adjust for rounding error so sum of all river sections in each season equals the seasonal statewide total from #4 or #5.
- d. If the sum of the seasonal harvest in all river sections was less than the seasonal statewide harvest (from #4 and #5), I added an Unknown section with harvest of: statewide seasonal total minus the seasonal sum of all river sections from 6a and 6b.
- e. The sum of the total spring and total fall season harvest will equal the CY statewide total harvest estimate.
- 7. Repeat steps 1 6 for the effort estimate.

I entered the adjusted re-scaled estimates in the statewide harvest database (Appendices D to J). The database queries that output the harvest estimates for CY1960 to CY1963 and the harvest estimates in this report are the bias adjusted estimates and may not equal those reported by Keating (1969a) when rounded to the nearest one-thousandth fish. I did not apply a bias adjustment to the effort estimates.

# 1967 to 1969

Keating (1969a, 1969b, 1970, 1971) reported the steelhead harvest in each river section in Table 5 of his reports for each CY. The sum of the harvest in all river sections equals the

statewide total CY harvest estimate. He also included the reported raw catch from the survey in his Table 7 in each river section in the spring and all seasons.

Effort was estimated by river sections for CY 1967 and CY1968. Effort in CY1969 was estimated statewide.

# Method to split the CY harvest into the spring and fall seasons

- 1. Using catch reported in Table 7, calculate the percentage of harvest in the spring season and in the fall season in each river section.
- 2. Parse the reported Unknown catch to spring and fall season using percentage from #1 in each river section.
- 3. Calculate the percentage of harvest in each river section caught in the spring and fall season after parsing the unknown catch.
- 4. Calculate the spring season harvest in each river section by multiplying the spring season harvest percentage (from #3) by the total CY river section harvest (from Table 5) and round to nearest fish. The total spring season harvest is the sum of all river sections.
- 5. Fall season harvest in each river section is: the river section total CY harvest minus the river section spring harvest (from #4). The total fall season harvest is the sum of all river sections.

Calculations using this method are shown in Appendices K to M.

# Method to adjust the river section effort estimates in CY 1967 and 1968

- 1. Keating reported the statewide CY effort estimate.
- 2. In Table 5, Keating reported the CY effort in each river section in 1967 and 1968.
- 3. Sum the CY1967 and CY1968 effort estimates for all river sections (by CY).
- 4. Calculate R = statewide CY effort / sum of all river sections CY effort (by CY).
- 5. Adjust the river section CY effort so the sum of all sections = CY statewide total as: R multiplied by the river section CY effort estimate. Round to nearest integer and adjust for rounding error so sum of all river sections effort equals the CY statewide effort estimate for 1967 and 1968.

Effort in CY1969 was reported statewide so no adjustment was needed.

# 1970 to 1972

In the CY1970 report, monthly river section steelhead harvest estimates were made and reported for the first time (Keating 1971). Mallet (1972a and 1972b) reported the monthly river section harvest for CY1971 and CY1972. The monthly estimates are in Table 10 of their reports for all years. The monthly harvest estimates when summed, equal the seasonal and CY harvest estimates, hence no adjustments were necessary for these years.

# 1973

Ortmann (1974, Tables 10 and 13) reported 10,432 as the statewide CY steelhead harvest. The monthly river section harvest estimates reported in his Table 13 include harvest in an unknown month. Using the CY harvest in each river section, I calculated the percentage of harvest in each month. I then parsed the unknown month harvest to the other months in proportion

to each of the known months harvest percentage in each river section. I then rounded the monthly estimates to nearest fish and adjusted for rounding error so sum of all river sections for the CY was 10,432. I then summed the monthly harvest estimates to get the spring and fall season harvest estimate in each river section. Effort was estimated statewide for the CY and required no adjustment.

# 1974

Ortmann (1975, page 4) reported statewide steelhead harvest in the spring season but no estimates were provided at a finer spatial scale. The fall season closed in portions of the state on October 8 and in all waters on October 28. The fall season steelhead harvest was reported for the Snake, Salmon, and Clearwater drainages on pages 3 and 4 of Ortmann's report. The effort estimate was made statewide (number of steelhead permits sold) for the CY and was reported on page 1 of his report.

# 1975

Sport fishing for steelhead was closed statewide in 1975, hence no harvest report was published.

# 1976

Sport fishing for steelhead was closed statewide in the spring 1976 season.

In the fall season, catch-and-release fishing was permitted in the Clearwater drainage and a released fish estimate was made. Ortmann (1977, Table 2) estimated the fall season steelhead harvest by river sections in the Salmon and Snake drainages. I parsed the unknown month harvest estimate (and the released fish estimate in the Clearwater) to October, November, and December using the proportion of each river section harvest (or released fish in the Clearwater) that occurred in those months. I rounded the estimates to nearest integer and adjusted for round error so the sum of all river sections harvest equals 2,247 and the Clearwater released fish estimate equals 1,996. The values in Ortmann's Table 2 for the Clearwater drainage are for released fish not kept fish. I used the number of anglers that fished for steelhead reported by Ortmann in his Table 1 for the fall statewide effort estimate.

# 1977

Ortmann (1978, Table 12) reported 12,885 as the CY statewide steelhead harvest and provided estimates for harvest in river sections by month. The unknown harvest in each river section was parsed to months with harvest using the proportion of the total river section harvest that occurred in those months. I rounded the estimates to nearest integer and adjusted for round error so the sum of all river sections harvest for the CY equals 12,885 and then summed the monthly harvest estimates in each river section to get the spring and fall season harvest.

Ortmann reported effort reported statewide (in Table 13) and by drainage (in Tables 14 to 15) for the CY. I scaled the drainage estimates so the sum of all drainages equals the statewide CY estimate of 100,194 angler days.

# 1978

Ortmann (1979, Table 10) made monthly steelhead harvest estimates for the spring season. No adjustment was necessary as the sum of all river sections equals the seasonal statewide harvest estimate of 11,616. In the fall season only catch-and-release fishing was allowed statewide and there was no estimate made for the number of released fish. Effort for the spring and fall seasons was reported statewide on page 3 of his report as the number of steelhead permits sold.

#### 1979 to 1981

Harvest of steelhead was restricted in all of these years. The Clearwater drainage was closed to steelhead fishing in the fall 1979 and spring 1980 seasons. The Clearwater drainage was open for catch-and-release fishing only in the fall 1981 season. The Snake River was closed to steelhead fishing in the spring 1979 season and only open upstream of Dug Bar in the spring seasons of 1980 and 1981. The Salmon River was open to harvest from Cove Creek Bridge to the Pahsimeroi River in the spring 1979 season.

Ortmann (1979, Table 2), Ortmann (1980, Table 7) and Pollard (1981, Table 7) reported steelhead harvest in river sections by month. The Unknown month harvest in each river section parsed to the months with harvest, rounded to an integer, and adjusted if needed so sum of harvest in all river sections equals the statewide CY harvest estimate (the statewide CY harvest in 1979 was 5,667; in 1980 it was 9,103; and in 1981 it was 12,961) that was reported in those tables. I then summed the monthly harvest estimates to get the spring and fall season harvest in each river section.

Effort (days fished) was estimated by season in drainages that were open to harvest in 1979 to 1981 in Tables 4 to 6 of their reports in all years.

#### 1982 to 1985

Partridge and Pollard (1983, Table 8) estimated the CY1982 steelhead harvest by river section and month. The Unknown month harvest in each river section and the Unknown section harvest were parsed to months with harvest and adjusted so the sum of all river section harvest estimates equals the statewide CY harvest total of 20,350 provided in Table 1 of their report. I then summed the monthly harvest estimates to get the spring and fall season harvest. Effort for 1982 was estimated by drainage and reported in Tables 5 to 7 of their report.

A telephone survey was used for the first time for the CY1983 report and an estimate of released fish in each river section was also made for the first time in both the spring and fall seasons. The survey was done for the spring and fall season after each season was over. Pollard (1985) reported CY1983 harvest in Table 2 that differed from the CY harvest reported in Table 1.

I used the CY1983 statewide steelhead harvest estimate (32,262) and the monthly steelhead harvest estimates reported in his Table 2. The Unknown month harvest in each river section was parsed to months with harvest and adjusted so the sum of harvest in all river sections equals the statewide CY total of 32,262. I then summed the monthly harvest estimates to get the spring and fall season harvest. For the effort estimates in 1983, I used values reported in his Table 3 and for released fish I used the values reported in his Table 7. Released fish were not classified as hatchery or wild or clipped/unclipped.

Cochnauer (1986, Table 1 and 3) estimated CY1984 statewide steelhead harvest, statewide spring and fall season steelhead harvest, and monthly steelhead harvest by river sections. An unknown month harvest in the spring and fall seasons was included in his Table 3. The Unknown month harvest in each river section for each season was parsed to months with harvest and adjusted so sum of harvest in all river sections in each season equals the statewide seasonal estimate (6,245 in the spring and 18,348 in the fall). The sum of the statewide seasonal harvest equals the statewide CY1984 harvest total of 24,593. I used the effort estimates by river section for the spring and fall seasons that were reported in his Table 4 and the released fish estimates that were reported in his Table 6. Released fish were not classified as hatchery or wild or clipped/unclipped.

Hall-Griswold and Cochnauer (1987, Tables 4 and 5) estimated CY1985 statewide steelhead harvest, statewide spring and fall season steelhead harvest and the monthly steelhead harvest by river section. An unknown month harvest in the spring and fall seasons was included in their Table 5. The Unknown month harvest in each river section for each season was parsed to months with harvest and adjusted so sum of harvest in all river sections in each season equals the statewide seasonal estimate (13,642 in the spring and 20,722 in the fall). The sum of the statewide seasonal harvest equals the statewide CY1985 harvest total of 34,364. Some harvest was reported in some river sections in a month that the river section was closed. If this occurred, I added that month's harvest to the prior month when the river section was open. I used the effort estimates by river section for the spring and fall seasons that were reported in their Table 7 and the released fish estimates that were reported in their Table 8. Released fish were not classified as hatchery or wild or adipose clipped or unclipped.

# 1986

This was the first year that harvest, effort, and released fish estimates were reported using Location Codes (LC). The LC boundaries have been used since 1986 and the boundaries have not changed. It was also the first year that released fish estimates were made for hatchery and wild origin fish (which I assumed were adipose clipped and unclipped fish).

McArthur (1988, Table 6) estimated the CY1986 statewide and seasonal steelhead harvest, effort, and released fish. He reported the monthly steelhead harvest estimates by LC in his Table 7. I used the monthly harvest estimates by LC in his Table 7, and adjusted for rounding error so the sum of all LCs in each season equals the seasonal estimates in his Table 6 and the sum of the spring and fall season equals the CY harvest estimate of 39,893. I retained the Unknown LC harvest estimates and entered it into the database. Some harvest was reported in some LCs in a month that the river section was closed. If this occurred, I added that month's harvest to the prior month when the LC was open. Any steelhead that was harvested in the fall season in the Clearwater and Salmon drainages had to be adipose clipped. In the Snake drainage, the dorsal fin height rule was in place for the fall season.

I used the number of days fished for the seasonal effort estimates by LC in his Table 9. I retained the Unknown LC estimates for each season. I adjusted for rounding error so the sum of LCs in the spring and fall seasons equals the seasonal estimate in his Table 6 and the sum of the spring and fall season equals the CY1986 effort estimate of 239,130 days fished. There was effort reported in the MF Salmon River in the fall season that I retained in the database although steelhead fishing was not permitted in this river.

For released fish I used the hatchery and wild (assumed to be adipose clipped and adipose unclipped) estimates in his Table 10 and retained the Unknown LC in the fall season. I then adjusted for rounding error so the sum of the spring season LCs equals the spring statewide total value shown in Table 10 (5,965 wild/unclipped and 5,505 hatchery/clipped fish). In the fall season I used the sum of all LCs (including the Unknown LC) for the total statewide released fish estimate (29,857 wild/unclipped and 8,321 hatchery/clipped fish). The sum of the fall LCs hatchery/clipped and wild/unclipped estimates differ somewhat from the statewide fall totals reported in Table 10, however the difference between the sum of the fall LC hatchery/clipped and wild/unclipped estimates in Table 10 is two fish and can be attributed to rounding error.

# **RESULTS**

I report statewide estimates of steelhead harvest by CY and SY in Table 1. I report the statewide estimates of steelhead harvest and effort for CY1954 to CY1986 and the fall and spring season steelhead harvest and effort estimates for CY1960 to CY1986 in Table 2. The estimates in Table 1 and 2 include all drainages and include estimates from all unknown locations. The CY1954 to CY1959 steelhead harvest estimates by drainage and county (river in CY1959 only) are reported in Table 3. I report the CY1960 to CY1986 spring and fall season steelhead harvest estimates by drainages in Table 4.

The fall season, spring season, and CY estimates of steelhead harvest, effort, and released fish are reported for the Clearwater drainage (Table 5), the MF Salmon and SF Salmon drainages (Table 6), the Salmon drainage excluding the MF Salmon and SF Salmon drainages (Table 7), and the Snake drainage excluding the Clearwater and Salmon drainages (Table 8). The estimates for the Snake drainage in CY1985 and CY1986 include the Boise River. The estimates in Tables 5 to 8 exclude river sections if the drainage was unknown. Estimates made at the statewide spatial scale are not included in Tables 5 to 8.

The SY estimates of steelhead harvest and released fish for the Clearwater drainage; Salmon drainage (excluding the SF Salmon and MF Salmon drainages); Snake drainage (excluding the Clearwater and Salmon drainages); SF Salmon drainage, and MF Salmon drainage are reported in Tables 9 and 10. Tables 9 and 10 exclude estimate(s) from a river section if the drainage was unknown.

The steelhead harvest estimates in the spring and fall season in each river section (zone) are reported in Appendices A and B for CY1960 to CY1986. The MF Salmon River and all its tributaries and SF Salmon River and all its tributaries are included in the Salmon drainage in Appendix A and B.

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Calendar Year	CY total harvest	Spawn Fall season Year harvest		Spring season harvest	SY total harvest
1954	12,605	1954	na	na	na
1955	13,130	1955	na	na	na
1956	7,886	1956	na	na	na
1957	19,772	1957	na	na	na
1958	29,816	1958	na	na	na
1959	31,000	1959	na	na	na
1960	29,996	1960	na	12,440	na
1961	25,681	1961	17,556	10,876	28,432
1962	19,623	1962	14,805	5,880	20,685
1963	27,395	1963	13,743	13,886	27,629
1964	17,781	1964	13,509	8,672	22,181
1965	19,524	1965	9,109	5,264	14,373
1966	20,410	1966	14,260	6,498	20,758
1967	24,469	1967	13,912	10,088	24,000
1968	24,617	1968	14,381	8,638	23,019
1969	17,187	1969	15,979	5,649	21,628
1970	20,681	1970	11,538	7,586	19,124
1971	17,661	1971	13,095	3,485	16,580
1972	13,524	1972	14,176	1,891	16,067
1973	10,432	1973	11,633	4,343	15,976
1974	3,010	1974	6,089	2,284	8,373
1975	0	1975	726	0	726
1976	2,247	1976	0	0	0
1977	12,855	1977	2,247	917	3,164
1978	11,616	1978	11,938	11,616	23,554
1979	5,667	1979	0	3,805	3,805
1980	9,103	1980	1,862	1,101	2,963
1981	12,961	1981	8,002	4,656	12,658
1982	20,350	1982	8,305	2,620	10,925
1983	32,262	1983	17,730	10,408	28,138
1984	24,593	1984	21,854	6,245	28,099
1985	34,364	1985	18,348	13,642	31,990
1986	39,893	1986	20,722	11,699	32,421

Table 1.The Idaho statewide sport harvest of steelhead by Calendar Year (CY) and Spawn<br/>Year (SY) from 1954 to 1986. Estimates include all drainages including estimates<br/>from unknown locations. na = not available.

Table 2. The statewide steelhead sport harvest, effort, and released fish estimates by Calendar Year (CY) from 1954 to 1986 and the spring and fall season estimates from 1960 to 1986. Estimates include all drainages including estimates from unknown locations. Effort was estimated for the CY from 1954 to 1959 and from 1967 to 1974. Released fish were not classified as clipped or unclipped until 1986. C&R = steelhead fishing statewide was catch-and-release only.

	Spring Season			Fall Season				CY Total		
Calendar Year	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Effort unit
1954							12,605	92,153		Angler trips
1955							13,130	160,651		Angler days
1956							7,886	90,608		Angler days
1957							19,772	148,607		Angler days
1958							29,816	173,301		Angler days
1959							31,000	172,413		Angler trips
1960	12,440	13,416		17,556	15,434		29,996	28,850		Number of anglers
1961	10,876	11,896		14,805	13,581		25,681	25,477		Number of anglers
1962	5,880	10,343		13,743	18,535		19,623	28,878		Number of anglers
1963	13,886	18,878		13,509	18,242		27,395	37,120		Number of anglers
1964	8,672	3,265		9,109	3,619		17,781	6,884		Successful anglers
1965	5,264	2,171		14,260	4,926		19,524	7,097		Successful anglers
1966	6,498	2,579		13,912	4,633		20,410	7,212		Successful anglers
1967	10,088			14,381			24,469	7,906		Successful anglers
1968	8,638			15,979			24,617	8,059		Successful anglers
1969	5,649			11,538			17,187	25,163		Number of anglers
1970	7,586			13,095			20,681	18,268		Number of anglers
1971	3,485			14,176			17,661	16,569		Number of anglers
1972	1,891			11,633			13,524	16,025		Number of anglers
1973	4,343			6,089			10,432	15,873		Number of anglers
1974	2,284			726			3,010	11,294		Number of permits
1975	No open sea	ason in 1975								no season
1976 <sup>a</sup>	No Spring	g season		2,247	5,282	1,996	2,247	5,282	1,996	Number of anglers
1977 <sup>b</sup>	917			11,938	46,025		12,855	100,255		Angler days

	S	pring Sease	on		Fall Seasor	1		CY Total		
Calendar			Released			Released			Released	
Year	Harvest	Effort	fish	Harvest	Effort	fish	Harvest	Effort	fish	Effort unit
1978	11,616	11,436		C&R	3,048		11,616	14,484		Number of permits
1979 <sup>c</sup>	3,805	31,443		1,862	1,555		5,667	50,271		Angler days
1980 <sup>d</sup>	1,101			8,002	35,830		9,103	79,490		Angler days
1981 <sup>e</sup>	4,656	23,666		8,305			12,961	98,510		Angler days
1982 <sup>f</sup>	2,620			17,730			20,350	134,284		Angler days
1983	10,408	71,334	11,425	21,854	114,557	24,823	32,262	185,891	36,248	Angler days
1984	6,245	30,911	9,767	18,348	141,414	27,299	24,593	172,325	37,066	Angler days
1985	13,642	61,972	9,180	20,722	176,324	26,873	34,364	238,296	36,053	Angler days
1986 <sup>g</sup>	11,699	76,339	11,470	28,194	162,799	38,178	39,893	239,138	49,648	Angler days

<sup>a</sup> Released fish estimate made in the Clearwater drainage only.

<sup>b</sup> Effort in fall season estimated in the Clearwater drainage only. Effort was estimated for the CY in the Salmon and Snake drainages.

<sup>c</sup> Effort in fall season estimated in the Snake drainage only. Effort in spring season estimated in the Clearwater drainage only. Effort was estimated for the CY in the Salmon drainage

<sup>d</sup> Effort in fall season estimated in the Clearwater drainage only. Effort was estimated for the CY in the Salmon and Snake drainages.

<sup>e</sup> Effort in the Clearwater drainage was estimated in the spring season only. Effort was estimated for the CY in the Salmon and Snake drainages.

<sup>f</sup> Effort was estimated for the CY in the Clearwater, Salmon, and Snake drainages.

<sup>9</sup> Spring season released 5,505 hatchery and 5,965 wild steelhead. Fall season released 8,322 hatchery and 29,858 wild steelhead.

Table 3. The estimated Calendar Year steelhead harvest from 1954 to 1959 by county (1954 – 1958) or river (1959). The harvest estimates are the estimates made by Hauck reduced by 50% to account for survey bias and adjusted for rounding error if necessary. The effort estimates are the estimates made by Hauck and are unadjusted for survey bias. MF = Middle Fork. SF = South Fork.

Calendar Year	Drainage	County or River	Bias Adjusted Harvest	Effort
1954	Salmon	Custer County	744	
1954	Salmon	Lemhi County	2,647	
1954	Snake	Washington County	1,273	
1954	Multiple	Idaho County	3,088	
1954	Multiple	Nez Perce County	3,845	
1954	Multiple	Other counties	1,008	
1954	Statewide total		12,605	92,153ª
1955	Salmon	Custer County	670	
1955	Salmon	Lemhi County	2,705	
1955	Salmon	Valley County	1,221	
1955	Snake	Washington County	1,642	
1955	Multiple	Idaho County	2,456	
1955	Multiple	Nez Perce County	3,782	
1955	Multiple	Other counties	654	
1955	Statewide total		13,130	160,651 <sup>ь</sup>
1956	Clearwater	Clearwater County	190	
1956	Clearwater	Lewis County	95	
1956	Salmon	Custer County	489	
1956	Salmon	Lemhi County	1,309	
1956	Salmon	Valley County	584	
1956	Snake	Elmore County	95	
1956	Snake	Owyhee County	465	
1956	Snake	Payette County	95	
1956	Snake	Washington County	1,569	
1956	Multiple	Idaho County	1,940	
1956	Multiple	Nez Perce County	1,010	
1956	Multiple	Other counties	45	
1956	Statewide total		7,886	<b>90,608</b> <sup>b</sup>
1957	Clearwater	Clearwater County	870	
1957	Salmon	Custer County	712	
1957	Salmon	Lemhi County	3,045	
1957	Salmon	Valley County	1,009	
1957	Snake	Washington County	692	

Calendar Year	Drainage	County or River	Bias Adjusted Harvest	Fffort
1957	Multiple	Adams County	415	Enon
1957	Multiple	Idaho County	5,339	
1957	Multiple	Nez Perce County	6,782	
1957	Multiple	Other counties	907	
1957	Statewide total		19,772	148,607 <sup>b</sup>
1958	Clearwater	Clearwater County	3,489	
1958	Salmon	Lemhi County	3,846	
1958	Salmon	Valley County	1,431	
1958	Snake	Washington County	2,803	
1958	Multiple	Idaho County	9,183	
1958	Multiple	Nez Perce County	7,007	
1958	Multiple	Other counties	2,057	
1958	Statewide total		29,816	173,301 <sup>b</sup>
1959	Clearwater	Clearwater River <sup>c</sup>	5,137	
1959	Clearwater	Clearwater drainage <sup>d</sup>	5,721	
1959	MF Salmon	MF Salmon River	1,142	
1959	Salmon	EF Salmon River	209	
1959	Salmon	Lemhi River	181	
1959	Salmon	Pahsimeroi River	70	
1959	Salmon	Salmon River – 1 <sup>e</sup>	6,389	
1959	Salmon	Salmon River – 2 <sup>f</sup>	3,160	
1959	SF Salmon	SF Salmon River	2,520	
1959	Snake	Snake River – 1 <sup>g</sup>	3,647	
1959	Snake	Snake River – 2 <sup>h</sup>	863	
1959	Snake	Weiser River	1,490	
1959	Multiple	Other rivers	471	
1959	Statewide total		31,000	172,413ª

<sup>a</sup> Effort was reported as Angler trips

<sup>b</sup> Effort was reported as Angler days

<sup>c</sup>Clearwater River from mouth to Lewiston Dam

<sup>d</sup>Clearwater drainage upstream of Lewiston Dam

<sup>e</sup> Salmon River downstream of MF Salmon River

<sup>f</sup>Salmon River upstream of MF Salmon River

<sup>g</sup> Snake River downstream of Oxbow Dam

<sup>h</sup> Snake River upstream of Brownlee Dam

Calondar —	Spring Season	Fall Season
Table 4.	Steelhead sport harvest by Calendar Year, season, and the Middle Fork (MF) and South Fork (SF) Salmon dra steelhead fishing after 1973. C&R = catch-and-release fis	drainage from 1960 to 1986. The Salmon drainage excludes ainages. The MF and SF Salmon drainages were closed to shing only.

Calondar			opring of	243011								
Year	Clearwater	MF Salmon	Salmon	SF Salmon	Snake	Unknown	Clearwater	MF Salmon	Salmon	SF Salmon	Snake	Unknown
1960	3,348	597	4,250	1,065	3,180	0	5,621	893	5,858	667	4,341	176
1961	2,020	545	4,863	899	2,171	378	4,828	786	5,647	497	2,889	158
1962	1,505	325	2,820	325	905	0	5,040	376	5,676	188	2,374	89
1963	2,123	989	8,102	1,319	1,054	299	4,892	659	5,995	214	1,745	4
1964	1,424	503	4,984	702	702	357	2,671	100	4,618	20	1,572	128
1965	1,191	188	2,928	75	104	778	5,641	80	5,542	44	1,644	1,309
1966	1,093	212	3,517	235	624	817	4,799	89	5,639	7	2,752	626
1967	1,924	440	5,899	436	1,210	179	6,641	52	5,029	59	2,362	238
1968	2,250	505	4,533	205	1,082	63	6,924	103	5,912	24	2,913	103
1969	1,542	258	3,401	35	360	53	3,519	63	5,629	9	2,184	134
1970	1,752	234	4,681	156	704	59	4,501	65	5,601	0	2,877	51
1971	808	91	2,452	5	118	11	3,422	16	7,822	5	2,835	76
1972	209	13	1,420	31	201	17	5,054	22	4,296	4	2,252	5
1973	1,671	31	1,835	57	707	42	2,644	5	2,550	10	875	5
1974 <sup>a</sup>	Spring harves	t estimated state	ewide			2,284	436	closed	252	closed	38	0
1975	No open Sprir	ng or Fall seasor	n statewide									
1976	No open Sprin	ng season statev	wide				C&R	closed	2,148	closed	99	0
1977	closed	closed	865	closed	52	0	5,194	closed	5,403	closed	1,341	0
1978	8,964	closed	2,452	closed	200	0	Catch-and-rel	ease fishing only	/ in the Fall s	season statewic	le	
1979	3,440	closed	365	closed	closed	0	closed	closed	1,813	closed	49	0
1980	closed	closed	1,050	closed	51	0	2,172	closed	5,380	closed	450	0
1981	1,982	closed	2,622	closed	52	0	C&R	closed	7,732	closed	573	0
1982	543	closed	2,037	closed	38	2	7,005	closed	8,335	closed	2,376	14
1983	5,334	closed	4,558	closed	516	0	5,312	closed	14,619	closed	1,923	0
1984	1,952	closed	4,146	closed	147	0	10,120	closed	5,329	closed	2,899	0
1985 <sup>b</sup>	11,662	closed	1,007	closed	973	0	6,940	closed	10,573	closed	3,209	0
1986°	3,189	closed	7,417	closed	985	108	8,200	closed	15,969	closed	3,950	75

<sup>a</sup> Harvest was estimated statewide in the Spring 1974 season.

<sup>b</sup> Fall 1985 harvest estimate in the Snake drainage includes 573 fish caught in the Boise River.

<sup>c</sup> Snake drainage 1986 harvest estimates include 193 fish caught in the Spring and 249 fish caught in the Fall in the Boise River.

Table 5. Steelhead sport harvest, effort, and released fish by Calendar Year (CY) and season in the Clearwater River drainage from 1954 to 1986. Harvest estimates were made for the calendar year prior to 1960. Beginning in the Fall 1986 season, anglers could keep only adipose clipped steelhead in the Clearwater River drainage. Drainage specific effort estimates were not made in all years or all seasons. Released fish were not classified as clipped or unclipped until CY 1986. Not available = "—". C&R = only catch-and-release fishing was allowed.

	S	pring Seaso	on		Fall Seaso	n		CY Total	_	
Calendar Year	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Effort unit
1954										
1955										
1956							285			
1957							870			
1958							3,489			
1959							10,858			
1960	3,348	3,890		5,621	6,165		8,967	10,055		Number of anglers
1961	2,020	2,628		4,828	4,783		6,848	7,411		Number of anglers
1962	1,505	2,049		5,040	7,020		6,544	9,069		Number of anglers
1963	2,123	4,522		4,892	7,432		7,015	11,954		Number of anglers
1964	1,424	507		2,671	1,064		4,095	1,571		Successful anglers
1965	1,191	584		5,641	2,085		6,832	2,669		Successful anglers
1966	1,093	477		4,799	1,572		5,892	2,049		Successful anglers
1967	1,924			6,641			8,565	2,496		Successful anglers
1968	2,250			6,924			9,174	2,488		Successful anglers
1969	1,542			3,519			5,061			
1970	1,752			4,501			6,253			
1971	808			3,422			4,230			
1972	209			5,054			5,263			
1973	1,671			2,644			4,315			
1974	Harvest esti	mated statev	vide	436			436			
1975	No open Sp	ring or Fall se	eason				0	0	0	no open season
1976	No open Sp	ring season.		C&R		1,996	0		1,996	

	S	Spring Seaso	n		Fall Seaso	า		CY Total		
Calendar	Released		Released	Released				Released	-	
Year	Harvest	Effort	fish	Harvest	Effort	fish	Harvest	Effort	fish	Effort unit
1977	No open Sp	ring season		5,194	46,025		5,194	46,025		Angler days
1978	8,964			C&R			8,964			
1979	3,440	31,443		No open Fa	all season		3,440	31,443		Angler days
1980	No open Sp	ring season		2,172	35,830		2,172	35,830		Angler days
1981	1,982	23,666		C&R			1,982	23,666		Angler days
1982	543			7,005			7,548	54,785		Angler days
1983	5,334	34,223	2,930	5,312	38,455	3,497	10,646	72,678	6,427	Angler days
1984	1,952	10,649	854	10,120	54,498	10,895	12,072	65,147	11,749	Angler days
1985	11,662	44,033	6,112	6,940	38,723	8,441	18,602	82,756	14,553	Angler days
1986 <sup>a</sup>	3,189	25,780	1,974	8,200	50,900	12,010	11,389	76,680	13,984	Angler days

<sup>a</sup> In the Spring season anglers released 1,321 clipped and 653 unclipped steelhead. In the Fall season anglers released 3,451 clipped and 8,559 unclipped steelhead and all harvested fish were adipose clipped.

Table 6. Steelhead sport harvest and effort estimates by Calendar Year (CY) and season in the Middle Fork (MF) and South Fork (SF) Salmon River drainages from 1959 to 1973. Harvest estimates were made for the calendar year prior to 1960. Harvest estimates from the MF and SF Salmon rivers from 1954 to 1958 are not available. Drainage specific effort estimates were not made in all years or all seasons. The last open steelhead season in these drainages was 1973. Not available = "--".

Calandar		Spring	Season		Fall Season				CY Total				
Year (CY)	MF Harvest	MF Effort	SF Harvest	SF Effort	MF Harvest	MF Effort	SF Harvest	SF Effort	MF Harvest	MF Effort	SF Harvest	SF Effort	Effort unit
1959									1,142		2,520		
1960	597	884	1,065	1,571	893	808	667	1,243	1,490	1,692	1,731	2,814	Number of anglers
1961	545	862	899	1,514	786	834	497	767	1,331	1,696	1,396	2,281	Number of anglers
1962	325	810	325	953	376	865	188	1,009	701	1,675	513	1,962	Number of anglers
1963	989	1,466	1,319	1,722	659	888	214	780	1,648	2,354	1,532	2,502	Number of anglers
1964	503	236	702	271	100	59	20	6	603	295	722	277	Successful anglers
1965	188	118	75	52	80	50	44	14	268	168	119	66	Successful anglers
1966	212	104	235	111	89	49	7	6	301	153	242	117	Successful anglers
1967	440		436		52		59		492	199	495	248	Successful anglers
1968	505		205		103		24		608	240	229	972	Successful anglers
1969	258		35		63		9		321		44		
1970	234		156		65		0		299		156		
1971	91		5		16		5		107		10		
1972	13		31		22		4		35		35		
1973	31		57		5		10		36		67		

Table 7. Steelhead sport harvest and effort estimates by Calendar Year (CY) and season in Salmon River drainage, excluding the Middle Fork and South Fork Salmon rivers, from 1954 to 1986. Harvest estimates were made for the calendar year prior to 1960. Beginning in the Fall 1986 season, anglers could keep only adipose clipped steelhead in the Salmon River drainage. Drainage specific effort estimates were not made in all years or all seasons. Released fish estimates were not made before 1976 and were not classified as clipped or unclipped until CY 1986. Not available = "—". C&R = only catch-and-release fishing was allowed.

	s	pring Sease	on	Fall Season				CY Total		
Calendar Year (CY)	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Effort unit
1954							3,391			
1955							4,596			
1956							2,382			
1957							4,766			
1958							5,277			
1959							10,009			
1960	4,250	3,791		5,858	4,319		10,111	8,110		Number of anglers
1961	4,863	4,923		5,647	4,586		10,510	9,509		Number of anglers
1962	2,820	4,814		5,676	7,094		8,495	11,908		Number of anglers
1963	8,102	9,193		5,995	6,456		14,097	15,649		Number of anglers
1964	4,984	1,974		4,618	1,827		9,602	3,801		Successful anglers
1965	2,928	1,360		5,542	2,050		8,470	3,410		Successful anglers
1966	3,517	1,586		5,639	2,058		9,156	3,644		Successful anglers
1967	5,899			5,029			10,928	3,617		Successful anglers
1968	4,533			5,912			10,445	3,141		Successful anglers
1969	3,401			5,629			9,030			
1970	4,681			5,601			10,282			
1971	2,452			7,822			10,274			
1972	1,420			4,296			5,716			
1973	1,835			2,550			4,385			
1974	Harvest esti	mated statev	vide	252			252			

	S	Spring Seaso	n		Fall Seasor	n	CY Total			
Calendar			Released			Released			Released	_
Year (CY)	Harvest	Effort	Fish	Harvest	Effort	Fish	Harvest	Effort	Fish	Effort unit
1975	No open Sp	ring or Fall se	ason				0	0	0	
1976	No open Sp	ring season		2,148			2,148			
1977	865			5,403			5,403	43,172		Angler days
1978	2,452			C&R			2,452			
1979	365			1,813			365	17,273		Angler days
1980	1,050			5,380			5,380	38,030		Angler days
1981	2,622			7,732			2,622	66,430		Angler days
1982	2,037			8,335			10,372	64,317		Angler days
1983	4,558	33,306	7,241	14,619	62,555	20,517	19,177	95,861	27,758	Angler days
1984	4,146	18,784	8,076	5,329	71,409	12,010	9,475	90,193	20,086	Angler days
1985	1,007	12,785	2,357	10,573	109,231	13,408	11,580	122,016	15,765	Angler days
1986 <sup>a</sup>	7,417	42,903	8,997	15,969	84,536	17,583	23,386	127,439	26,580	Angler days

<sup>a</sup> In the Spring season anglers released 4,081 clipped and 4,916 unclipped steelhead. In the Fall season anglers released 3,749 clipped and 13,834 unclipped steelhead and all harvested fish were adipose clipped.

Table 8. Steelhead sport harvest and effort estimates by Calendar Year (CY) and season in Snake River drainage, excluding the Salmon and Clearwater River drainages, from 1954 to 1986. Harvest estimates were made for the calendar year prior to 1960. Drainage specific effort estimates were not made in all years or all seasons. Released fish estimates were not made before 1976. The Fall 1985 season and 1986 estimates include the Boise River. Not available = "—". C&R = only catch-and-release fishing was allowed.

	s	pring Seas	on	Fall Season				CY Total		
Calendar			Released			Released		<b>E</b> (( <b>a a</b> )	Released	
rear	Harvest	Effort	tisn	Harvest	Effort	tisn	Harvest	Effort	tisn	Effort unit
1954							1,273			
1955							1,642			
1956							2,224			
1957							692			
1958							2,803			
1959							6,000			
1960	3,180	3,280		4,341	2,899		7,520	6,179		Number of anglers
1961	2,171	1,969		2,889	2,611		5,060	4,580		Number of anglers
1962	905	1,717		2,374	2,547		3,279	4,264		Number of anglers
1963	1,054	1,975		1,745	2,686		2,799	4,661		Number of anglers
1964	702	277		1,572	663		2,274	940		Successful anglers
1965	104	57		1,644	727		1,748	784		Successful anglers
1966	624	301		2,752	948		3,376	1,249		Successful anglers
1967	1,210			2,362			3,572	1,346		Successful anglers
1968	1,082			2,913			3,995	1,147		Successful anglers
1969	360			2,184			2,544			
1970	704			2,877			3,581			
1971	118			2,835			2,953			
1972	201			2,252			2,453			
1973	707			875			1,582			
1974	Harvest estil	mated state	vide	38			38			
1975	No open Spi	ring or Fall s	eason				0	0	0	

		Spring Seas	on		Fall Seaso	1		CY Total		
Calendar Year	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Harvest	Effort	Released fish	Effort unit
1976	No open S	oring season		99			99			
1977	52			1,341			1,393	11,058		Angler days
1978	200			C&R			200			
1979	No open S	oring season		49	1,555		49	1,555		Angler days
1980	51			450			501	5,630		Angler days
1981	52			573			625	8,414		Angler days
1982	38			2,376			2,414	15,182		Angler days
1983	516	3,805	1,254	1,923	13,547	809	2,439	17,352	2,063	Angler days
1984	147	1,478	837	2,899	15,507	4,394	3,046	16,985	5,231	Angler days
1985 <sup>a</sup>	973	5,154	711	3,209	28,370	5,024	4,182	33,524	5,735	Angler days
1986 <sup>b</sup>	985	7,491	499	3,950	26,833	8,529	4,935	34,324	9,028	Angler days

<sup>a</sup> The Fall season estimates include 573 fish harvested; 6,273 Angler days; and 222 released fish from the Boise River.

<sup>b</sup> The Spring season estimates include 193 fish harvested; 1,499 Angler days; and 74 released fish from the Boise River. The Fall season estimates include 249 fish harvested; 3,685 Angler days; and 35 released fish from the Boise River

Spawn	Clearwater	River drainage	Salmon River drainage			
Year	Harvest	Released fish	Harvest	Released fish		
1961	7,641		10,721			
1962	6,333		8,467			
1963	7,163		13,778			
1964	6,316		10,979			
1965	3,862		7,546			
1966	6,734		9,059			
1967	6,723		11,538			
1968	8,891		9,562			
1969	8,466		9,313			
1970	5,271		10,310			
1971	5,309		8,053			
1972	3,631		9,242			
1973	6,725		6,131			
1974 <sup>a</sup>	2,644		2,550			
1975	436		252			
1976	0	0	0	0		
1977	0	1,996	3,013			
1978	14,158		7,855			
1979	3,440		365			
1980	0	0	2,863			
1981	4,154		8,002			
1982	543		9,769			
1983	12,339		12,893			
1984	7,264	4,351	18,765	28,593		
1985	21,782	17,007	6,336	14,367		
1986	10,129	10,415	17,990	22,405		

Table 9.Steelhead sport harvest and released fish estimates by Spawn Year in the<br/>Clearwater and Salmon River drainages. The Salmon drainage excludes the<br/>Middle Fork and South Fork Salmon drainages.

<sup>a</sup> Harvest is from the Fall 1973 season only. The Spring 1974 season harvest was estimated statewide.

Table 10.Steelhead sport harvest and released fish estimates in the Snake River drainage<br/>and harvest in the Middle Fork (MF) Salmon River and South Fork (SF) Salmon<br/>River drainages by Spawn Year. The Snake drainage excludes the Salmon and<br/>Clearwater drainages.

Spawn	Snake Ri	ver drainage	MF Salmon	SF Salmon
Year	Harvest	Released fish	Harvest	Harvest
1961	6,512		1,438	1,566
1962	3,794		1,111	822
1963	3,428		1,365	1,507
1964	2,447		1,162	916
1965	1,676		288	95
1966	2,268		292	279
1967	3,962		529	443
1968	3,444		557	264
1969	3,273		361	59
1970	2,888		297	165
1971	2,995		156	5
1972	3,036		29	36
1973	2,959		53	61
1974 <sup>a</sup>	875		5	10
1975	38		closed	closed
1976	0		closed	closed
1977	151		closed	closed
1978	1,541		closed	closed
1979	0		closed	closed
1980	100		closed	closed
1981	502		closed	closed
1982	611		closed	closed
1983	2,892		closed	closed
1984	2,070	1,646	closed	closed
1985	3,872	5,105	closed	closed
1986 <sup>b</sup>	4,194	5,523	closed	closed

<sup>a</sup> Harvest is from the Fall 1973 season only. The Spring 1974 season harvest was estimated statewide.

<sup>b</sup> Estimates include 766 fish harvested and 296 fish released in the Boise River.

Appendix A. Steelhead harvest, effort, and released fish estimates by river zones and drainages in the spring season from 1960 to 1986. The Salmon drainage includes rivers in the MF Salmon and SF Salmon drainages. The harvest in the 1974 spring season was estimated statewide, hence harvest estimates for each drainage are not available. DAY = angler days; NP = number of steelhead permits sold; NUA = number of anglers; SUA = number of successful anglers (caught a steelhead).

Voar	Pivor	Zono	Harvost	Effort	Released	Effort	Downstroom boundary	Unstream boundary
Cleary	vater River drainage	20116	Haivest	Enon	11511	Unit	Downstream boundary	
1960	Clearwater River	2	1,437	1,651		NUA	Mouth	Lewiston Dam
1960	Clearwater drainage	3	1,911	2,239		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1961	Clearwater River	3	641	946		NUA	Mouth	Lewiston Dam
1961	Clearwater drainage	4	1,379	1,682		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1962	Clearwater River	2	428	477		NUA	Mouth	Lewiston Dam
1962	Clearwater drainage	3	1,077	1,572		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1963	Clearwater River	2	362	1,338		NUA	Mouth	Lewiston Dam
1963	Clearwater drainage	3	1,761	3,184		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1964	Clearwater River	2	1,424	507		SUA	Mouth	Entire drainage
1965	Clearwater River	1	946	433		SUA	Mouth	Entire drainage except NF Clearwater and Selway River
1965	NF Clearwater River	2	35	29		SUA	Mouth	Entire drainage
1965	Selway River	3	210	122		SUA	Mouth	Entire drainage
1966	Clearwater River	2	903	386		SUA	Mouth	Entire drainage except NF Clearwater and Selway River
1966	NF Clearwater River	3	51	26		SUA	Mouth	Entire drainage
1966	Selway River	4	139	65		SUA	Mouth	Entire drainage
1967	Clearwater River	2	1,657				Mouth	Confluence MF and SF Clearwater rivers
1967	NF Clearwater River	3	133				Mouth	Entire drainage
1967	MF Clearwater River	4	44				Mouth	Entire drainage
1967	Lochsa River	5	9				Mouth	Entire drainage
1967	Selway River	6	81				Mouth	Entire drainage
1968	Clearwater River	2	1,698				Mouth	Confluence MF and SF Clearwater rivers
1968	NF Clearwater River	3	79				Mouth	Entire drainage
1968	MF Clearwater River	4	87				Mouth	Entire drainage
1968	SF Clearwater River	5	8				Mouth	Entire drainage

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1968	Selway River	6	378				Mouth	Entire drainage
1969	Clearwater River	4	640				Mouth	NF Clearwater River
1969	Clearwater River	5	582				NF Clearwater River	Confluence SF and MF Clearwater rivers
1969	NF Clearwater River	6	71				Mouth	Entire drainage
1969	MF Clearwater River	7	187				Mouth	Confluence Lochsa and Selway rivers
1969	Selway River	9	62				Mouth	Entire drainage
1970	Clearwater River	1	829				Mouth	NF Clearwater River
1970	Clearwater River	2	272				NF Clearwater River	Confluence SF and MF Clearwater rivers
1970	NF Clearwater River	3	163				Mouth	Entire drainage
1970	MF Clearwater River	4	345				Mouth	Confluence Lochsa and Selway rivers
1970	Other tributaries	5	143				Unknown	Unknown
1971	Clearwater River	2	302				Mouth	NF Clearwater River
1971	Clearwater River	3	204				NF Clearwater River	Confluence SF and MF Clearwater rivers
1971	NF Clearwater River	4	44				Mouth	Entire drainage
1971	MF Clearwater River	5	70				Mouth	Confluence Lochsa and Selway rivers
1971	Other tributaries	6	188				Unknown	Unknown
1972	Clearwater River	1	137				Mouth	NF Clearwater River
1972	Clearwater River	2	28				NF Clearwater River	Confluence SF and MF Clearwater rivers
1972	MF Clearwater River	4	44				Mouth	Confluence Lochsa and Selway rivers
1973	Clearwater River	4	1,213				Mouth	NF Clearwater River
1973	Clearwater River	5	333				NF Clearwater River	Confluence SF and MF Clearwater rivers
1973	Clearwater River	6	58				Mouth	Confluence SF and MF Clearwater rivers
1973	NF Clearwater River	7	10				Mouth	Entire drainage
1973	MF Clearwater River	8	47				Mouth	Confluence Lochsa and Selway rivers
1973	Selway River	9	5				Mouth	Entire drainage
1973	Lochsa River	10	5				Mouth	Entire drainage
1978	Clearwater River	5	8,964				Mouth	Orofino Bridge including NF Clearwater River
1979	Clearwater River	1	2,397				US Highway 12 Memorial Bridge	NF Clearwater River
1979	Clearwater River	2	306				NF Clearwater River	Orofino Bridge
1979	NF Clearwater River	3	579				Mouth	Dworshak Dam
1979	Clearwater drainage	4	158				Unknown	Unknown
1979	Clearwater drainage <sup>a</sup>	98	0	31,443		DAY	US Highway 12 Memorial Bridge	Orofino Bridge including NF Clearwater River
1981	Clearwater River	1	1,634				Mouth	NF Clearwater River
1981	Clearwater River	2	120				NF Clearwater River	Orofino Bridge
1981	NF Clearwater River	3	165				Mouth	Dworshak Dam

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1981	Unknown	4	63				Unknown	Unknown
1981	Clearwater drainage <sup>a</sup>	98	0	23,666		DAY	Mouth	all waters open
1982	Clearwater River	1	355				Mouth	NF Clearwater River
1982	Clearwater River	2	32				NF Clearwater River	Orofino Bridge
1982	NF Clearwater River	3	144				Mouth	Dworshak Dam
1982	Unknown	4	12				Unknown	Unknown
1983	Clearwater River	1	3,300		1,602		Mouth	NF Clearwater River
1983	NF Clearwater River	3	885		221		Mouth	Dworshak Dam
1983	Clearwater River	5	1,149		1,107		NF Clearwater River	Orofino Bridge
1983	Clearwater drainage <sup>a</sup>	98	0	34,223		DAY	Mouth	all waters open
1984	Clearwater River	1	1,575	7,939	665	DAY	Mouth	NF Clearwater River
1984	Clearwater River	2	270	2,135	172	DAY	NF Clearwater River	SF Clearwater River
1984	NF Clearwater River	3	107	575	17	DAY	Mouth	Dworshak Dam
1985	Clearwater River	1	8,948	31,707	5,251	DAY	Mouth	NF Clearwater River
1985	Clearwater River	2	495	3,502	465	DAY	NF Clearwater River	SF Clearwater River
1985	NF Clearwater River	3	1,910	6,595	339	DAY	Mouth	Dworshak Dam
1985	SF Clearwater River	4	284	2,145	44	DAY	Mouth	Mount Idaho Bridge
1985	MF Clearwater River	5	25	84	13	DAY	Mouth	Clear Creek
1986	Clearwater River	1	2,123	16,705	1,426	DAY	Mouth	Orofino Bridge
1986	Clearwater River	2	131	1,843	21	DAY	Orofino Bridge	SF Clearwater River
1986	NF Clearwater River	3	705	4,351	347	DAY	Mouth	Dworshak Dam
1986	MF Clearwater River	4	0	210	0	DAY	Mouth	Clear Creek
1986	SF Clearwater River	5	230	2,671	180	DAY	Mouth	Confluence American and Red rivers
Salmo	n River drainage							
1960	Salmon River	9	3,041	2,318		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1960	Salmon River	10	1,209	1,473		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1960	SF Salmon River	11	742	1,041		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1960	EF SF Salmon River	12	290	373		NUA	Mouth	Entire drainage
1960	Secesh River	13	33	157		NUA	Mouth	Entire drainage
1960	MF Salmon River	14	597	884		NUA	Mouth	Entire drainage
1961	Salmon River	9	3,691	3,241		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1961	Salmon River	10	1,172	1,682		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1961	SF Salmon River	11	770	1,178		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1961	EF SF Salmon River	12	129	336		NUA	Mouth	Entire drainage
1961	MF Salmon River	13	545	862		NUA	Mouth	Entire drainage

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1962	Salmon River	10	2,392	3,455		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1962	Salmon River	11	428	1,359		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1962	SF Salmon River	12	325	953		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1962	MF Salmon River	14	325	810		NUA	Mouth	Entire drainage
1963	Salmon River	10	6,735	6,624		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1963	Salmon River	11	1,367	2,569		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1963	SF Salmon River	12	1,021	1,296		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1963	EF SF Salmon River	13	198	319		NUA	Mouth	Entire drainage
1963	Secesh River	14	100	107		NUA	Mouth	Entire drainage
1963	MF Salmon River	15	989	1,466		NUA	Mouth	Entire drainage
1964	Salmon River	9	4,984	1,974		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1964	SF Salmon River	10	702	271		SUA	Mouth	Entire drainage
1964	MF Salmon River	11	503	236		SUA	Mouth	Entire drainage
1965	Salmon River	1	2,928	1,360		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1965	SF Salmon River	2	75	52		SUA	Mouth	Entire drainage
1965	MF Salmon River	3	188	118		SUA	Mouth	Entire drainage
1966	Salmon River	3	3,517	1,586		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1966	SF Salmon River	4	235	111		SUA	Mouth	Entire drainage
1966	MF Salmon River	5	212	104		SUA	Mouth	Entire drainage
1967	Salmon River	10	5,679				Mouth	Entire drainage except SF, MF, NF, EF Salmon, Little Salmon, and Lemhi rivers
1967	Little Salmon River	11	15				Mouth	Entire drainage
1967	SF Salmon River	12	436	248		SUA	Mouth	Entire drainage
1967	MF Salmon River	13	428				Mouth	Entire drainage
1967	Big Creek	14	12				Mouth	Entire drainage
1967	NF Salmon River	15	81				Mouth	Entire drainage
1967	Lemhi River	16	88				Mouth	Entire drainage
1967	EF Salmon River	17	36				Mouth	Entire drainage
1968	Salmon River	10	4,485				Mouth	Entire drainage except SF, MF, NF, EF Salmon, Little Salmon, and Lemhi rivers
1968	Little Salmon River	11	24				Mouth	Entire drainage
1968	SF Salmon River	12	205				Mouth	Entire drainage
1968	MF Salmon River	13	458				Mouth	Entire drainage
1968	Big Creek	14	47				Mouth	Entire drainage
1968	NF Salmon River	15	24				Mouth	Entire drainage
1969	Salmon River	21	470				Mouth	Whitebird Creek

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1969	Salmon River	22	843				Whitebird Creek	Little Salmon River
1969	Salmon River	23	542				Little Salmon River	SF Salmon River
1969	Salmon River	24	879				SF Salmon River	MF Salmon River
1969	Salmon River	25	397				MF Salmon River	Lemhi River
1969	Salmon River	26	85				Lemhi River	Pahsimeroi River
1969	Salmon River	27	48				Pahsimeroi River	EF Salmon River
1969	Salmon River	28	48				EF Salmon River	Headwaters
1969	Little Salmon River	30	36				Mouth	Headwaters
1969	SF Salmon River	31	35				Unknown	Unknown
1969	MF Salmon River	32	213				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1969	Big Creek	33	36				Mouth	Smith Creek
1969	NF Salmon River	36	44				Mouth	Headwaters
1969	Pahsimeroi River	37	9				Mouth	Headwaters
1969	Loon Creek	39	9				Mouth	Unknown
1970	Salmon River	21	605				Mouth	Whitebird Creek
1970	Salmon River	22	629				Whitebird Creek	Little Salmon River
1970	Salmon River	23	821				Little Salmon River	SF Salmon River
1970	Salmon River	24	1,154				SF Salmon River	MF Salmon River
1970	Salmon River	25	1,015				MF Salmon River	Lemhi River
1970	Salmon River	26	158				Lemhi River	Pahsimeroi River
1970	Salmon River	27	113				Pahsimeroi River	EF Salmon River
1970	Salmon River	28	27				EF Salmon River	Hell Roaring Creek
1970	SF Salmon River	29	156				Unknown	Unknown
1970	MF Salmon River	30	234				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1970	Other tributaries	31	159				Unknown	Unknown
1971	Salmon River	20	237				Mouth	Whitebird Creek
1971	Salmon River	21	307				Whitebird Creek	Little Salmon River
1971	Salmon River	22	539				Little Salmon River	SF Salmon River
1971	Salmon River	23	647				SF Salmon River	MF Salmon River
1971	Salmon River	24	549				MF Salmon River	Lemhi River
1971	Salmon River	25	49				Lemhi River	Pahsimeroi River
1971	Salmon River	26	11				Pahsimeroi River	EF Salmon River
1971	Salmon River	27	22				EF Salmon River	Hell Roaring Creek
1971	SF Salmon River	28	5				Unknown	Unknown

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1971	MF Salmon River	29	91				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1971	Other tributaries	30	91				Unknown	Unknown
1972	Salmon River	21	125				Mouth	Whitebird Creek
1972	Salmon River	22	281				Whitebird Creek	Little Salmon River
1972	Salmon River	23	301				Little Salmon River	SF Salmon River
1972	Salmon River	24	249				SF Salmon River	MF Salmon River
1972	Salmon River	25	315				MF Salmon River	Lemhi River
1972	Salmon River	26	69				Lemhi River	Pahsimeroi River
1972	Salmon River	27	27				Pahsimeroi River	EF Salmon River
1972	Salmon River	28	4				EF Salmon River	Hell Roaring Creek
1972	SF Salmon River	29	31				Unknown	Unknown
1972	MF Salmon River	30	13				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1972	Other tributaries	31	49				Unknown	Unknown
1973	Salmon River	20	240				Mouth	Whitebird Creek
1973	Salmon River	21	264				Whitebird Creek	Little Salmon River
1973	Salmon River	22	220				Little Salmon River	SF Salmon River
1973	Salmon River	23	510				SF Salmon River	MF Salmon River
1973	Salmon River	24	445				MF Salmon River	Lemhi River
1973	Salmon River	25	26				Lemhi River	Pahsimeroi River
1973	Salmon River	26	10				Pahsimeroi River	EF Salmon River
1973	Salmon River	27	21				EF Salmon River	Hell Roaring Creek
1973	Salmon River	28	83				Unknown	Unknown
1973	SF Salmon River	29	57				Unknown	Unknown
1973	MF Salmon River	30	5				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1973	Big Creek	31	26				Mouth	Entire drainage
1973	NF Salmon River	32	16				Mouth	Entire drainage
1977	Salmon River	11	65				Mouth	Whitebird Creek
1977	Salmon River	12	83				Whitebird Creek	Little Salmon River
1977	Salmon River	13	63				Little Salmon River	SF Salmon River
1977	Salmon River	14	245				SF Salmon River	MF Salmon River
1977	Salmon River	15	301				MF Salmon River	Lemhi River
1977	Salmon River	16	68				Lemhi River	Pahsimeroi River
1977	Salmon River	17	19				Pahsimeroi River	EF Salmon River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1977	Salmon River	19	21				Mouth	Headwaters
1978	Salmon River	12	278				Mouth	Whitebird Creek
1978	Salmon River	13	733				Whitebird Creek	Little Salmon River
1978	Salmon River	14	257				Little Salmon River	SF Salmon River
1978	Salmon River	15	140				SF Salmon River	MF Salmon River
1978	Salmon River	16	913				MF Salmon River	Lemhi River
1978	Salmon River	17	79				Lemhi River	Pahsimeroi River
1978	Salmon River	18	12				Pahsimeroi River	EF Salmon River
1978	Salmon River	19	40				EF Salmon River	Headwaters
1979	Salmon River	1	191				Cove Creek Bridge	Lemhi River
1979	Salmon River	2	154				Lemhi River	400 yards downstream of Pahsimeroi River
1979	Salmon River	10	20				Cove Creek Bridge	400 yards downstream of Pahsimeroi River
1980	Salmon River	1	49				Mouth	Whitebird Creek
1980	Salmon River	2	47				Whitebird Creek	Little Salmon River
1980	Salmon River	3	148				Little Salmon River	SF Salmon River
1980	Salmon River	4	256				SF Salmon River	MF Salmon River
1980	Salmon River	5	430				MF Salmon River	Lemhi River
1980	Salmon River	6	92				Lemhi River	400 yards downstream of Pahsimeroi River
1980	Unknown	7	28				Mouth	EF Salmon River
1981	Salmon River	1	109				Mouth	Whitebird Creek
1981	Salmon River	2	94				Whitebird Creek	Little Salmon River
1981	Salmon River	3	421				Little Salmon River	SF Salmon River (Mackay Bar Bridge)
1981	Salmon River	4	447				SF Salmon River (Mackay Bar Bridge)	MF Salmon River
1981	Salmon River	5	868				MF Salmon River	Lemhi River
1981	Salmon River	6	651				Lemhi River	400 yards downstream of Pahsimeroi River
1981	Salmon River	7	25				Pahsimeroi River	EF Salmon River
1981	Unknown	8	7				Unknown	Unknown
1982	Salmon River	1	66				Mouth	Whitebird Creek
1982	Salmon River	2	84				Whitebird Creek	Little Salmon River
1982	Salmon River	3	204				Little Salmon River	SF Salmon River (Mackay Bar Bridge)
1982	Salmon River	4	115				SF Salmon River (Mackay Bar Bridge)	MF Salmon River
1982	Salmon River	5	781				MF Salmon River	Lemhi River
1982	Salmon River	6	513				Lemhi River	400 yards downstream of Pahsimeroi River
1982	Salmon River	7	36				Pahsimeroi River	EF Salmon River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1982	Unknown	8	238				Unknown	Unknown
1983	Salmon River	1	106		53		Mouth	Whitebird Creek
1983	Salmon River	2	169		179		Whitebird Creek	Little Salmon River
1983	Salmon River	3	169		611		Little Salmon River	SF Salmon River
1983	Salmon River	4	538		1,191		SF Salmon River	MF Salmon River
1983	Salmon River	5	2,235		3,742		MF Salmon River	Lemhi River
1983	Salmon River	6	1,138		1,433		Lemhi River	Pahsimeroi River
1983	Salmon River	7	150		32		Pahsimeroi River	EF Salmon River
1983	Salmon River	8	53				EF Salmon River	Basin Creek
1983	Salmon River drainage <sup>a</sup>	97	0	33,306		DAY	Mouth	all waters open
1984	Salmon River	1	123	1,346	238	DAY	Mouth	Whitebird Creek
1984	Salmon River	2	123	1,076	41	DAY	Whitebird Creek	Little Salmon River
1984	Salmon River	3	24	591	33	DAY	Little Salmon River	SF Salmon River
1984	Salmon River	4	378	1,379	1,001	DAY	SF Salmon River	MF Salmon River
1984	Salmon River	5	846	6,346	2,553	DAY	MF Salmon River	Lemhi River
1984	Salmon River	6	1,642	4,655	3,563	DAY	Lemhi River	Pahsimeroi River
1984	Salmon River	7	402	1,897	467	DAY	Pahsimeroi River	EF Salmon River
1984	Salmon River	8	608	1,494	180	DAY	EF Salmon River	Basin Creek
1985	Salmon River	2	296	1,611	680	DAY	Mouth	Whitebird Creek
1985	Salmon River	3	190	2,389	349	DAY	Whitebird Creek	Little Salmon River
1985	Salmon River	4	56	643	97	DAY	Little Salmon River	SF Salmon River
1985	Salmon River	5	42	769	151	DAY	SF Salmon River	MF Salmon River
1985	Salmon River	6	256	3,605	643	DAY	MF Salmon River	Lemhi River
1985	Salmon River	7	155	3,067	420	DAY	Lemhi River	Pahsimeroi River
1985	Salmon River	8	12	523	4	DAY	Pahsimeroi River	EF Salmon River
1985	Salmon River	9	0	178	13	DAY	EF Salmon River	Basin Creek
1986	Salmon River	4	154	1,995		DAY	Mouth	Whitebird Creek
1986	Salmon River	5	226	2,480		DAY	Whitebird Creek	Little Salmon River
1986	Salmon River	6	95	1,617		DAY	Little Salmon River	Vinegar Creek
1986	Salmon River	7	7	268		DAY	Vinegar Creek	SF Salmon River
1986	Salmon River	8	293	2,177		DAY	SF Salmon River	MF Salmon River
1986	Salmon River	9	1,870	10,948		DAY	MF Salmon River	NF Salmon River
1986	Salmon River	10	421	4,276		DAY	NF Salmon River	Lemhi River
1986	Salmon River	11	2,282	9,237		DAY	Lemhi River	Pahsimeroi River
1986	Salmon River	12	389	2,689		DAY	Pahsimeroi River	EF Salmon River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1986	Salmon River	13	1,587	6,719		DAY	EF Salmon River	Redfish Lake Creek
1986	Little Salmon River	14	93	497		DAY	Mouth	Smokey Boulder Road Bridge
Snake	River drainage							
1960	Snake River	4	1,648	1,414		NUA	Idaho/Washington border	Oxbow Dam
1960	Snake River	5	387	609		NUA	Brownlee Dam	Entire Snake drainage upstream of Brownlee Dam
1960	Weiser River	6	1,145	1,257		NUA	Mouth	Entire Weiser River drainage
1961	Snake River	4	1,781	968		NUA	Idaho/Washington border	Oxbow Dam
1961	Snake River	5	354	673		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam
1961	Weiser River	6	36	328		NUA	Mouth	Entire Weiser River drainage
1962	Snake River	2	564	906		NUA	Idaho/Washington border	Oxbow Dam
1962	Snake River	3	171	477		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam
1962	Weiser River	9	170	334		NUA	Mouth	Entire Weiser River drainage
1963	Snake River	2	889	1,444		NUA	Idaho/Washington border	Oxbow Dam
1963	Snake River	3	165	531		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam
1964	Snake River	2	702	277		SUA	Idaho/Washington border	Entire drainage
1965	Snake River	1	104	57		SUA	Idaho/Washington border	Entire drainage
1966	Snake River	2	624	301		SUA	Idaho/Washington border	Entire drainage
1967	Snake River	2	1,210				Idaho/Washington border	Entire drainage
1968	Snake River	2	1,082				Idaho/Washington border	Entire drainage
1969	Snake River	3	236				Clearwater River	Salmon River
1969	Snake River	4	124				Salmon River	Hells Canyon Dam
1970	Snake River	3	284				Clearwater River	Salmon River
1970	Snake River	4	420				Salmon River	Hells Canyon Dam
1971	Snake River	3	64				Clearwater River	Salmon River
1971	Snake River	4	54				Salmon River	Hells Canyon Dam
1972	Snake River	3	103				Clearwater River	Salmon River
1972	Snake River	4	98				Salmon River	Hells Canyon Dam
1973	Snake River	3	525				Clearwater River	Salmon River
1973	Snake River	4	135				Salmon River	Hells Canyon Dam
1973	Snake River	5	47				Clearwater River	Hells Canyon Dam
1977	Snake River	3	46				Clearwater River	Salmon River
1977	Snake River	4	6				Salmon River	Hells Canyon Dam
1978	Snake River	3	200				Clearwater River	Hells Canyon Dam
1980	Snake River	2	51				Dug Bar	Hells Canyon Dam
1981	Snake River	2	52				Dug Bar	Hells Canyon Dam

N	Disco	7		<b>E</b> (( ) = 1)	Released	Effort	Deventer and have deve	Use a second second second	
1082	Snake River	Zone	23	Effort	tisn	Unit	Three Mile Inn	Salmon River (closed from Anatone Gauge Station	
1902	Shake River	1	23					to Lime Point)	
1982	Snake River	2	15				Salmon River	Hells Canyon Dam (closed from Salmon River to	
								Dug Bar)	
1983	Snake River	1	253		1,054		Idaho/Washington border	Salmon River	
1983	Snake River	2	263		200		Salmon River	Hells Canyon Dam	
1983	Snake River drainage <sup>a</sup>	96	0	3,805		DAY	Mouth	Hells Canyon Dam	
1984	Snake River	1	106	1,355	829	DAY	Idaho/Washington border	Salmon River	
1984	Snake River	2	41	123	8	DAY	Salmon River	Hells Canyon Dam	
1985	Snake River	3	780	3,753	474	DAY	Idaho/Washington border	Salmon River	
1985	Snake River	4	193	1,401	237	DAY	Salmon River	Hells Canyon Dam	
1986	Snake River	3	536	4,945		DAY	Idaho/Washington border	Salmon River	
1986	Snake River	4	256	1,047		DAY	Salmon River	Hells Canyon Dam	
1986	Boise River	1	193	1,499		DAY	Mouth	Barber Dam	
Harvest and effort estimates from Unknown rivers									
1974	statewide	1	2,284				Spring 1974 season harvest was e	stimated statewide for all waters open	
1961	Unknown	15	378				statewide	statewide	
1963	Unknown	16	299				statewide	statewide	
1964	Unknown	12	357				statewide	statewide	
1965	Unknown	4	778				statewide	statewide	
1966	Unknown	7	817				statewide	statewide	
1967	Unknown	18	179				Unknown	Unknown	
1968	Unknown	18	63				Unknown	Unknown	
1969	Unknown	40	53				Unknown	Unknown	
1970	Unknown	32	59				Unknown	Unknown	
1971	Unknown	31	11				Unknown	Unknown	
1972	Unknown	32	17				Unknown	Unknown	
1973	Unknown	100	42				Unknown	Unknown	
1982	Unknown	9	2				Unknown	Unknown	
1986	Unknown	15	108	165		DAY	Unknown	Unknown	

<sup>a</sup> Zone was used for effort estimate only.

Appendix B. Steelhead harvest, effort, and released fish estimates by river zones and drainages in the fall season from 1960 to 1986. The Salmon drainage includes rivers in the MF Salmon and SF Salmon drainages. DAY = angler days; NP = number of steelhead permits sold; NUA = number of anglers; SUA = number of successful anglers (caught a steelhead).

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
Clearv	vater River drainage							
1960	Clearwater River	2	1,901	2,307		NUA	Mouth	Lewiston Dam
1960	Clearwater drainage	3	3,720	3,858		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1961	Clearwater River	3	1,893	1,887		NUA	Mouth	Lewiston Dam
1961	Clearwater drainage	4	2,935	2,896		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1962	Clearwater River	2	906	2,356		NUA	Mouth	Lewiston Dam
1962	Clearwater drainage	3	4,134	4,664		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1963	Clearwater River	2	1,862	2,600		NUA	Mouth	Lewiston Dam
1963	Clearwater drainage	3	3,030	4,832		NUA	Lewiston Dam	Entire Clearwater drainage upstream of Lewiston Dam
1964	Clearwater River	2	2,671	1,064		SUA	Mouth	Entire drainage
1965	Clearwater River	1	5,462	1,978		SUA	Mouth	Entire drainage except NF Clearwater and Selway River
1965	NF Clearwater River	2	153	93		SUA	Mouth	Entire drainage
1965	Selway River	3	26	14		SUA	Mouth	Entire drainage
1966	Clearwater River	2	4,607	1,491		SUA	Mouth	Entire drainage except NF Clearwater and Selway River
1966	NF Clearwater River	3	192	81		SUA	Mouth	Entire drainage
1967	Clearwater River	2	6,108				Mouth	Confluence MF and SF Clearwater rivers
1967	NF Clearwater River	3	444				Mouth	Entire drainage
1967	MF Clearwater River	4	89				Mouth	Entire drainage
1968	Clearwater River	2	6,687				Mouth	Confluence MF and SF Clearwater rivers
1968	NF Clearwater River	3	103				Mouth	Entire drainage
1968	MF Clearwater River	4	102				Mouth	Entire drainage
1968	Selway River	6	32				Mouth	Entire drainage
1969	Clearwater River	4	2,705				Mouth	NF Clearwater River
1969	Clearwater River	5	654				NF Clearwater River	Confluence SF and MF Clearwater rivers
1969	NF Clearwater River	6	18				Mouth	Entire drainage
1969	MF Clearwater River	7	115				Mouth	Confluence Lochsa and Selway rivers
1969	SF Clearwater River	8	9				Mouth	Entire drainage
1969	Selway River	9	18				Mouth	Entire drainage

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1970	Clearwater River	1	3,488				Mouth	NF Clearwater River
1970	Clearwater River	2	774				NF Clearwater River	Confluence SF and MF Clearwater rivers
1970	NF Clearwater River	3	6				Mouth	Entire drainage
1970	MF Clearwater River	4	221				Mouth	Confluence Lochsa and Selway rivers
1970	Other tributaries	5	12				Unknown	Unknown
1971	Clearwater River	2	3,180				Mouth	NF Clearwater River
1971	Clearwater River	3	226				NF Clearwater River	Confluence SF and MF Clearwater rivers
1971	MF Clearwater River	5	16				Mouth	Confluence Lochsa and Selway rivers
1972	Clearwater River	1	4,549				Mouth	NF Clearwater River
1972	Clearwater River	2	421				NF Clearwater River	Confluence SF and MF Clearwater rivers
1972	NF Clearwater River	3	13				Mouth	Entire drainage
1972	MF Clearwater River	4	71				Mouth	Confluence Lochsa and Selway rivers
1973	Clearwater River	4	2,314				Mouth	NF Clearwater River
1973	Clearwater River	5	152				NF Clearwater River	Confluence SF and MF Clearwater rivers
1973	Clearwater River	6	153				Mouth	Confluence SF and MF Clearwater rivers
1973	NF Clearwater River	7	10				Mouth	Entire drainage
1973	MF Clearwater River	8	15				Mouth	Confluence Lochsa and Selway rivers
1974	Clearwater River	4	436				Unknown	Unknown
1976	Clearwater River	1	0		1,981		Mouth	NF Clearwater River
1976	Clearwater River	2	0		15		NF Clearwater River	Confluence SF and MF Clearwater rivers
1977	Clearwater River	5	4,615				Mouth	NF Clearwater River
1977	Clearwater River	6	169				NF Clearwater River	Confluence SF and MF Clearwater rivers
1977	NF Clearwater River	7	114				Mouth	Dworshak Dam
1977	Unknown	8	296				Unknown	Unknown
1977	Clearwater drainage <sup>a</sup>	98	0	46,025		DAY	Mouth	SF Clearwater River including NF Clearwater
1980	Clearwater River	1	1,891				Mouth	NF Clearwater River
1980	Clearwater River	2	36				NF Clearwater River	Orofino Bridge
1980	NF Clearwater River	3	91				Mouth	Dworshak Dam
1980	Unknown	4	154				Unknown	Unknown
1980	Clearwater drainage <sup>a</sup>	98	0	35,830		DAY	Mouth	Orofino Bridge including NF Clearwater River
1982	Clearwater River	1	5,874				Mouth	NF Clearwater River
1982	Clearwater River	2	250				NF Clearwater River	Orofino Bridge
1982	NF Clearwater River	3	310				Mouth	Dworshak Dam
1982	Unknown	4	571				Unknown	Unknown
1983	Clearwater River	1	4,589	31,398	3,278	DAY	Mouth	NF Clearwater River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1983	Clearwater River	2	416	4,457	197	DAY	NF Clearwater River	SF Clearwater River
1983	NF Clearwater River	3	307	2,600	22	DAY	Mouth	Dworshak Dam
1984	Clearwater River	1	9,076	47,871	10,031	DAY	Mouth	NF Clearwater River
1984	Clearwater River	2	738	4,250	828	DAY	NF Clearwater River	SF Clearwater River
1984	NF Clearwater River	3	306	2,377	36	DAY	Mouth	Dworshak Dam
1985	Clearwater River	1	6,169	35,788	7,332	DAY	Mouth	NF Clearwater River
1985	Clearwater River	2	527	683	200	DAY	NF Clearwater River	SF Clearwater River
1985	NF Clearwater River	3	215	1,802	709	DAY	Mouth	Dworshak Dam
1985	MF Clearwater River	7	0		200		Mouth	Confluence Lochsa and Selway rivers
1985	SF Clearwater River	6	29	450		DAY	Mouth	Hungry Ridge Road Bridge
1986	Clearwater River	1	6,468	41,291		DAY	Mouth	Orofino Bridge
1986	Clearwater River	2	789	4,749		DAY	Orofino Bridge	SF Clearwater River
1986	NF Clearwater River	3	879	3,818		DAY	Mouth	Dworshak Dam
1986	MF Clearwater River	4	39	241		DAY	Mouth	Clear Creek
1986	SF Clearwater River	8	17	353		DAY	Mouth	Hungry Ridge Road Bridge
1986	Selway River	6	4	435		DAY	Mouth	Entire drainage
1986	Lochsa River	7	4	13		DAY	Mouth	Confluence Crooked Fork and Colt Killed creeks
Salmo	n River drainage							
1960	Salmon River	9	4,163	2,761		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1960	Salmon River	10	1,695	1,558		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1960	SF Salmon River	11	569	789		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1960	EF SF Salmon River	12	49	316		NUA	Mouth	Entire drainage
1960	Secesh River	13	49	138		NUA	Mouth	Entire drainage
1960	MF Salmon River	14	893	808		NUA	Mouth	Entire drainage
1961	Salmon River	9	4,877	3,270		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1961	Salmon River	10	770	1,316		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1961	SF Salmon River	11	353	527		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1961	EF SF Salmon River	12	144	240		NUA	Mouth	Entire drainage
1961	MF Salmon River	13	786	834		NUA	Mouth	Entire drainage
1962	Salmon River	10	4,701	5,435		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)
1962	Salmon River	11	975	1,659		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1962	SF Salmon River	12	154	672		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1962	EF SF Salmon River	13	34	337		NUA	Mouth	Entire drainage
1962	MF Salmon River	14	376	865		NUA	Mouth	Entire drainage
1963	Salmon River	10	5,434	4,960		NUA	Mouth	MF Salmon River (mainstem only, no tributaries)

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1963	Salmon River	11	561	1,496		NUA	MF Salmon River	Entire mainstem Salmon River (no tributaries)
1963	SF Salmon River	12	181	498		NUA	Mouth	Entire mainstem SF Salmon River (no tributaries)
1963	EF SF Salmon River	13	33	282		NUA	Mouth	Entire drainage
1963	MF Salmon River	15	659	888		NUA	Mouth	Entire drainage
1964	Salmon River	9	4,618	1,827		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1964	SF Salmon River	10	20	6		SUA	Mouth	Entire drainage
1964	MF Salmon River	11	100	59		SUA	Mouth	Entire drainage
1965	Salmon River	1	5,542	2,050		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1965	SF Salmon River	2	44	14		SUA	Mouth	Entire drainage
1965	MF Salmon River	3	80	50		SUA	Mouth	Entire drainage
1966	Salmon River	3	5,639	2,058		SUA	Mouth	Entire drainage except SF and MF Salmon rivers
1966	SF Salmon River	4	7	6		SUA	Mouth	Entire drainage
1966	MF Salmon River	5	89	49		SUA	Mouth	Entire drainage
1967	Salmon River	10	4,970				Mouth	Entire drainage except SF, MF, NF, EF Salmon, Little Salmon, and Lemhi rivers
1967	Little Salmon River	11	15				Mouth	Entire drainage
1967	SF Salmon River	12	59				Mouth	Entire drainage
1967	MF Salmon River	13	52				Mouth	Entire drainage
1967	NF Salmon River	15	44				Mouth	Entire drainage
1968	Salmon River	10	5,811				Mouth	Entire drainage except SF, MF, NF, EF Salmon, Little Salmon, and Lemhi rivers
1968	Little Salmon River	11	23				Mouth	Entire drainage
1968	SF Salmon River	12	24				Mouth	Entire drainage
1968	MF Salmon River	13	103				Mouth	Entire drainage
1968	NF Salmon River	15	70				Mouth	Entire drainage
1968	Lemhi River	16	8				Mouth	Entire drainage
1969	Salmon River	21	1,554				Mouth	Whitebird Creek
1969	Salmon River	22	1,349				Whitebird Creek	Little Salmon River
1969	Salmon River	23	880				Little Salmon River	SF Salmon River
1969	Salmon River	24	1,133				SF Salmon River	MF Salmon River
1969	Salmon River	25	590				MF Salmon River	Lemhi River
1969	Salmon River	26	36				Lemhi River	Pahsimeroi River
1969	Salmon River	27	36				Pahsimeroi River	EF Salmon River
1969	Salmon River	28	24				EF Salmon River	Headwaters
1969	SF Salmon River	31	9				Unknown	Unknown

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1969	MF Salmon River	32	36				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1969	Marsh Creek	34	18				Mouth	Bridge downstream of Capehorn Creek
1969	Bear Valley Creek	35	9				Mouth	Fir Creek Pack Bridge
1969	NF Salmon River	36	18				Mouth	Headwaters
1969	EF Salmon River	38	9				Mouth	Bridge downstream of Herd Creek
1970	Salmon River	21	1,587				Mouth	Whitebird Creek
1970	Salmon River	22	856				Whitebird Creek	Little Salmon River
1970	Salmon River	23	970				Little Salmon River	SF Salmon River
1970	Salmon River	24	812				SF Salmon River	MF Salmon River
1970	Salmon River	25	1,299				MF Salmon River	Lemhi River
1970	Salmon River	27	9				Pahsimeroi River	EF Salmon River
1970	Salmon River	28	52				EF Salmon River	Hell Roaring Creek
1970	MF Salmon River	30	65				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1970	Other tributaries	31	16				Unknown	Unknown
1971	Salmon River	20	1,701				Mouth	Whitebird Creek
1971	Salmon River	21	930				Whitebird Creek	Little Salmon River
1971	Salmon River	22	941				Little Salmon River	SF Salmon River
1971	Salmon River	23	1,755				SF Salmon River	MF Salmon River
1971	Salmon River	24	2,291				MF Salmon River	Lemhi River
1971	Salmon River	25	150				Lemhi River	Pahsimeroi River
1971	Salmon River	26	27				Pahsimeroi River	EF Salmon River
1971	Salmon River	27	11				EF Salmon River	Hell Roaring Creek
1971	SF Salmon River	28	5				Unknown	Unknown
1971	MF Salmon River	29	16				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1971	Other tributaries	30	16				Unknown	Unknown
1972	Salmon River	21	1,003				Mouth	Whitebird Creek
1972	Salmon River	22	1,081				Whitebird Creek	Little Salmon River
1972	Salmon River	23	726				Little Salmon River	SF Salmon River
1972	Salmon River	24	652				SF Salmon River	MF Salmon River
1972	Salmon River	25	779				MF Salmon River	Lemhi River
1972	Salmon River	26	50				Lemhi River	Pahsimeroi River
1972	Salmon River	27	5				Pahsimeroi River	EF Salmon River
1972	SF Salmon River	29	4				Unknown	Unknown

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1972	MF Salmon River	30	22				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1973	Salmon River	20	442				Mouth	Whitebird Creek
1973	Salmon River	21	310				Whitebird Creek	Little Salmon River
1973	Salmon River	22	312				Little Salmon River	SF Salmon River
1973	Salmon River	23	593				SF Salmon River	MF Salmon River
1973	Salmon River	24	808				MF Salmon River	Lemhi River
1973	Salmon River	25	26				Lemhi River	Pahsimeroi River
1973	Salmon River	28	59				Unknown	Unknown
1973	SF Salmon River	29	10				Unknown	Unknown
1973	MF Salmon River	30	5				Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1974	Salmon River	21	252				Unknown	Unknown
1976	Salmon River	1	571				Mouth	Whitebird Creek
1976	Salmon River	2	271				Whitebird Creek	Little Salmon River
1976	Salmon River	3	297				Little Salmon River	SF Salmon River
1976	Salmon River	4	476				SF Salmon River	MF Salmon River
1976	Salmon River	5	427				MF Salmon River	Lemhi River
1976	Salmon River	6	41				Lemhi River	Pahsimeroi River
1976	Salmon River	7	6				Pahsimeroi River	EF Salmon River
1976	Salmon River	8	12				EF Salmon River	Headwaters
1976	Salmon River	9	47				Mouth	Headwaters
1977	Salmon River	11	559				Mouth	Whitebird Creek
1977	Salmon River	12	305				Whitebird Creek	Little Salmon River
1977	Salmon River	13	798				Little Salmon River	SF Salmon River
1977	Salmon River	14	1,578				SF Salmon River	MF Salmon River
1977	Salmon River	15	1,972				MF Salmon River	Lemhi River
1977	Salmon River	16	52				Lemhi River	Pahsimeroi River
1977	Salmon River	19	90				Mouth	Headwaters
1977	Salmon River	20	49				Unknown	Unknown
1979	Salmon River	3	295				Mouth	Whitebird Creek
1979	Salmon River	4	211				Whitebird Creek	Little Salmon River
1979	Salmon River	5	199				Little Salmon River	SF Salmon River
1979	Salmon River	6	303				SF Salmon River	MF Salmon River
1979	Salmon River	7	622				MF Salmon River	Lemhi River
1979	Salmon River	8	33				Lemhi River	Pahsimeroi River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1979	Salmon River	9	8				Pahsimeroi River	EF Salmon River
1979	Salmon River	10	142				Mouth	EF Salmon River
1980	Salmon River	1	602				Mouth	Whitebird Creek
1980	Salmon River	2	443				Whitebird Creek	Little Salmon River
1980	Salmon River	3	975				Little Salmon River	SF Salmon River
1980	Salmon River	4	972				SF Salmon River	MF Salmon River
1980	Salmon River	5	2,014				MF Salmon River	Lemhi River
1980	Unknown	7	257				Mouth	EF Salmon River
1980	Salmon River	8	117				Lemhi River	Pahsimeroi River
1981	Salmon River	1	1,216				Mouth	Whitebird Creek
1981	Salmon River	2	794				Whitebird Creek	Little Salmon River
1981	Salmon River	3	1,511				Little Salmon River	SF Salmon River (Mackay Bar Bridge)
1981	Salmon River	4	1,668				SF Salmon River (Mackay Bar Bridge)	MF Salmon River
1981	Salmon River	5	2,387				MF Salmon River	Lemhi River
1981	Salmon River	7	6				Pahsimeroi River	EF Salmon River
1981	Unknown	8	63				Unknown	Unknown
1981	Salmon River	9	87				Lemhi River	Pahsimeroi River
1982	Salmon River	1	1,469				Mouth	Whitebird Creek
1982	Salmon River	2	781				Whitebird Creek	Little Salmon River
1982	Salmon River	3	826				Little Salmon River	SF Salmon River (Mackay Bar Bridge)
1982	Salmon River	4	1,112				SF Salmon River (Mackay Bar Bridge)	MF Salmon River
1982	Salmon River	5	3,703				MF Salmon River	Lemhi River
1982	Unknown	8	66				Unknown	Unknown
1982	Salmon River	9	378				Lemhi River	Pahsimeroi River
1983	Salmon River	1	1,334	8,565	918	DAY	Mouth	Whitebird Creek
1983	Salmon River	2	787	5,790	1,005	DAY	Whitebird Creek	Little Salmon River
1983	Salmon River	3	853	6,402	1,136	DAY	Little Salmon River	SF Salmon River
1983	Salmon River	4	1,485	7,167	3,671	DAY	SF Salmon River	MF Salmon River
1983	Salmon River	5	8,739	26,744	11,165	DAY	MF Salmon River	Lemhi River
1983	Salmon River	6	1,180	6,664	2,600	DAY	Lemhi River	Pahsimeroi River
1983	Salmon River	7	219	983	22	DAY	Pahsimeroi River	EF Salmon River
1983	Salmon River	8	22	240		DAY	EF Salmon River	Basin Creek
1984	Salmon River	1	1,062	11,779	2,269	DAY	Mouth	Whitebird Creek
1984	Salmon River	2	540	9,347	1,350	DAY	Whitebird Creek	Little Salmon River

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1984	Salmon River	3	414	6,015	1,152	DAY	Little Salmon River	SF Salmon River
1984	Salmon River	4	846	13,273	4,574	DAY	SF Salmon River	MF Salmon River
1984	Salmon River	5	2,071	24,386	2,485	DAY	MF Salmon River	Lemhi River
1984	Salmon River	6	252	4,394	180	DAY	Lemhi River	Pahsimeroi River
1984	Salmon River	7	36	1,621		DAY	Pahsimeroi River	EF Salmon River
1984	Salmon River	8	108	594		DAY	EF Salmon River	Basin Creek
1985	Salmon River	2	1,290	13,445	1,788	DAY	Mouth	Whitebird Creek
1985	Salmon River	3	684	9,793	794	DAY	Whitebird Creek	Little Salmon River
1985	Salmon River	4	1,602	15,734	2,342	DAY	Little Salmon River	SF Salmon River
1985	Salmon River	5	1,355	11,761	1,826	DAY	SF Salmon River	MF Salmon River
1985	Salmon River	6	5,258	48,177	6,237	DAY	MF Salmon River	Lemhi River
1985	Salmon River	7	384	7,700	320	DAY	Lemhi River	Pahsimeroi River
1985	Salmon River	8	0	1,448		DAY	Pahsimeroi River	EF Salmon River
1985	Salmon River	9	0	670	101	DAY	EF Salmon River	Basin Creek
1985	Little Salmon River	10	0	308		DAY	Mouth	Smokey Boulder Road Bridge
1985	NF Salmon River	11	0	195		DAY	Mouth	Unknown
1986	Salmon River	4	2,150	12,731	3,465	DAY	Mouth	Whitebird Creek
1986	Salmon River	5	1,311	10,184	1,490	DAY	Whitebird Creek	Little Salmon River
1986	Salmon River	6	943	6,008	677	DAY	Little Salmon River	Vinegar Creek
1986	Salmon River	7	564	3,491	910	DAY	Vinegar Creek	SF Salmon River
1986	Salmon River	8	2,387	8,951	2,681	DAY	SF Salmon River	MF Salmon River
1986	Salmon River	9	6,576	28,094	5,732	DAY	MF Salmon River	NF Salmon River
1986	Salmon River	10	1,470	9,361	1,267	DAY	NF Salmon River	Lemhi River
1986	Salmon River	11	444	3,590	965	DAY	Lemhi River	Pahsimeroi River
1986	Salmon River	12	64	923	90	DAY	Pahsimeroi River	EF Salmon River
1986	Salmon River	13	60	1,203	306	DAY	EF Salmon River	Redfish Lake Creek
1986	MF Salmon River <sup>b</sup>	16	0	17	0	DAY	Mouth	Confluence Bear Valley Creek and Marsh Creek
Snake	River drainage							
1960	Snake River	4	3,382	1,874		NUA	Idaho/Washington border	Oxbow Dam
1960	Snake River	5	893	769		NUA	Brownlee Dam	Entire Snake drainage upstream of Brownlee Dam
1960	Weiser River	6	66	256		NUA	Mouth	Entire Weiser River drainage
1961	Snake River	4	2,504	1,931		NUA	Idaho/Washington border	Oxbow Dam
1961	Snake River	5	385	680		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam
1962	Snake River	2	2,135	1,970		NUA	Idaho/Washington border	Oxbow Dam
1962	Snake River	3	239	577		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam

Year	River	Zone	Harvest	Effort	Released fish	Effort Unit	Downstream boundary	Upstream boundary
1963	Snake River	2	1,531	2,145		NUA	Idaho/Washington border	Oxbow Dam
1963	Snake River	3	214	541		NUA	Oxbow Dam	Entire Snake drainage upstream of Oxbow Dam
1964	Snake River	2	1,572	663		SUA	Idaho/Washington border	Entire drainage
1965	Snake River	1	1,644	727		SUA	Idaho/Washington border	Entire drainage
1966	Snake River	2	2,752	948		SUA	Idaho/Washington border	Entire drainage
1967	Snake River	2	2,362				Idaho/Washington border	Entire drainage
1968	Snake River	2	2,913				Idaho/Washington border	Entire drainage
1969	Snake River	3	1,869				Clearwater River	Salmon River
1969	Snake River	4	315				Salmon River	Hells Canyon Dam
1970	Snake River	3	2,331				Clearwater River	Salmon River
1970	Snake River	4	546				Salmon River	Hells Canyon Dam
1971	Snake River	3	2,470				Clearwater River	Salmon River
1971	Snake River	4	365				Salmon River	Hells Canyon Dam
1972	Snake River	3	2,033				Clearwater River	Salmon River
1972	Snake River	4	219				Salmon River	Hells Canyon Dam
1973	Snake River	3	700				Clearwater River	Salmon River
1973	Snake River	4	93				Salmon River	Hells Canyon Dam
1973	Snake River	5	82				Clearwater River	Hells Canyon Dam
1974	Snake River	1	38				Unknown	Unknown
1976	Snake River	1	55				Clearwater River	Salmon River
1976	Snake River	2	44				Salmon River	Hells Canyon Dam
1977	Snake River	3	1,141				Clearwater River	Salmon River
1977	Snake River	4	31				Salmon River	Hells Canyon Dam
1977	Snake River	5	169				Clearwater River	Hells Canyon Dam
1979	Snake River	1	19				Clearwater River	Salmon River
1979	Snake River	2	30				Salmon River	Dug Bar
1979	Snake River drainage <sup>a</sup>	96	0	1,555		DAY	Idaho/Washington border	400 feet downstream of Hells Canyon Dam
1980	Snake River	1	358				Idaho/Washington border	Three Mile Inn (3 miles upstream of Asotin)
1980	Snake River	2	46				Dug Bar	Hells Canyon Dam
1980	Unknown	3	46				Idaho/Washington border	Hells Canyon Dam
1981	Snake River	1	462				US Highway 12 Interstate Bridge	Salmon River (closed from Anatone Gauge Station to Lime Point)
1981	Snake River	2	111				Dug Bar	Hells Canyon Dam
1982	Snake River	1	1,309				Three Mile Inn	Salmon River (closed from Anatone Gauge Station to Lime Point)

Veen	Diver	7	Hamisat	<b>Eff</b> a set	Released	Effort		
1982	Snake River	3	1,067				Salmon River	Hells Canyon Dam (closed from Mountain Sheep Crock to Dup Bac)
1983	Snake River	1	918	10,226	481	DAY	Idaho/Washington border	Salmon River
1983	Snake River	2	1,005	3,321	328	DAY	Salmon River	Hells Canyon Dam
1984	Snake River	1	2,539	14,066	4,286	DAY	Idaho/Washington border	Salmon River
1984	Snake River	2	360	1,441	108	DAY	Salmon River	Hells Canyon Dam
1985	Snake River	3	1,881	16,324	3,896	DAY	Idaho/Washington border	Salmon River
1985	Snake River	4	755	5,773	906	DAY	Salmon River	Hells Canyon Dam
1986	Snake River	3	2,560	17,067		DAY	Idaho/Washington border	Salmon River
1986	Snake River	4	1,133	6,055		DAY	Salmon River	Hells Canyon Dam
1986	Snake River	5	0	26		DAY	Hells Canyon Dam	Oxbow Dam
1985	Boise River	1	573	6,273	222	DAY	Mouth	Barber Dam
1986	Boise River	1	249	3,685	35	DAY	Mouth	Barber Dam
Harves	st and effort estimates from	m Unkno	own rivers					
1976	statewide	99		5,282		NUA	Effort in the Fall 1976 season was	estimated statewide
1960	Unknown	15	176				Unknown	Unknown
1961	Unknown	15	158				Unknown	Unknown
1962	Unknown	15	89				Unknown	Unknown
1963	Unknown	16	4				Unknown	Unknown
1964	Unknown	12	128				Unknown	Unknown
1965	Unknown	4	1,309				Unknown	Unknown
1966	Unknown	7	626				Unknown	Unknown
1967	Unknown	18	238				Unknown	Unknown
1968	Unknown	18	103				Unknown	Unknown
1969	Unknown	40	134				Unknown	Unknown
1970	Unknown	32	51				Unknown	Unknown
1971	Unknown	31	76				Unknown	Unknown
1972	Unknown	32	5				Unknown	Unknown
1973	Unknown	100	5				Unknown	Unknown
1982	Unknown	9	14				Unknown	Unknown
1986	Unknown	15	0	513		DAY	Unknown	Unknown

<sup>a</sup> Zone was used for effort estimate only.

<sup>b</sup> River was closed to steelhead fishing but effort was reported in the survey.

Appendix C. Adjustments made to Hauck's CY1954 to CY1959 steelhead harvest estimates. The statewide total harvest estimates for CY1954 to CY1958 were in Table 5 and the percent of harvest by county in Table 6 in Hauck's reports. The harvest for river sections in CY1959 is from his Table 4 and percent of harvest by river section was calculated using the harvest estimate of each river section. Cells shaded in grey were adjusted for rounding error so the sum of all sections equals the statewide harvest total.

Year	County/River	Percent of harvest	Hauck original harvest estimate	Bias adjusted harvest estimate
1954	Statewide	-	25,210	12,605
1954	Custer	5.9%	1,487	744
1954	Idaho	24.5%	6,176	3,088
1954	Lemhi	21.0%	5,294	2,647
1954	Nez Perce	30.5%	7,689	3,845
1954	Other counties	8.0%	2,018	1,008
1954	Washington	10.1%	2,546	1,273
1955	Statewide		26,260	13,130
1955	Custer	5.1%	1,339	670
1955	Idaho	18.7%	4,911	2,456
1955	Lemhi	20.6%	5,410	2,705
1955	Nez Perce	28.8%	7,563	3,782
1955	Other counties	5.0%	1,312	654
1955	Valley	9.3%	2,442	1,221
1955	Washington	12.5%	3,283	1,642
1956	Statewide		15,771	7,886
1956	Clearwater County	2.4%	379	190
1956	Custer County	6.2%	978	489
1956	Elmore County	1.2%	189	95
1956	Idaho County	24.6%	3,880	1,940
1956	Lemhi County	16.6%	2,618	1,309
1956	Lewis County	1.2%	189	95
1956	Nez Perce County	12.8%	2,019	1,010
1956	Other counties	0.6%	95	45
1956	Owyhee County	5.9%	930	465
1956	Payette County	1.2%	189	95
1956	Valley County	7.4%	1,167	584
1956	Washington County	19.9%	3,138	1,569
1957	Statewide		39,544	19,772
1957	Adams County	2.1%	830	415
1957	Clearwater County	4.4%	1,740	870
1957	Custer County	3.6%	1,424	712
1957	Idaho County	27.0%	10,677	5,339
1957	Lemhi County	15.4%	6,090	3,045

Year	County/River	Percent of harvest	Hauck original harvest estimate	Bias adjusted harvest estimate
1957	Nez Perce County	34.3%	13,564	6,782
1957	Other counties	4.6%	1,818	908
1957	Valley County	5.1%	2,017	1,009
1957	Washington County	3.5%	1,384	692
1958	Statewide		59,631	29,816
1958	Clearwater County	11.7%	6,977	3,489
1958	Idaho County	30.8%	18,366	9,183
1958	Lemhi County	12.9%	7,692	3,846
1958	Nez Perce County	23.5%	14,013	7,007
1958	Other counties	6.9%	4,116	2,057
1958	Valley County	4.8%	2,862	1,431
1958	Washington County	9.4%	5,605	2,803
1959	Statewide		62,000	31,000
1959	Clearwater drainage (upstream Lewiston Dam)	18.5%	11,442	5,721
1959	Clearwater River (downstream Lewiston Dam)	16.6%	10,273	5,137
1959	EF Salmon River	0.7%	418	209
1959	Lemhi River	0.6%	362	181
1959	MF Salmon River	3.7%	2,283	1,142
1959	Pahsimeroi River	0.2%	139	70
1959	Salmon River (downstream of MF Salmon)	20.6%	12,778	6,389
1959	Salmon River (upstream of MF Salmon)	10.2%	6,320	3,160
1959	SF Salmon River	8.1%	5,039	2,520
1959	Snake River (downstream of Oxbow Dam)	11.8%	7,294	3,647
1959	Snake River (upstream of Oxbow Dam)	2.8%	1,726	863
1959	Unknown	1.5%	947	471
1959	Weiser River	4.8%	2,979	1,490

Appendix D. Adjustments to Bjornn's 1960 steelhead harvest estimates presented in Table 5.

	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	Spring + Fall	Total	– (Spring + Fall)
Harvest	25,239	35,617	60,856	59,991	-865
% of CY harvest	41.47%	58.53%			
Scaled to 59,991	24,880	35,111		59,991	
Bias adjustment	12,440	17,556		29,996	

# Scale seasonal harvest to statewide total.

# Spring season—grey shaded values were adjusted for rounding error

Pivor	Zone	Bjornn's original barvest	Scaled barvest	Bias adjusted
	Zone	oliginal haivest		Ildi vest
Clearwater River	2	2,891	2,873	1,437
Clearwater drainage	3	3,845	3,821	1,911
Salmon River	9	6,126	6,089	3,041
Salmon River	10	2,433	2,418	1,209
SF Salmon River	11	1,492	1,483	742
EF SF Salmon River	12	583	579	290
Secesh River	13	65	65	33
MF Salmon River	14	1,200	1,193	597
Snake River	4	3,316	3,296	1,648
Snake River	5	778	773	387
Weiser River	6	2,304	2,290	1,145
Spring total		25,033	24,880	12,440

The sum of Bjornn's river section harvest was 153 more than the scaled Spring total. Each river section harvest was proportionally reduced so the sum of all sections equals the scaled Spring total of 24,880.

# Fall season

River	Zone	Bjornn's original harvest	Bias adjusted harvest
Clearwater River	2	3,802	1,901
Clearwater drainage	3	7,439	3,720
Salmon River	9	8,326	4,163
Salmon River	10	3,390	1,695
SF Salmon River	11	1,138	569
EF SF Salmon River	12	98	49
Secesh River	13	97	49
MF Salmon River	14	1,786	893
Snake River	4	6,763	3,382
Snake River	5	1,786	893
Weiser River	6	131	66
Unknown <sup>a</sup>	15	355	176
Fall total		35,111	17,556

<sup>a</sup> Sum of Bjornn's river sections harvest was less than the scaled fall total. I added an Unknown section with harvest of 355 so Fall harvest equals the statewide Fall estimate of 35,111.

Appendix E. Adjustments to Bjornn's 1961 steelhead harvest estimates presented in Table 5. In both the spring and fall season, the sum of Bjornn's river section estimates were less than the scaled seasonal total, hence an Unknown section was added. Values shaded in grey were adjusted for rounding error.

Scale seasonal i	iai vest to st	alewide lola	11		
	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	arvest Spring + Fall Tota		– (Spring + Fall)
Harvest	21,684	29,519	51,203	51,362	159
% of CY harvest	42.35%	57.65%			
Scaled to 51,632	21,751	29,611		51,362	
Bias adjustment	10,876	14,805		25,681	

# Scale seasonal harvest to statewide total

#### Spring season

River	Zone	Bjornn's original harvest	Bias adjusted harvest
Clearwater River	3	1,282	641
Clearwater drainage	4	2,758	1,379
Salmon River	9	7,382	3,691
Salmon River	10	2,343	1,172
SF Salmon River	11	1,540	770
EF SF Salmon River	12	257	129
MF Salmon River	13	1,090	545
Snake River	4	3,562	1,781
Snake River	5	707	354
Weiser River	6	72	36
Unknown	15	758	378
Spring total		21,751	10,876

River	Zone	Bjornn's original harvest	Bias adjusted harvest t
Clearwater River	3	3,785	1,893
Clearwater drainage	4	5,870	2,935
Salmon River	9	9,753	4,877
Salmon River	10	1,540	770
SF Salmon River	11	706	353
EF SF Salmon River	12	287	144
MF Salmon River	13	1571	786
Snake River	4	5,007	2504
Snake River	5	770	385
Unknown	15	322	157
Fall total		29,611	14,806

Appendix F. Adjustments to Bjornn's 1962 steelhead harvest estimates presented in Table 4.

	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	Spring + Fall	Total	– (Spring + Fall)
Harvest	11,755	27,474	39,229	39,245	16
% of CY harvest	29.97%	70.03%			
Scaled to 39,245	11,760	27,485		39,245	
Bias adjustment	5,880	13,743		19,623	

## Scale seasonal harvest to statewide total.

# Spring season—grey shaded values were adjusted for rounding error

River	Zone	Bjornn's original harvest	Bias adjusted harvest
Clearwater River	2	855	4,28
Clearwater drainage	3	2,154	1,077
Salmon River	10	4,787	2,392
Salmon River	11	856	428
SF Salmon River	12	649	325
MF Salmon River	14	649	325
Snake River	2	1,128	564
Snake River	3	342	171
Weiser River <sup>a</sup>	9	340	170
Spring total		11,760	5,880

<sup>a</sup> All Weiser River harvest was put in the spring season and reduced by 2 fish so spring total harvest equals 11,760.

		Bjornn's original	Bias adjusted
River	Zone	harvest	harvest
Clearwater River	2	1,812	906
Clearwater drainage	3	8,268	4,134
Salmon River	10	9,401	4,701
Salmon River	11	1,949	975
SF Salmon River	12	307	154
EF SF Salmon River	13	68	34
MF Salmon River	14	752	376
Snake River	2	4,269	2,135
Snake River	3	478	239
Unknown	15	181	89
Fall total		27.485	13,743

# Fall season—grey shaded values were adjusted for rounding error

The sum of Bjornn's river section harvest in the fall was 181 fish less than the fall season scaled total. I added an Unknown section with a harvest of 181 fish so the sum of all sections equals 27,485.

Appendix G. Adjustments to Bjornn's 1963 steelhead harvest estimates presented in Table 4. In both the spring and fall season, the sum of Bjornn's river section estimates were less than the scaled seasonal total, hence an Unknown section was added

	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	Spring + Fall	Total	– (Spring + Fall)
Harvest	27,796	27,041	54,837	54,789	-48
% of CY harvest	50.69%	49.31%			
Scaled to 54,789	27,772	27,017		54,789	
Bias adjustment	13,886	13,509		27,395	

# Spring season—grey shaded values were adjusted for rounding error

Piver	Zone	Bjornn's original	Bias adjusted
	2011e		liaivest
Clearwater River	2	724	362
Clearwater drainage	3	3,522	1,761
Salmon River	10	13,469	6,735
Salmon River	11	2,734	1,367
SF Salmon River	12	2,042	1,021
EF SF Salmon River	13	395	198
Secesh River	14	199	100
MF Salmon River	15	1,978	989
Snake River	2	1,778	889
Snake River	3	329	165
Unknown	16	602	299
Spring total		27,772	13,886

# Fall season—grey shaded values were adjusted for rounding error

		Bjornn's original	
River	Zone	harvest	Bias adjusted harvest
Clearwater River	2	3,723	1,862
Clearwater drainage	3	6,060	3,030
Salmon River	10	10,868	5,434
Salmon River	11	1,121	561
SF Salmon River	12	362	181
EF SF Salmon River	13	66	33
MF Salmon River	15	1,318	659
Snake River	2	3,062	1,531
Snake River	3	427	214
Unknown	16	10	4
Fall total		27,017	13,509

Appendix H. Adjustments to Bjornn's 1964 steelhead harvest estimates presented in Table 7. In both the spring and fall season, the sum of Bjornn's river section estimates were less than the scaled seasonal total, hence an Unknown section was added.

# Scale seasonal harvest to statewide total.

	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	Spring + Fall	Total	- (Spring + Fall)
Harvest	8,663	9,099	17,762	17,781	19
% of harvest	48.77%	51.23%			
Scaled to 17,781	8,672	9,109		17,781	

# Spring season

River	Zone	Harvest estimate
Clearwater River	2	1,424
Salmon River	9	4,984
SF Salmon River	10	702
MF Salmon River	11	503
Snake River	2	702
Unknown	12	357
Spring total		8,672

River	Zone	Harvest estimate	
Clearwater River	2	2,671	
Salmon River	9	4,618	
SF Salmon River	10	20	
MF Salmon River	11	100	
Snake River	2	1,572	
Unknown	12	128	
Spring total		9,109	

Appendix I. Adjustments to Bjornn's 1965 steelhead harvest estimates presented in Table 7. In both the spring and fall season, the sum of Bjornn's river section estimates were less than the scaled seasonal total, hence an Unknown section was added. The NF Clearwater seasonal harvest estimates were calculated by multiplying 188 by the seasonal proportion of the total Clearwater drainage harvest.

	Spring	Fall	Sum of	CY statewide	Difference: statewide
	harvest	harvest	Spring + Fall	Total	– (Spring + Fall)
Harvest	5,132	13,901	19,033	19,524	491
% of CY harvest	26.96%	73.04%			
Scaled to 19,524	5,264	14,260	19,524		

# Scale seasonal harvest to statewide total.

# Spring season

River	Zone	Harvest estimate
Clearwater River	1	946
NF Clearwater River	2	35
Selway River	3	210
Salmon River	1	2,928
SF Salmon River	2	75
MF Salmon River	3	188
Snake River	1	104
Unknown	4	778
Spring total		5,264

River	Zone	Harvest estimate
Clearwater River	1	5,462
NF Clearwater River	2	153
Selway River	3	26
Salmon River	1	5,542
SF Salmon River	2	44
MF Salmon River	3	80
Snake River	1	1,644
Unknown	4	1,309
Fall total		14,260

Appendix J. Adjustments to Bjornn's 1966 steelhead harvest estimates presented in Table 10. In both the spring and fall season, the sum of Bjornn's river section estimates were less than the scaled seasonal total, hence an Unknown section was added.

# Scale seasonal harvest to statewide total.

	Spring	Fall	Sum of	CY statewide	Difference: statewide		
	harvest	harvest	Spring + Fall	Total	– (Spring + Fall)		
Harvest	6,374	13,648	20,022	20,410	388		
% of harvest	31.83%	68.17%					
Scaled to 20,410	6,498	13,912	20,410	20,410			

# Spring season

River	Zone	Harvest estimate
Clearwater River	2	903
NF Clearwater River	3	51
Selway River	4	139
Salmon River	3	3,517
SF Salmon River	4	235
MF Salmon River	5	212
Snake River	2	624
Unknown	12	817
Spring total		6,498

River	Zone	Harvest estimate
Clearwater River	2	4,607
NF Clearwater River	3	192
Selway River	4	5,639
Salmon River	3	7
SF Salmon River	4	89
MF Salmon River	5	2,752
Snake River	2	4,607
Unknown	12	626
Spring total		13,912

	Catch reported (Table 7)			w/Unkr	w/Unkn parsed Percent of catch			CY Adjusted harv		d harvest	
River	Jan-Jun	Jul-Dec	Unkn	total	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	harvest	Jan-Jun	Jul-Dec
Clearwater River	221	815	14	1,050	224	826	21.3%	78.7%	7,765	1,657	6,108
NF Clearwater River	15	46	17	78	18	60	23.1%	76.9%	577	133	444
MF Clearwater River	6	12	0	18	6	12	33.3%	66.7%	133	44	89
Lochsa River	1	0	0	1	1	0	100.0%	0.0%	9	9	0
Selway River	11	0	0	11	11	0	100.0%	0.0%	81	81	0
Salmon River	719	622	99	1,440	768	672	53.3%	46.7%	10,649	5,679	4,970
Little Salmon River	2	2	0	4	2	2	50.0%	50.0%	30	15	15
SF Salmon River	57	8	2	67	59	8	88.1%	11.9%	495	436	59
MF Salmon River	54	6	5	65	58	7	89.2%	10.8%	480	428	52
Big Creek	1	0	0	1	1	0	100.0%	0.0%	12	12	0
NF Salmon River	11	6	0	17	11	6	64.7%	35.3%	125	81	44
Lemhi River	12	0	0	12	12	0	100.0%	0.0%	88	88	0
EF Salmon River	5	0	0	5	5	0	100.0%	0.0%	36	36	0
Snake River	153	297	34	484	164	320	33.9%	66.1%	3,572	1,210	2,362
Unknown rivers	22	28	6	56	24	32	42.9%	57.1%	417	179	238
Sum of all sections									24,469	10,088	14,381

Appendix K. Adjustments to Keating's 1967 calendar year (CY) steelhead harvest estimates presented in Table 5. Jan-Jun is the spring season and Jul-Dec is the fall season. Unkn = Unknown.

	Catch reported (Table 7)			w/Unkn parsed Percent of catch			CY Adjusted harve		d harvest		
River	Jan-Jun	Jul-Dec	Unkn	total	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	harvest	Jan-Jun	Jul-Dec
Clearwater River	206	808	48	1,062	215	847	20.2%	79.8%	8,385	1,698	6,687
NF Clearwater River	9	12	2	23	10	13	43.5%	56.5%	182	79	103
MF Clearwater River	9	10	5	24	11	13	45.8%	54.2%	189	87	102
SF Clearwater River	1	0	0	1	1	0	100.0%	0.0%	8	8	0
Selway River	43	3	6	52	48	4	92.3%	7.7%	410	378	32
Salmon River	551	712	41	1,304	568	736	43.6%	56.4%	10,296	4,485	5,811
Little Salmon River	2	2	2	6	3	3	50.0%	50.0%	47	24	23
SF Salmon River	21	1	7	29	26	3	89.7%	10.3%	229	205	24
MF Salmon River	58	13	0	71	58	13	81.7%	18.3%	561	458	103
Big Creek	6	0	0	6	6	0	100.0%	0.0%	47	47	0
NF Salmon River	3	9	0	12	3	9	25.0%	75.0%	94	24	70
Lemhi River	0	1	0	1	0	1	0.0%	100.0%	8	0	8
Snake River	132	356	18	506	137	369	27.1%	72.9%	3,995	1,082	2,913
	-			0.1		10	00.40/	04.00/	4.0.0		400
Unknown rivers	1	11	3	21	8	13	38.1%	61.9%	166	63	103
Sum of all sections									24,617	8,638	15,979

Appendix L. Adjustments to Keating's 1968 calendar year (CY) steelhead harvest estimates presented in Table 5. Jan-Jun is the spring season and Jul-Dec is the fall season. Unkn = Unknown.

	Catch reported (Table 7)			w/Unkn	parsed	Percent of catch		CY	Adjusted harvest		
River	Jan-Jun	Jul-Dec	Unkn	total	Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec	harvest	Jan-Jun	Jul-Dec
Clearwater River-lower	44	186	0	230	44	186	19.1%	80.9%	3,345	640	2,705
Clearwater River-upper	39	44	2	85	40	45	47.1%	52.9%	1,236	582	654
NF Clearwater River	7	1	2	10	8	2	80.0%	20.0%	89	71	18
MF Clearwater River	21	13	0	34	21	13	61.8%	38.2%	302	187	115
SF Clearwater River	0	1	0	1	0	1	0.0%	100.0%	9	0	9
Selway River	7	2	0	9	7	2	77.8%	22.2%	80	62	18
Salmon River-1	36	120	12	168	39	129	23.2%	76.8%	2,024	470	1,554
Salmon River-2	70	111	1	182	70	112	38.5%	61.5%	2,192	843	1,349
Salmon River-3	42	67	9	118	45	73	38.1%	61.9%	1,422	542	880
Salmon River-4	69	89	9	167	73	94	43.7%	56.3%	2,012	879	1,133
Salmon River-5	32	48	2	82	33	49	40.2%	59.8%	987	397	590
Salmon River-6	7	3	0	10	7	3	70.0%	30.0%	121	85	36
Salmon River-7	4	3	0	7	4	3	57.1%	42.9%	84	48	36
Salmon River-8	4	2	0	6	4	2	66.7%	33.3%	72	48	24
Little Salmon River	3	0	1	4	4	0	100.0%	0.0%	36	36	0
SF Salmon River	4	1	0	5	4	1	80.0%	20.0%	44	35	9
MF Salmon River	22	4	2	28	24	4	85.7%	14.3%	249	213	36
Big Creek	4	0	0	4	4	0	100.0%	0.0%	36	36	0
Marsh Creek	0	2	0	2	0	2	0.0%	100.0%	18	0	18
Bear Valley Creek	0	1	0	1	0	1	0.0%	100.0%	9	0	9
NF Salmon River	4	2	1	7	5	2	71.4%	28.6%	62	44	18
Pahsimeroi River	1	0	0	1	1	0	100.0%	0.0%	9	9	0
EF Salmon River	0	1	0	1	0	1	0.0%	100.0%	9	0	9
Loon Creek	1	0	0	1	1	0	100.0%	0.0%	9	9	0
Snake River-lower	20	156	11	187	21	166	11.2%	88.8%	2,105	236	1,869
Snake River-upper	9	22	8	39	11	28	28.2%	71.8%	439	124	315
Unknown rivers	6	15	0	21	6	15	28.6%	71.4%	187	53	134
Sum of all sections									17,187	5,649	11,538

Appendix M. Adjustments to Keating's 1969 calendar year (CY) steelhead harvest estimates presented in Table 5. Jan-Jun is the spring season and Jul-Dec is the fall season. Unkn = Unknown.

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