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Alaska Department of Fish and Game
Commercial Fisheries Management
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Bethel Salmon Test-Fishing Project, 1991

by

Douglas B. Molyneaux

State of Alaska

Tony Knowles, Governor

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ABSTRACT

Annual timing and abundance of adult chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, chum *O. keta*, and coho *O. kisutch* salmon returning to the Kuskokwim River has been assessed by the Bethel drift gillnet test fishery since 1984. In 1991 the Bethel test fishery was operated from 2 June through 31 August. A series of timed drifts using 13.6-cm (5-3/8-in) and 20.3-cm (8-in) stretch mesh gillnets were made at three stations across the river channel. Each series of drifts was begun approximately 1 h following each high tide throughout the fishing season. Mean tidal CPUE was calculated for each species and this served as an index of abundance. The cumulative mean tidal CPUE was compared to data from earlier years to help in making commercial fishery management decisions. The Bethel test fishery performed well as an index of salmon abundance in 1991. The test fishery forewarned of escapement concerns for chinook, chum, and coho salmon in a timely manner. These cautions were generally corroborated post hoc by commercial catch CPUE statistics from District 2 and escapement projects.

The mean dates of migration for chinook, sockeye, chum, and coho salmon were 25 June, 28 June, 12 July, and 10 August, respectively. These dates were generally within 1 or 2 d of the historical averages, except for chum salmon which was 9 d later than average. The apparent lateness of the chum salmon return was probably not due to a delay of fish entry into the river; more likely the difference was a result of lower abundance of early chum salmon stocks and a greater than usual abundance of late stocks.

KEY WORDS: Kuskokwim, salmon, *Oncorhynchus*, abundance, test fishery, timing, passage

INTRODUCTION

The primary objective of salmon management is to provide an optimum sustained harvest by regulating annual harvests in such a way as to ensure adequate spawning escapement (Francisco et al. 1992). Successful management requires accurate and timely knowledge about migratory timing, run strength, and escapement levels. For salmon management on the Kuskokwim River these information needs are met, in part, by the Bethel test fishery, a departmentally operated project used to estimate run timing and a relative index of salmon abundance (Molyneaux 1991).

Fishery Description

In the Kuskokwim River stocks of returning chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, chum *O. keta*, and coho *O. kisutch* salmon are the targets of intense periodic fishing pressure by commercial and subsistence fishermen. The commercial fishery is directed primarily at chum and coho salmon; chinook salmon are the principal target of subsistence users. Because of conservation concerns, chinook salmon have not been subjected to a directed commercial fishery since 1987; however, substantial numbers of this species are caught incidentally during the commercial chum salmon fishery (Francisco et al. 1992). Sockeye salmon are generally less abundant in the Kuskokwim River than chum and coho salmon, and commercial catches of sockeye salmon are considered incidental because they are not part of the formal management plan. Harvests of pink salmon *O. gorbuscha* are negligible and are not considered in this report.

Commercial Fishery

Commercial harvests in the Kuskokwim River occur in two separate districts. District 1, the lower Kuskokwim, extends from the mouth of the river to 1.6 km (1 mi) above the Tuluksak River confluence 220 km (137 mi) upstream (Figure 1). District 1 is divided into four statistical areas (335-11, 335-12, 335-13, and 335-14) which divide the district into segments of approximately equal length (Figure 2).[1] District 2, the middle Kuskokwim, is 113 km (60 mi) in length and extends from High Bluffs to Chuathbaluk. District 2 consists of only one statistical area (335-20). Districts 1 and 2 are separated by a section of river approximately 80 km (50 mi) in length that is closed to commercial fishing. All waters upstream of District 2 are also closed to commercial fishing.

Drift gillnets are the principal gear type used in the Kuskokwim River commercial fisheries, but set gillnets are also legal. The mesh size used in the fisheries is restricted to 15.2-cm (6-in) or smaller. This mesh restriction has been imposed since 1985 as an attempt to improve declining chinook salmon escapements (Francisco et al. 1992).

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[1] Prior to 1990 District 1 was only divided into three statistical areas (335-11, 335-12, and 335-13). In 1990 the statistical area farthest downstream (335-11) was divided in half. The numbering of all four statistical areas was then reordered to 335-11 and 335-12 (formerly 335-11), 335-13 (formerly 335-12), and 335-14 (formerly 335-13).

Although commercial fishermen are not restricted from fishing in any district in the Kuskokwim Salmon Management Area, most effort is concentrated in District 1, especially statistical area 335-12, which is immediately downstream of the Bethel test-fish site. Catch data from the two upriver statistical areas (335-13 and 335-14) are generally thought to underestimate the actual catch from these locations because fish caught in these areas are often delivered to buyer stations in Bethel (statistical area 335-12). Consequently, it is assumed that the incorrect statistical area is sometimes recorded on the fish tickets (R. K. Francisco, Alaska Department of Fish and Game [ADF&G], Bethel, personal communication).

District 1 has supported as many as 679 units of gear during a single 8-h commercial fishing period (Francisco et al. 1992). This amount of gear probably results in a saturated fishing district, a conclusion supported by observations that most of the harvest occurs within the first 3 to 4 h of each 6- or 8-h opening (R. K. Francisco, ADF&G, Bethel, personal communication; Huttunen 1988), plus commercial fishing periods typically result in depressed test-fish catches for 1 to 2 d following each opening.

Subsistence Fishery

Alaska state law mandates that subsistence needs have priority over commercial use of fisheries resources (AS 16.05.258). In the Kuskokwim area subsistence is a prominent and vital element to the local life style. Along the Kuskokwim River the subsistence salmon fishery is especially important as evidenced by the fact that the number of chinook salmon taken from the river for subsistence purposes is often greater than the number taken commercially (Francisco et al. 1992). This was even true prior to 1987 when there was a commercial fishery directed at chinook salmon.

The types of gear used by subsistence fishermen are generally similar to the gear used for commercial fishing. However, set gillnets are more prevalent in the subsistence fishery, and there is no restriction on mesh size. In June many subsistence fishermen use 20- to 22-cm (8.0- to 8.5-in) mesh sizes to target chinook salmon.

Subsistence fishing occurs throughout the Kuskokwim River, including many of the major spawning tributaries, but over half of all subsistence fishing occurs in the portion of District 1 located downstream of the Bethel test fishery (Francisco et al. 1992). By regulation, subsistence fishing in District 1 and between Districts 1 and 2 is closed 16 h before and during and 6 h after each District 1 commercial fishing period. Kuskokuak Slough is an exception to the subsistence fishing regulations in District 1. Subsistence fishing in the slough may begin as soon as the commercial fishing period is over; i.e., no 6-h delay. The slough is also closed to commercial fishing. In District 2 the subsistence fishery is closed 16 h before and during and 6 h after each District 2 commercial fishing period. Subsistence fishing above District 2 is open 7 d a week with no closures.

Project Background

From 1966 through 1983 the department conducted a set gillnet test fishery in the lower reach of the Kuskokwim River near an abandoned fish camp called Kwegooyuk (Huttunen 1984). At this site the river ranged from approximately 5 to 7 km in width and had a major channel along both the east and west shores. The channels were separated by soft, sandy shoals that are mostly flooded at high tide. Relief along the shore was so minimal that at high tide the horizon is formed by the sky and water much like what occurs when looking out at the open ocean. In this expansive body of water, the Kwegooyuk test-fish gillnets, 49 m in length, were set from the east shore just upstream of the lower boundary of District 1 and fished 24 h a day.

The goals of the Kwegooyuk test fishery were to estimate run timing and index abundance of chinook, sockeye, and chum salmon. Although the project adequately estimated run timing, it was not able to satisfactorily index run abundance. This problem was attributed to fluctuations in the preferred migratory route of salmon as influenced inseason by changes in weather patterns and between seasons by alterations in the cross-sectional profile of the channel (Huttunen 1984). Indeed, changes in the channel profile are so profound that every few years commercial barge traffic must switch from the west to east channel, or vice versa, as one channel becomes shallower and the other deepens (C. Brown[2] and G. Kortheus[3], personal communications). The remoteness of the test-fish location also made sale of the daily test-fish catches difficult or impossible, a problem that often resulted in unavoidable wastage that was not acceptable to ADF&G, local residents, or the industry (R. K. Francisco, ADF&G, Bethel, personal communication).

Efforts to redesign the test-fish program to minimize waste and improve abundance indexing began in July of 1983. The focus was on the use of drift gillnets in a narrower river channel near Bethel (Huttunen 1984). Objectives of the 1983 drift gillnet test fishery were to assess feasibility related to collecting run timing and abundance information for coho salmon and to reduce waste. The new site was in the main stem Kuskokwim River about 5 km (3.5 mi) upstream from Bethel, near the boundary line separating current statistical areas 335-12 and 335-13. The river was approximately 1 km wide at the new location and had a single, major channel[4] that allowed drift gillnets to collect accurate catch per unit effort (CPUE) data at selected stations across the entire channel width. The new location was also convenient to outlets for the timely distribution and sale of daily catches. The conclusion from the feasibility study was that the drift gillnet test fishery at Bethel was viable and offered a more reliable means of monitoring run timing and salmon abundance than the Kwegooyuk test fishery. The historical

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[2] Charlie Brown is a resident of the village of Eek and was a crew member of the Eek test fishery in 1988–1990, a project sponsored cooperatively between the local fishing industry and ADF&G.

[3] Gerald Kortheus, Sr., operates a local tender on the Kuskokwim River and has served as a river pilot for directing barge traffic in the river and as a buoy tender for marking the navigable river channel.

[4] Three small channels, Straight, Steamboat, and Church Sloughs, circumvent the site but are considered minor contributors to fish passage (D. Huttunen, ADF&G, Anchorage, personal communication).

Kwegooyuk set gillnet program was discontinued after 1983 and replaced with a multiple-mesh drift gillnet project referred to as the *Bethel test fishery* or the *Kuskokwim test fishery* (Huttunen 1985).

Relocation of the test fishery to a point upriver of most commercial and subsistence harvests, however, caused a new problem. Instead of indexing total run abundance, as was the objective of the Kwegooyuk test fishery, the Bethel test fishery indexes abundance of salmon at the test-fish site. This distinction is important because the downriver commercial and subsistence harvests are not accounted for in the Bethel test-fish index. Moreover, the exploitation rate of the commercial fishery is probably inconsistent because of changes in gear efficiency, changes in regulations designed to alter harvest efficiency, variability in fishing pattern (length of openings and frequency of openings), changes in water level, variability in the synchrony of openings with the entry pattern of salmon, the occurrence of fishermen strikes, etc. These inconsistencies confound the ability of the project to accurately and consistently index total run abundance. Instead, it is more appropriate to use the Bethel test-fish data as an index of salmon passage at Bethel. Taken within the context of a passage index, the Bethel test fishery provides timely and useful insights of escapement expectations.

METHODS

Field Operations

The methods and locations used in the 1991 Bethel test fishery were similar to those used since 1984. Following each high tide a series of gillnet drifts were conducted in the Kuskokwim River near Bethel. The drifts were performed by one of two alternating two-person crews using a 6.1-m (20-ft) skiff and 90-m (50-fathom) gillnets. Each series of drifts began 1 h after the published high slack tide for Bethel. This ensured all drifts were conducted in water flowing downstream. Drifts began approximately 5 km (3.5 mi) upstream of Bethel, where Straight Slough diverges from the main channel (Figure 3). Each drift was conducted at one of three stations across the width of the main channel. The duration of each drift was approximately 20 min and the mean fishing time was calculated as half the time it took to both deploy and retrieve the net plus the time the net was fully deployed. The river distance traversed by each drift varied depending on water and channel conditions, but the distance was generally <3 km (2 mi). To avoid impacting commercial fishermen, no drifts were conducted during commercial fishing openings.

The river channel was approximately 12 m (36 ft) deep and 320 m (1,050 ft) wide as measured near the downriver end of the test-fish site (Figure 4). Gillnets used in the test fishery generally sampled the upper half of the water column; however, at station I the inshore end of the net generally dragged along a section of sandbar. At station III the inshore end of the net was deployed approximately 8 m (24 ft) offshore to avoid snags along the channel's edge. As the station III drift progressed, it typically moved toward the center of the channel (Figure 3).

Drifting began on 2 June and continued through the morning tide on 31 August. Through 15 July two different mesh sizes where used in the test fishery; the first two drifts of each tide were conducted with 20.3-cm (8-in) stretched-mesh gillnets, and the second two drifts were performed with 13.6-cm (5-3/8-in) mesh. Different mesh sizes were used because larger mesh takes larger chinook salmon, whereas smaller mesh is more effective on smaller chinook and other species of salmon. For each tidal drift series, one of six unique permutations from a repeating fishing schedule was used to determine which mesh size would be fished at each station (Table 1). The result was that no station was fished with the same mesh size twice during a single tide. However, this design dictated that one station was fished twice each tide: first with 20.3-cm gear then with 13.6-cm gear. The two remaining stations were each fished only once: one station with 20.3-cm gear and the other station with 13.6-cm gear. The station fished twice and the station missed by a given mesh size varied with the random fishing schedule. This discontinuity was the result of time and fiscal restraints but was consistent with past years.

The 20.3-cm and 13.6-cm mesh gillnets were 50 fathoms in length and approximately 6.7 m and 5.8 m deep, respectively. The webbing was manufactured by Nagura Net Company[5] and hung at a 2:1 ratio. The 20.3-cm mesh webbing was made of 225d #24 twine and was 35 meshes deep by 105 fathoms long; the color code was NG80 (light green). The 13.6-cm webbing was made of 225d #18 twine and was 45 meshes deep by 105 fathoms long; the color code was NG45 (light green).

By 15 July the chinook salmon migration in the lower Kuskokwim River was essentially over, so use of the larger, 20.3-cm-mesh nets was discontinued for the remainder of the season. Until 1990 four drifts continued to be conducted at the three stations each tide even though only the 13.6-cm-mesh gillnet was in use after 15 July. The random fishing schedule was used to determine the drift sequence and the station that received the duplicate drift. Results of the duplicated drifts were then averaged. Molyneaux (1991), however, found that the duplicated fourth drift was unnecessary. It was therefore discontinued in 1990 in favor of fishing each of the three stations once using a modified fishing schedule (Table 1).

The catch for each drift was tallied by species and by station. Weather conditions, water temperature, and water clarity data were also recorded during the first drift of each tide. At the end of each series of drifts the catch was sold to a local processor or donated to individuals who desired the fish for personal use. The data were recorded in the office log and entered into a computer program for analysis.

Test-Fish Index

The actual salmon catch for each drift was converted to CPUE to enhance the comparability of catch results. This was accomplished by converting differences in net length and mean fishing time of each drift to the number of fish caught by 180 m (100 fathoms) of net fished for 60 min. This standard net length and fishing time is used in many gillnet test fisheries conducted by ADF&G throughout Alaska (Meacham 1978; Waltemeyer 1983). Each drift CPUE (I) was computed as:

[5] Use of a company's name does not constitute endorsement.

$$I = (100 \text{ fathoms})\ (60 \text{ min})\ C\ (L\ T)^{-1}\ , \tag{1}$$

where C is the catch of each species in numbers of fish, L is the length of net used in fathoms, and T is the mean fishing time in minutes.

For each tide the drift CPUEs were averaged over all stations to calculate a mean tidal CPUE index (I_i) for each species:

$$I_i = n^{-1} \left(\sum_{j=1}^{n} I_{i,j}\right)\ , \tag{2}$$

where $I_{i,j}$ is the drift CPUE index from drift j on tide i, and n is the number of applicable drifts. For chinook salmon the mean was calculated using the drift CPUEs from both 20.3-cm and 13.6-cm nets with each drift and mesh size weighted equally ($n = 4$). In contrast, only catches in the 13.6-cm-mesh nets were used to calculate mean tidal CPUEs of sockeye, chum, and coho salmon ($n = 2$ through 15 July and $n = 3$ after 15 July).

If a tide was not fished by the test-fish crew, an estimated mean tidal CPUE was calculated using one of two methods. First, if the tide was missed because of a commercial fishing period, the mean tidal CPUE for the missed tide was assumed to be equal to the CPUE of the next tide fished. Second, if the missed tide was not affected by commercial openings, then the estimate was assumed to be an average of the preceding and following mean tidal CPUEs.

Actual and estimated mean tidal CPUEs were summed by species throughout the season to generate a cumulative CPUE index (I) for the season:

$$I = \sum_{i=1}^{n} I_i\ , \tag{3}$$

where n is the total number of tides that occurred throughout the season.

Migratory Timing

The mean date of migration (t) as defined by Mundy (1982) was calculated for each species:

$$t = \sum_{i=1}^{n} (t_i\ p_i)\ , \tag{4}$$

where t_i is the coded date of migration and p_i is the daily proportion of mean tidal CPUE indices observed on day i. The daily proportion of mean tidal CPUE indices was also calculated,

$$p_i = I_i \, I^{-1} \, , \tag{5}$$

as was the variance about the mean date of migration (s_t^2), or

$$s_t^{\,2} = \sum_{i=1}^{n} (t_i - t)^2 \, P_i \, . \tag{6}$$

Commercial Harvest Statistics

A gear restriction that limits commercial gillnet mesh sizes to 15.2 cm (6.0 in) or smaller has been imposed on the Kuskokwim area since 1985 (Francisco et al. 1992). Because the comparability of catch statistics was affected by that change, catch comparisons for sockeye and chum salmon were limited to the period from 1985 to the present. Coho salmon were essentially unaffected by the gear restriction because the preferred gear type during the coho fishery has traditionally been 15.2 cm or smaller. Chinook salmon catch statistics, however, were affected and further influenced by changes in management strategy in 1987; therefore, only commercial catch data for chinook salmon since 1987 will be used in this report.

The typical commercial fishing period in Districts 1 and 2 is 6 h, but there has been a recent trend toward allowing occasional 8-h fishing periods (Francisco et al. 1992). This change in management strategy influences the comparability of historical commercial CPUE data because the efficiency of an 8-h period is generally thought to be lower than a 6-h period. Furthermore, not all fishermen use the extra time in an 8-h period. The problem is probably most acute in District 2 where there are generally fewer than 20 boats participating in the commercial fishery. Unfortunately, there is no agreed upon method to adjust for these factors. Commercial CPUE data are useful statistics, but some caution should be exercised in their interpretation.

RESULTS AND DISCUSSION

The first salmon caught with the standard Bethel test-fish gear was on 5 June, four days after the test fishery began (Table 2). The 569 drifts made during the season provided a total catch of 117 chinook, 234 sockeye, 573 chum, and 931 coho salmon (Appendix A). Chinook, sockeye, and chum salmon migrations ended long before the test fishery was concluded, but small numbers of coho salmon did persist in the catches through the end of the program.

The average water temperature at the test-fish site in 1991 was the same as the 1984–1990 average of 13°C (Table 3). The seasonal pattern of daily water temperatures was also similar to historical averages.

The 1991 average water clarity of 0.43 m was a little better than the 1984–1990 average of 0.34 m (Table 3). The general pattern of above-average clarity held true throughout the season, except for early July when clarity fell below more typical levels.

Chinook Salmon

Mean Tidal Test-Fish Index

The 1991 cumulative mean tidal test-fish index for chinook salmon was 172 (Table 2). This was the second lowest chinook index on record and 48% of the 1984–1990 average (Appendix B). Results from the commercial fishery and escapement projects generally supported findings from the test fishery in that they were all below average (Francisco et al. 1992). District 1 commercial CPUE for chinook salmon was 78% of the 1988–1990 average, and the commercial CPUE in District 2 was 30% of average (Appendix C). The District 2 CPUE was one of the lowest in recent history and below most years when escapement objectives were achieved. Kogrukluk River weir was 73% of escapement objective, although the drainage-wide chinook salmon index was 95% of objective (Appendix B). The drainage-wide chinook index possibly reflects the benefit of management actions taken to restrict the commercial fishery for chum salmon conservation. By default chinook salmon may have benefited from these restrictions; however, the actions occurred late in the chinook salmon run which may have limited any potential benefit to some subset of stocks.

The temporal pattern of chinook salmon abundance in the test fishery evolved in a way that forewarned of an escapement concern for chinook salmon. Throughout the season the cumulative chinook index was the second lowest on record (Table 4). Furthermore, the cumulative index was consistently below years when escapement objectives where achieved and within the range of years when escapement objectives were not achieved.

Since 1987 the abundance of chinook salmon in the Kuskokwim River has generally been improving. The drop in abundance in 1991 was unexpected. The cause for the apparent decline in chinook abundance is unknown; however, coincidental to this decline is a record-high subsistence catch that was 38% above the 1981–1990 average (Francisco et al. 1992).

Temporal Distribution

Chinook salmon were caught in the Bethel test fishery from 5 June to 19 July (Table 2). Most chinook salmon were caught between 18 June and 4 July (Figure 5). The mean and median dates of migration were both 25 June, 1 d day later than the 1984–1990 average (Appendix D).

The peak chinook salmon catch in the test fishery occurred on tide 54, 29 June (Table 2; Figure 5). Another comparable pulse of abundance peaked on tide 39. These pulses appeared to be independent of the commercial fishery. Other factors possibly influencing the temporal abundance are tide, changes in weather patterns, and subsistence harvest patterns.

Spatial Distribution

The proportions of chinook salmon in stations I, II, and III were 63%, 17%, and 20%, respectively (Table 5). This distribution is comparable with the 1984–1990 average of 53%, 19%, and 28%.

Gear Selection

Chinook salmon were caught in both the 20.3-cm- and 13.6-cm-mesh gillnets (Table 6). The larger gear accounted for 51% of the catch which is greater than the 1984–1990 average of 41.1%.

Sockeye Salmon

Mean Tidal Test-Fish Index

The cumulative mean tidal test-fish index for sockeye salmon in 1991 was 581 (Table 2). This was the second lowest sockeye index on record and 37% of the 1984–1990 average (Appendix B). Throughout the season the cumulative index was one of the lowest on record (Table 7). Commercial CPUE for the June and July sockeye salmon harvest was also below average (Francisco et al. 1992). District 1 commercial CPUE was the third lowest since 1985 and 84% of the 1985–1990 average; District 2 commercial CPUE was the second lowest since 1985 and 59% of the 1985–1990 average (Appendix E). Escapement concerns for chum salmon prompted commercial fishery restrictions that appeared to benefit sockeye salmon escapement. Sockeye escapement through the Kogrukluk River weir was the best on record and well above the objective (Appendix B). Although the Kogrukluk River is not a major sockeye system and probably not a reliable index of sockeye escapement for the Kuskokwim drainage, it is the only system in the Kuskokwim River drainage with an historical database for sockeye escapement.

Temporal Distribution

Sockeye salmon were caught in the Bethel test fishery from 13 June to 23 July (Table 2). Most sockeye salmon were caught between 18 June and 9 July (Figure 6). The mean and median dates of migration were 28 and 29 June, 2 d and 3 d later than the 1984–1990 average (Appendix D).

The peak catch of sockeye salmon in the test fishery occurred on tide 62 (3 July) and was flanked by relatively high abundance (Table 2; Figure 6). Approximately two other pulses of abundance occurred

in the test fishery. These peaked on tides 39 (22 June) and 51 (28 June). The peak on tide 39 was comparable in magnitude to the tide 62 peak. The pulses do not appear to be artifacts of commercial fishing activity, although the pattern does depict the impact of commercial fishing, as noted by depressed test-fishing indices following commercial fishing periods. Factors possibly influencing the temporal abundance are tide and changes in weather and subsistence harvest patterns.

Spatial Distribution

The proportions of sockeye salmon in stations I, II, and III were 61%, 26%, and 13%, respectively (Table 5). This distribution is comparable with the 1984–1990 average of 55%, 26%, and 19%.

Chum Salmon

Mean Tidal Test-Fish Index

The test-fish index for chum salmon passage in 1991 was 1,250 (Table 2). This was the lowest chum index on record and 38% of the 1984–1990 average (Appendix B). Inseason confidence in the test-fish index was reinforced by commercial catch statistics from District 1 (Francisco et al. 1992). For June and July, District 1 commercial CPUEs for chum salmon were among the lowest on record — 63% of the 1985–1990 average — and well below years when escapement objectives were achieved (Appendix F). Following the second commercial fishing period the number of days between commercial fishing periods was increased an additional 1 to 2 d to provide for more escapement. As a result, the commercial CPUE for chum salmon in District 2 improved to a level 5% above the 1985–1990 average and within the range of years when escapement objectives were achieved.

The timely management response to the weak run assessment appeared to be effective in addressing escapement concerns (Francisco et al. 1992). Estimated chum salmon escapement for the Aniak River was 13% over the objective and escapement through the Kogrukluk River weir was 81% of the objective (Appendix B). The Aniak drainage possibly benefited more from the remedial action imposed on the fishing schedule than did the Kogrukluk drainage because the Aniak chum salmon stock is generally thought to enter the Kuskokwim River later than the Kogrukluk stock. However, the migration timing of the two stocks probably overlaps considerably. This hypothesis of a temporal difference in the migration timing of salmon stocks in the Kuskokwim drainage has not been verified; nevertheless, it is a working assumption considered in fishery management decisions.

The cumulative test-fish index was at or near a record low level from the very beginning of the season and continued at a record low level throughout the season (Table 8). With this in mind, the management actions taken could possibly have been invoked earlier. In turn, that may have better benefited the Kogrukluk River chum salmon stock. A more thorough assessment is not possible because stock composition for the Kuskokwim River fishery has not been examined. At the time, however, staff agreed that only a small proportion of the chum salmon run had yet entered the river. Although escapement

concerns for chum salmon were already well established, sockeye salmon appeared to be abundant. To maximize the sockeye harvest and still minimize the impact to chum salmon, a second commercial fishing period was set for 4 d after the first period. In retrospect, the timing of that second commercial fishing period may have had a disproportionately high impact on Kogrukluk River chum salmon stocks and any other stocks indexed by that project. In the future this can possibly be avoided by putting more emphasis on Kuskokwim River stock management, to the extent possible.

Temporal Distribution

Chum salmon were observed in the Bethel test fishery from 12 June to 18 August (Table 2). Most chum salmon were caught between 27 June and 29 July (Figure 7). The mean and median dates of migration were 12 and 11 July; both dates are 9 d later than the 1984–1990 average (Appendix D). The peak chum salmon catch in the test fishery occurred on tide 60, 2 July, but the period of abundance was not sustained (Table 2; Figure 7). Several smaller pulses of abundance occurred, but their resolution is confounded by the influence of commercial fishing periods. Peaks did occur on tides 75, 89, 97, and 103.

Rather than late entry of fish into the river, the lateness of the chum run was probably caused by a low abundance of earlier running stocks and a high abundance of later running stocks. This is reinforced by the migration timing of other species, which were near average (Appendix D).

Spatial Distribution

The proportions of chum salmon for stations I, II, and III were 56%, 39%, and 5%, respectively (Table 5). This distribution was more skewed than the 1984–1990 averages of 47%, 32%, and 21%, and chum salmon catches at station III were the lowest on record. No other year has had a distribution resembling that of 1991; the reason for the difference is unknown.

Coho Salmon

Mean Tidal Test-Fish Index

The test-fish index for coho salmon passage in 1991 was 1,647 (Table 2). This was the lowest coho index on record, 43% below the 1984–1990 average (Appendix B). Other indicators of coho salmon abundance generally supported these findings (Francisco et al. 1992). For example, the District 2 commercial CPUE of 18.87 for August was 58% below average. The District 2 commercial CPUE for August has typically averaged 37 or greater in years when the escapement objective at the Kogrukluk River weir was achieved. The District 1 commercial CPUE of 15.19 for August was very near the 1984–1990 average of 15.25, but in many of these years the coho escapement objective was not achieved (Appendix G).

Following the fifth commercial coho fishing period of the season, management staff acted to improve escapement by increasing the number of days between commercial fishing periods similar to those actions followed for chum salmon. However, as gauged by the test fishery, 73% of the coho run had passed by that date; consequently, the remedial action had minimal impact on improving escapement. Escapement through the Kogrukluk River weir, the only established coho escapement project on the Kuskokwim River, was 40% of its 25,000-fish objective (Appendix B).

Escapement concerns were apparent throughout the coho season. By 1 August apprehension regarding the coho run had already developed because the cumulative Bethel test-fish index fell well below levels when escapement objectives were achieved (Table 9). For the first half of the season the cumulative index was consistently one of the lowest on record. By 14 August the 1991 cumulative index had fallen below all other years. Throughout the remainder of the season the index never showed any sign of recovery. Although commercial CPUEs for District 1 were not alarming, the CPUEs for District 2 were some of the lowest on record (Appendix G). Not until after the 6-d closure, which preceded the last commercial fishing period on 26 August, was the target commercial CPUE of 37 for District 2 ever approached.

Throughout the coho season corrective measures were delayed for a variety of reasons. At times there was low confidence in the test fishery, and staff and the public questioned the reliability of the Kogrukluk River weir as an index of coho escapement for the entire Kuskokwim River drainage. In addition, some thought that the timing of the coho run would be late, similar to what seemingly happened with the chum salmon run. Finally, in late August spokespersons representing subsistence users and sport fishermen from the middle and upper Kuskokwim drainage began to voice strong concern over the low coho abundance in their local areas. The subsistence concern provided the final impetus for more restrictive actions to improve escapements, but these actions came too late.

Temporal Distribution

Coho salmon were caught in the Bethel test fishery from 19 July to 30 August (Table 2). Most coho salmon were caught between 30 July and 26 August (Figure 8). The mean and median dates of migration were 10 and 11 August; the mean date was 1 d earlier than the 1984–1985 average and the median date was 1 d later than the average (Appendix D).

The peak test-fish catch for coho salmon occurred on tide 138, 12 August, but the period of abundance was brief (Table 2; Figure 8). Three smaller pulses of abundance occurred in the test fishery on tides 115 (31 July), 124 (4 August), and 149 (18 August). As in most instances these pulses appeared to be influenced by commercial fishing periods, as noted by depressed test-fishing indexes following commercial fishing periods.

Spatial Distribution

The proportion of coho salmon at stations I, II, and III were 44%, 40%, and 16%, respectively (Table 5). This distribution is different from the 1984–1990 averages of 53%, 24%, and 23% but within the range of past years.

CONCLUSIONS AND RECOMMENDATIONS

The Bethel test fishery performed well as an index of salmon abundance in 1991. The test fishery did forewarn of escapement concerns for chinook, chum, and coho salmon in a timely manner, and the warnings were generally corroborated by commercial catch CPUE statistics from District 2 and results from escapement projects. Although the test fishery did not detect the sockeye abundance at the Kogrukluk River weir, this abundance is likely a manifestation of the fishing restrictions invoked to protect chum salmon.

Although the test fishery has not always performed as reliably as it did in 1991, it should be possible to develop minimum guidelines from historical test-fish data that will help managers better approach escapement objectives while maximizing harvest. Two goals for the Bethel test-fish program for the 1992 season will be to develop such guidelines for each species and to investigate the reason(s) why the test fishery fails to perform well in some years.

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Table 1. The drift schedule used to determine the sequence (#) of stations and mesh sizes to be fished during each tidal drift series of the Bethel test fishery from 2 June through 15 July (A) and 16 July through 31 August (B).

(A)

Schedule Number	Mesh Size (cm) and (Sequence) Station: 1	2	3
1	20.3 (1)		20.3 (2)
		13.6 (3)	13.6 (4)
2	20.3 (1)	20.3 (2)	
	13.6 (4)		13.6 (3)
3		20.3 (1)	20.3 (2)
	13.6 (3)	13.6 (4)	
4	20.3 (1)	20.3 (2)	
		13.6 (4)	13.6 (3)
5		20.3 (1)	20.3 (2)
	13.6 (3)		13.6 (4)
6	20.3 (1)		20.3 (2)
	13.6 (4)	13.6 (3)	

(B)

Schedule Number	Mesh Size (cm) and (Sequence) Station: 1	2	3
1	13.6 (1)	13.6 (2)	13.6 (3)
2	13.6 (3)	13.6 (1)	13.6 (2)
3	13.6 (2)	13.6 (3)	13.6 (1)
4	13.6 (1)	13.6 (3)	13.6 (2)
5	13.6 (2)	13.6 (1)	13.6 (3)
6	13.6 (3)	13.6 (2)	13.6 (1)

Table 2. Catch and mean tidal CPUE for the 1991 Bethel test fishery.

Date	Tide No.	Chinook[a] Catch	Chinook[a] CPUE	Sockeye[b] Catch	Sockeye[b] CPUE	Chum[b] Catch	Chum[b] CPUE	Coho[b] Catch	Coho[b] CPUE
06/02	1	0	0.0	0	0.0	0	0.0	0	0.0
06/02	2 [c]		0.0		0.0		0.0		0.0
06/03	3	0	0.0	0	0.0	0	0.0	0	0.0
06/03	4 [c]		0.0		0.0		0.0		0.0
06/04	5	0	0.0	0	0.0	0	0.0	0	0.0
06/04	6 [c]		0.0		0.0		0.0		0.0
06/05	7	0	0.0	0	0.0	0	0.0	0	0.0
06/05	8	1	1.2	0	0.0	0	0.0	0	0.0
06/06	9	2	2.5	0	0.0	0	0.0	0	0.0
06/07	10	0	0.0	0	0.0	0	0.0	0	0.0
06/07	11	4	5.9	0	0.0	0	0.0	0	0.0
06/08	12	1	1.8	0	0.0	0	0.0	0	0.0
06/08	13	0	0.0	0	0.0	0	0.0	0	0.0
06/09	14	0	0.0	0	0.0	0	0.0	0	0.0
06/09	15	1	1.3	0	0.0	0	0.0	0	0.0
06/10	16	0	0.0	0	0.0	0	0.0	0	0.0
06/10	17	0	0.0	0	0.0	0	0.0	0	0.0
06/11	18	0	0.0	0	0.0	0	0.0	0	0.0
06/11	19	2	2.9	0	0.0	0	0.0	0	0.0
06/12	20	0	0.0	0	0.0	1	3.0	0	0.0
06/12	21	0	0.0	0	0.0	0	0.0	0	0.0
06/13	22	0	0.0	0	0.0	0	0.0	0	0.0
06/13	23	1	1.6	1	2.9	0	0.0	0	0.0
06/14	24	0	0.0	0	0.0	2	6.0	0	0.0
06/14	25	1	1.5	1	3.1	0	0.0	0	0.0
06/15	26	0	0.0	1	2.7	0	0.0	0	0.0
06/15	27	1	1.4	0	0.0	0	0.0	0	0.0
06/16	28 [c]		1.4		0.0		0.0		0.0
06/16	29	1	1.4	0	0.0	0	0.0	0	0.0
06/17	30	1	1.4	1	2.7	0	0.0	0	0.0
06/17	31	1	1.5	3	9.2	0	0.0	0	0.0
06/18	32	1	1.1	11	24.3	0	0.0	0	0.0
06/18	33	8	10.8	10	26.4	0	0.0	0	0.0
06/19	34	4	5.7	4	11.4	0	0.0	0	0.0
06/20	35	2	2.5	14	30.2	5	10.5	0	0.0
06/20	[d]								
06/20	36	9	12.9	3	8.6	5	14.8	0	0.0
06/21	37	0	0.0	1	3.1	0	0.0	0	0.0
06/21	38	4	5.6	2	5.5	1	2.7	0	0.0
06/22	39	3	4.0	15	43.3	1	3.0	0	0.0
06/22	40	0	0.0	0	0.0	2	5.7	0	0.0
06/23	41	2	2.6	6	16.7	4	11.2	0	0.0
06/23	42	2	2.9	0	0.0	1	3.1	0	0.0
06/24	43	2	3.0	1	3.1	1	3.1	0	0.0
06/24	44 [c]		2.8		2.6		2.6		0.0
06/25	45	3	4.4	2	5.9	2	5.9	0	0.0
06/25	46	2	2.8	1	2.6	1	2.6	0	0.0
06/26	47	1	1.4	2	5.7	5	14.3	0	0.0
06/26	48	2	2.9	0	0.0	6	17.3	0	0.0
06/27	49	1	1.5	8	20.9	6	15.0	0	0.0
06/27	50	0	0.0	0	0.0	17	42.5	0	0.0
06/28	51	2	2.5	12	30.4	12	30.4	0	0.0
06/28	52	3	4.1	3	8.2	7	19.1	0	0.0
06/29	53	2	2.9	7	20.0	9	25.7	0	0.0
06/29	54	10	13.5	2	5.3	14	38.1	0	0.0
06/30	55	2	2.9	2	5.9	0	0.0	0	0.0
06/30	56	4	5.9	5	13.8	3	8.2	0	0.0
07/01	57	2	2.3	12	28.3	13	30.0	0	0.0
07/01	[d]								
07/01	58	4	6.2	0	0.0	0	0.0	0	0.0
07/02	59	1	1.5	9	25.1	1	2.7	0	0.0
07/02	60	5	6.4	4	9.9	37	88.2	0	0.0
07/03	61	2	2.9	3	8.4	0	0.0	0	0.0
07/03	62	3	3.3	21	53.7	13	21.7	0	0.0

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Table 2. (page 2 of 3)

Date	Tide No.	Chinook[a] Catch	Chinook[a] CPUE	Sockeye[b] Catch	Sockeye[b] CPUE	Chum[b] Catch	Chum[b] CPUE	Coho[b] Catch	Coho[b] CPUE
07/04	63	1	1.1	12	27.4	12	27.4	0	0.0
07/04	64	3	4.4	3	8.6	2	5.9	0	0.0
07/05	65	0	0.0	3	8.7	0	0.0	0	0.0
07/05	66	1	1.4	14	29.5	3	5.7	0	0.0
07/06	67 •		1.7		6.7		0.0		0.0
07/07	68	1	1.4	0	0.0	4	12.0	0	0.0
07/07	69	1	1.7	2	6.7	0	0.0	0	0.0
07/08	70	0	0.0	0	0.0	3	8.6	0	0.0
07/08	71	1	1.5	0	0.0	0	0.0	0	0.0
07/09	72	0	0.0	8	18.8	12	28.2	0	0.0
07/09	73	0	0.0	3	8.4	11	31.6	0	0.0
07/10	74	0	0.0	0	0.0	0	0.0	0	0.0
07/10	75	1	1.5	2	5.8	17	46.4	0	0.0
07/11	76	0	0.0	1	2.9	9	25.7	0	0.0
07/11	77	0	0.0	0	0.0	0	0.0	0	0.0
07/12	78	0	0.0	1	2.9	6	17.6	0	0.0
07/12	79	0	0.0	0	0.0	9	25.7	0	0.0
07/13	80	1	1.5	1	2.9	5	14.3	0	0.0
07/13	[d]								
07/13	81	0	0.0	0	0.0	2	6.9	0	0.0
07/14	82	1	1.3	1	2.7	8	21.3	0	0.0
07/14	83	0	0.0	0	0.0	2	6.2	0	0.0
07/15	84	1	1.4	1	2.8	6	16.7	0	0.0
07/15	85	0	0.0	0	0.0	1	3.0	0	0.0
07/16	86	0	0.0	0	0.0	2	4.1	0	0.0
07/16	87	1	2.0	0	0.0	4	8.0	0	0.0
07/17	88	0	0.0	1	2.0	8	15.6	0	0.0
07/18	89	0	0.0	0	0.0	26	45.0	0	0.0
07/18	90 •		2.0		0.0		5.9		1.8
07/19	91	0	0.0	0	0.0	5	10.1	0	0.0
07/19	92	1	2.0	0	0.0	3	5.9	1	1.8
07/20	93	0	0.0	0	0.0	6	11.8	2	3.9
07/20	94	0	0.0	0	0.0	2	4.1	1	2.0
07/21	95	0	0.0	0	0.0	6	11.8	0	0.0
07/21	96	0	0.0	0	0.0	16	28.6	4	7.3
07/22	97	0	0.0	1	1.8	22	38.6	2	3.5
07/22	98 •		0.0		0.0		18.5		0.0
07/23	99	0	0.0	1	2.1	7	14.1	3	6.1
07/23	100	0	0.0	0	0.0	10	18.5	0	0.0
07/24	101	0	0.0	0	0.0	6	11.8	2	4.0
07/24	102	0	0.0	0	0.0	0	0.0	0	0.0
07/25	103	0	0.0	0	0.0	26	45.6	4	7.4
07/25	[d]								
07/25	104	0	0.0	0	0.0	5	10.0	0	0.0
07/26	105	0	0.0	0	0.0	2	4.0	1	2.0
07/26	106	0	0.0	0	0.0	2	4.0	0	0.0
07/27	107	0	0.0	0	0.0	15	28.9	9	17.6
07/27	108	0	0.0	0	0.0	11	20.3	3	5.5
07/28	109	0	0.0	0	0.0	8	12.3	19	30.1
07/28	110	0	0.0	0	0.0	3	6.0	2	4.0
07/29	111	0	0.0	0	0.0	16	29.8	19	35.6
07/29	[d]								
07/29	112	0	0.0	0	0.0	3	5.8	3	6.0
07/30	113	0	0.0	0	0.0	3	5.9	22	42.8
07/30	114	0	0.0	0	0.0	4	7.6	15	28.3
07/31	115	0	0.0	0	0.0	9	16.2	26	48.1
07/31	116	0	0.0	0	0.0	4	7.9	8	15.4
08/01	117	0	0.0	0	0.0	4	7.5	14	26.8
08/01	[d]								
08/01	118	0	0.0	0	0.0	0	0.0	8	15.6
08/02	119	0	0.0	0	0.0	2	4.2	5	10.5
08/02	120	0	0.0	0	0.0	1	1.8	7	13.0
08/03	121	0	0.0	0	0.0	3	5.3	10	19.3
08/03	122	0	0.0	0	0.0	4	6.2	62	98.4
08/04	123	0	0.0	0	0.0	1	2.0	7	13.9
08/04	124	0	0.0	0	0.0	5	7.9	72	110.5

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Table 2. (page 3 of 3)

Date	Tide No.	Chinook[a] Catch	Chinook[a] CPUE	Sockeye[b] Catch	Sockeye[b] CPUE	Chum[b] Catch	Chum[b] CPUE	Coho[b] Catch	Coho[b] CPUE
08/05	125 [e]		0.0		0.0		0.0		9.8
08/06	126	0	0.0	0	0.0	1	2.0	12	22.1
08/06	127	0	0.0	0	0.0	0	0.0	5	9.8
08/07	128	0	0.0	0	0.0	0	0.0	9	16.3
08/07	129	0	0.0	0	0.0	1	1.9	2	3.8
08/08	130	0	0.0	0	0.0	3	5.2	30	49.8
08/08	131 [e]		0.0		0.0		0.0		14.0
08/09	132	0	0.0	0	0.0	1	1.9	15	28.5
08/09	133	0	0.0	0	0.0	0	0.0	7	14.0
08/10	134	0	0.0	0	0.0	1	1.7	21	36.8
08/10	135	0	0.0	0	0.0	1	1.5	3	5.4
08/11	136	0	0.0	0	0.0	2	3.7	14	26.6
08/11	137	0	0.0	0	0.0	0	0.0	4	8.0
08/12	138	0	0.0	0	0.0	2	2.7	170	239.6
08/12	[d]								
08/12	139	0	0.0	0	0.0	0	0.0	4	8.0
08/13	140	0	0.0	0	0.0	1	1.7	38	70.4
08/13	141	0	0.0	0	0.0	0	0.0	11	20.6
08/14	142	0	0.0	0	0.0	0	0.0	19	33.8
08/14	[d]								
08/14	143	0	0.0	0	0.0	0	0.0	3	6.0
08/15	144	0	0.0	0	0.0	0	0.0	0	0.0
08/15	145	0	0.0	0	0.0	1	1.9	19	36.2
08/16	146	0	0.0	0	0.0	0	0.0	0	0.0
08/16	147	0	0.0	0	0.0	0	0.0	10	19.6
08/17	148	0	0.0	0	0.0	1	1.9	13	25.1
08/18	149	0	0.0	0	0.0	0	0.0	27	48.3
08/18	150	0	0.0	0	0.0	1	2.0	20	39.2
08/19	151	0	0.0	0	0.0	0	0.0	12	24.1
08/19	152 [e]		0.0		0.0		0.0		11.0
08/20	153	0	0.0	0	0.0	0	0.0	8	15.4
08/20	154	0	0.0	0	0.0	0	0.0	7	11.0
08/21	155	0	0.0	0	0.0	0	0.0	18	27.1
08/21	156	0	0.0	0	0.0	0	0.0	8	10.8
08/22	157	0	0.0	0	0.0	0	0.0	9	14.3
08/22	158	0	0.0	0	0.0	0	0.0	3	6.0
08/23	159	0	0.0	0	0.0	0	0.0	5	9.8
08/23	160	0	0.0	0	0.0	0	0.0	0	0.0
08/24	161	0	0.0	0	0.0	0	0.0	7	13.7
08/24	162	0	0.0	0	0.0	0	0.0	6	12.2
08/25	163	0	0.0	0	0.0	0	0.0	3	5.9
08/25	164	0	0.0	0	0.0	0	0.0	4	8.0
08/26	165	0	0.0	0	0.0	0	0.0	22	42.2
08/26	[d]								
08/26	166	0	0.0	0	0.0	0	0.0	0	0.0
08/27	167	0	0.0	0	0.0	0	0.0	1	2.0
08/27	168	0	0.0	0	0.0	0	0.0	8	15.4
08/28	169	0	0.0	0	0.0	0	0.0	4	8.1
08/28	170	0	0.0	0	0.0	0	0.0	5	9.8
08/29	171	0	0.0	0	0.0	0	0.0	8	16.1
08/29	172	0	0.0	0	0.0	0	0.0	1	2.0
08/30	173	0	0.0	0	0.0	0	0.0	1	2.0
08/30	174	0	0.0	0	0.0	0	0.0	4	7.4
08/31	175	0	0.0	0	0.0	0	0.0	0	0.0
Totals		117	172.0	222	580.6	551	1250.3	931	1647.2

[a] Includes fish caught in 13.6 cm (5–3/8 in) and 20.3 cm (8 in) mesh gillnets.

[b] Includes fish caught in 13.6 cm (5–3/8 in) mesh gillnet only

[c] Test fish data was not collected for this tide for reasons other than the occurence of a commercial fishing period; CPUE is estimated by extrapolating between the previous and following mean tidal CPUEs.

[d] Commercial fishing period occurred between high tides.

[e] Test fish data was not collected for this tide because of the co–occurence of a commercial fishing period CPUE is estimated to be equal to the tide occuring approximately 25–h later.

Table 3. Daily water temperature and clarity at the Bethel test-fishing site, 1984 – 1991.

Date	Water Temperature (°C)									Secchi Reading (m)								
	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–90	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–90
05/31	11								11									
06/01	10						12		11						0.20	0.70		0.45
06/02	11				9		12	9	11					0.20	0.50	0.30	0.50	0.33
06/03	11	7			9		12	9	10		0.10			0.30	0.30		0.50	0.23
06/04	13	7		14	10	9	13	9	11		0.10		0.70	0.20	0.25	0.50	0.55	0.35
06/05	13	7	7	16	10	9	12	10	11		0.10	0.45	0.70	0.30	0.40	0.50	0.50	0.41
06/06	13	8		16	10	9	13	11	12		0.20	0.35	0.60	0.30	0.30	0.60	0.60	0.39
06/07	12	8	7	16	11	9	12	11	11		0.20	0.50	0.70	0.35	0.30	0.30	0.60	0.39
06/08	12	8	7	15	10	9		11	10		0.20	0.30	0.70	0.30	0.35	0.30	0.55	0.36
06/09	13	9	8	16	10	9		12	11	1.00	0.20	0.45	0.70	0.40	0.30	0.30	0.60	0.48
06/10	13	9	8	14	11	9		12	11	0.70	0.20	0.35	0.60	0.40	0.40	0.50	0.60	0.45
06/11	15	10	8	14	11	10		13	11	0.70	0.30	0.35	0.70	0.40	0.40	0.30	0.60	0.45
06/12			11	14	11	9		13	11	1.00		0.45	0.70	0.35	0.40	0.20	0.60	0.52
06/13	16	8	12	12	12	11		13	12		0.30	0.45	0.70	0.40	0.60	0.15	0.80	0.43
06/14	16	8	12	10	12	11		13	12	1.10	0.30	0.45	0.70	0.35	0.35	0.30	0.65	0.51
06/15	15	9	12	10	12	12		12	12	1.00	0.30	0.60	0.60	0.35	0.40	0.30	0.60	0.51
06/16	16	11	14	10	13	12	12	10	13	0.90	0.40	0.75	0.60	0.40	0.30	0.30	0.80	0.52
06/17	16	10	14	11	13	12	12	10	13	0.80	0.40	0.60	0.60	0.35	0.50		0.70	0.54
06/18	16	10	14	12	13	12	12	11	13	0.60	0.40	0.65	0.60	0.40	0.60	0.15	0.60	0.49
06/19	16	11	13	12	13	12	12	11	13	0.60	0.30	0.65	0.60	0.40	0.60	0.15	0.55	0.47
06/20	16		13	11	11	12	12	11	13	0.60		0.65	0.70	0.35	0.40	0.15	0.65	0.48
06/21	16	10	13	12	11		11	13	12	0.60	0.30	0.55		0.30		0.15	0.60	0.38
06/22	16	10	13	14		13	11	12	13	0.60	0.40	0.55			0.55	0.20	0.50	0.46
06/23	16	11		12	11	13	10	13	12	0.60	0.40			0.35	1.00	0.20	0.50	0.51
06/24	15		13	12	12	13	11	12	13	0.50	0.40	0.60	0.65	0.30	0.75	0.20	0.50	0.49
06/25	15	11	13	12	11	12	12	13	12	0.40	0.40	0.60	0.75			0.20	0.60	0.47
06/26	15	12	13	13	12	13	12	13	13	0.40	0.50	0.50	0.70	0.25	0.20	0.25	0.60	0.40
06/27	16	12	13	13	11	13	11	13	13	0.40		0.55	0.70	0.30	0.50	0.20	0.50	0.44
06/28	16		13	13	11	13	11	14	13	0.40		0.30	0.70	0.25	0.60	0.25	0.60	0.42
06/29	16	10		13	12	14	12	15	13	0.40	0.40	0.50	0.60	0.30	0.60	0.30	0.50	0.47
06/30	16		16	13	13		14	15	14	0.40		0.40	0.50	0.35			0.50	0.41
07/01	16	13	16	12	14	16	15	16	15	0.40		0.40	0.70	0.30	0.50	0.55	0.35	0.48
07/02	17	12	17	12	15	14	16	16	15	0.50	0.50	0.50	0.40	0.40	0.60	0.60	0.25	0.50
07/03	17	12	13		15		16	16	15	0.30	0.50	0.55		0.40		0.50	0.25	0.45
07/04	16			14		17	16	17	16	0.30			0.40		0.40	0.70	0.30	0.45
07/05	16	13	17	13	15	18	17	17	16	0.30	0.50	0.70	0.40	0.30	0.30	0.60	0.30	0.44
07/06	16	14	17	13	15	18	17		16	0.30	0.50	0.65	0.40	0.30	0.25	0.60	0.25	0.43
07/07	15	14	16	14	16	17	16	18	15	0.30	0.40	0.55	0.50	0.40	0.50	0.40	0.25	0.44
07/08	14	13	17	14		17	16	17	15	0.30	0.30	0.90	0.70		0.40	0.40	0.25	0.50
07/09	13	13	16		14	15	16	17	15	0.20		0.90	0.50	0.25	0.35	0.40	0.25	0.43
07/10	13	13	16	13	15	15		17	14	0.20		0.60	0.50	0.30	0.20	0.20	0.25	0.33
07/11	15	13	15	13		15		17	14	0.20	0.20	0.60	0.50			0.25	0.20	0.35
07/12	15	15	16	13	14	15	16	17	15	0.30	0.20		0.60	0.20	0.20	0.20	0.25	0.28
07/13	16	13		13	14	15	16	16	15	0.30	0.20		0.60	0.20	0.20	0.20	0.15	0.28
07/14	16	15	14	13	15		15	15	15	0.30	0.20	0.30	0.50	0.15		0.15	0.50	0.27
07/15	16	15	15	14	16	15	16	14	15	0.30	0.20	0.20	0.50	0.15	0.20	0.15	0.20	0.24
07/16	17	15	15	12	17	15	16	14	15	0.20	0.20	0.20	0.45	0.15	0.20	0.15	0.25	0.22
07/17	17	15	15	12	14	14	16	14	15	0.20	0.20	0.25	0.35	0.25	0.25	0.15	0.15	0.24
07/18	16	15	15	14	15	13	17		15	0.20	0.20	0.25		0.25	0.30	0.15		0.23
07/19	15	16		12	17	13	16	14	15	0.20	0.30		0.35	0.25	0.30	0.15	0.20	0.26
07/20	15	16			16	12	17	13	15	0.20	0.30			0.25	0.20	0.20	0.20	0.23
07/21	15		13	12	17	12	17	13	14	0.20		0.20	0.30	0.20	0.30	0.20		0.23
07/22	15	17	13	11	18	12	17	14	15	0.30	0.30	0.25	0.30	0.20	0.30	0.35	0.15	0.29
07/23	17	17	13	11	18	12	17	14	15	0.40	0.30	0.30	0.40	0.20	0.30	0.30	0.35	0.31
07/24	15	17	13	11	18	12	17	15	15	0.40	0.30	0.25	0.35	0.20	0.20	0.35	0.30	0.29
07/25	16	17	12			13	18	15	15	0.40	0.30	0.20			0.20	0.30	0.50	0.28
07/26	16	17	12		17	13	17	16	15	0.40	0.30	0.20		0.20	0.20	0.35	0.60	0.28
07/27	16	17	12	12	16		16	15	15	0.40	0.30	0.20	0.30	0.15		0.40	0.50	0.29
07/28	16		13	13	15	12	17	14	14	0.40	0.30	0.15	0.20	0.10	0.20	0.35	0.50	0.24
07/29	16	17	13	14	15	14		14	15	0.30	0.30	0.10	0.25	0.15	0.20	0.35	0.50	0.24
07/30	15	17	13	14	15	14		14	15	0.30	0.30	0.05	0.20	0.10	0.30		0.45	0.21
07/31	15	17	13		15		16	14	15	0.30	0.30		0.20	0.15		0.40	0.50	0.27
08/01	15	19	12	12	15	14	16	14	15	0.20	0.30	0.25	0.30	0.15	0.20	0.35	0.50	0.25
08/02	16	18	12		15	14	15	14	15	0.20	0.30	0.05	0.20	0.10	0.30	0.20	0.50	0.19
08/03	16	18	12		14	14	14	13	15	0.20	0.30	0.05	0.20	0.10	0.30	0.20	0.60	0.19
08/04	15	18	12		15	14	14	13	15	0.20	0.30	0.10	0.30	0.15	0.30	0.20	0.55	0.22
08/05	15	18	11		16	13	16		15	0.20	0.30	0.15	0.30	0.15	0.20	0.20		0.21
08/06		16	12		16	13	16	14	15			0.20	0.30	0.20	0.30	0.15	0.50	0.23
08/07		16	12		15	14	16	14	15		0.30	0.20	0.30	0.20		0.20	0.50	0.24

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Table 3. (page 2 of 2)

Date	Water Temperature (° C)									Secchi Reading (m)								
	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–90	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–90
08/08	16		13			14	16	14	15	0.20		0.25	0.30		0.30	0.20	0.30	0.25
08/09	16	14	13		13	14	16	13	14	0.20		0.20	0.20	0.25	0.30	0.20	0.40	0.23
08/10	15	13	11			14	16	13	14	0.10	0.30	0.25	0.15		0.30	0.25	0.30	0.23
08/11	15		12	14	12	14	16	14	14	0.20		0.25	0.15	0.25	0.30	0.30	0.35	0.24
08/12		13	12	14	12		16	14	13			0.20	0.20	0.20		0.40	0.30	0.25
08/13	15	12			12	13	16	13	14	0.10	0.20	0.25		0.20	0.20	0.40	0.25	0.23
08/14	15	12		12	11	13		14	13	0.10			0.15	0.30	0.20		0.15	0.19
08/15	15	12	11	12	11	13	16	13	13	0.10			0.20	0.20	0.20	0.50	0.20	0.24
08/16	14	11	12	12	11	14	14	13	13	0.10	0.20	0.30		0.25	0.20	0.40	0.30	0.24
08/17	14	11	12	12	11	14		13	12	0.10	0.20	0.40		0.25	0.20		0.30	0.23
08/18	14		13	12	11	13	14	13	13	0.10	0.10	0.30		0.20	0.20	0.20	0.30	0.18
08/19	16		11	16	12	13	13	13	14	0.10	0.10	0.30	0.20	0.20	0.20	0.20	0.30	0.19
08/20			13	13	12	13	13	14	13		0.10	0.35	0.30	0.25	0.15	0.15	0.40	0.22
08/21	14	11	13	16	12	13	13	14	13	0.10	0.10	0.35	0.30	0.25	0.15	0.20	0.40	0.21
08/22	13	11	13	13	12	13	13	13	13	0.10		0.30	0.45	0.20	0.20	0.30	0.45	0.26
08/23	11	10	12	14	11	12	13	13	12	0.20	0.20	0.45	0.35	0.25	0.20	0.20	0.40	0.26
08/24	12	10	12		11	13	12	13	12	0.20	0.20	0.40	0.35	0.20	0.25	0.15	0.40	0.25
08/25	11	10			11			12	11	0.20	0.20		0.35	0.30			0.50	0.26
08/26	9	10			9		12	12	10	0.20	0.30		0.40	0.40		0.10	0.50	0.28
08/27	10	11	12		9		12	12	11	0.20	0.30	0.30	0.35	0.35		0.15	0.50	0.28
08/28	9	11			10	12	12	11	11	0.20	0.30		0.40	0.45	0.30	0.10	0.50	0.29
08/29	9	11		16	11	12	12	11	12	0.10	0.30		0.45	0.40		0.25	0.40	0.30
08/30	9			15		12	12	11	12	0.10			0.35		0.35	0.15	0.45	0.24
08/31	9					12	11	11	11	0.10					0.30		0.55	0.20
09/01	9			14					12	0.10			0.35					0.23
09/02	9			14					12	0.10			0.40					0.25
09/03				13					13				0.50					0.50
09/04	9			13					11	0.20			0.45					0.33
09/05	9			13					11	0.10			0.40					0.25
09/06	9			12					11	0.10			0.50					0.30
09/07				11					11				0.45					0.45
09/08				10					10				0.50					0.50
09/09				9					9				0.55					0.55
09/10				8					8				0.45					0.45
09/11				8					8				0.45					0.45
Mean	14	13	13	13	13	13	14	13	13	0.33	0.28	0.38	0.45	0.26	0.33	0.29	0.43	0.34
Min.	9	7	7	8	9	9	10	9	8	0.10	0.10	0.05	0.15	0.10	0.15	0.10	0.15	0.11
Max	17	19	17	16	18	18	18	18	16	1.10	0.50	0.90	0.80	0.45	1.00	0.70	0.80	0.55

Table 4. Mean tidal CPUE for chinook salmon catches in the Bethel test fishery, 1984–1991. Parentheses designate years in which escapement objectives were not achieved at Kogrukluk River weir and/or the Kuskokwim River drainage index.

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	Mean 84–90
05/30	0	0							0	0															
05/31	1	0							1	0															
06/01	0	0				0	0		1	0				0	0		1	0	0	0	0	0	0	0	0
06/02	1	0			3	0	2	0	3	0			3	0	2	0	1	0	0	0	1	0	0	0	0
06/03	0	0	0		0	0	0	0	3	0	0		3	0	2	0	1	0	0	0	1	0	0	0	0
06/04	0	0	3	0	0	0	1	0	3	0	3	0	3	0	3	0	1	0	1	0	1	0	1	0	1
06/05	0	0	1	5	2	0	1	1	3	0	4	5	5	0	4	1	1	0	2	1	1	0	1	1	1
06/06	0	0	1	3	0	0	1	3	3	0	6	8	5	0	6	4	1	0	3	1	1	0	1	2	1
06/07	2	0	5	5	3	2	3	6	5	0	10	13	8	2	6	10	2	0	5	2	2	0	2	6	2
06/08	3	0	0	16	22	7	4	2	7	0	10	29	30	8	13	11	3	0	5	5	8	2	3	7	4
06/09	6	0	1	9	14	9	5	1	13	0	12	38	44	17	17	13	5	0	6	7	12	3	4	7	5
06/10	5	0	0	20	5	15	8	0	18	0	12	59	49	32	25	13	7	0	6	10	14	6	6	7	7
06/11	5	0	0	18	21	4	14	3	23	0	12	77	71	36	39	16	8	0	6	13	20	7	9	9	9
06/12	13	0	0	22	18	9	14	0	35	0	12	98	89	45	53	16	13	0	6	17	25	9	12	9	12
06/13	3	0	0	13	11	11	6	2	38	0	12	112	100	56	58	17	14	0	6	19	28	11	13	10	13
06/14	5	0	1	21	3	27	2	2	43	0	13	133	103	63	61	19	16	0	6	23	29	16	14	11	15
06/15	17	0	9	10	8	19	9	1	60	0	22	143	111	102	69	20	22	0	11	25	31	20	16	12	18
06/16	14	0	20	11	8 [a]	7	11	3	74	0	42	154	119 [a]	109	81	23	27	0	21	26	33	21	18	13	21
06/17	4	0	14	54	21	21	6	3	78	0	56	208	140	130	87	26	29	0	28	36	39	25	20	15	25
06/18	26	0	4	14 [a]	7	35	13	12	104	0	59	222 [a]	147	165	100	38	38	0	30	38	41	32	23	22	29
06/19	14	0	15	13	13	19 [a]	26	6	118	0	74	235	160	185 [a]	126	43	43	0	37	40	44	35	28	25	33
06/20	14	1 [a]	3	18	25 [a]	16	9 [a]	15 [a]	132	1 [a]	77	253	185 [a]	201	135 [a]	59 [a]	46	1	38	44	51	38	30	34	36
06/21	5	7	17	23	16	14	12	6	137	8	94	277	201	215	146	64	50	7	47	46	56	41	33	37	40
06/22	12	0	15	30	13	17	19	4	149	8	109	306	214	231	165	68	55	7	54	53	59	44	37	40	44
06/23	4	3	14	26	16	23 [a]	9	6	153	11	123	333	231	255 [a]	174	74	56	9	61	57	64	49	39	43	48
06/24	11	0 [a]	13	9 [a]	21 [a]	21	24	6 [a]	164	11 [a]	136	342 [a]	252 [a]	276	198	80 [a]	60	9	68	59	70	53	45	46	52
06/25	4 [a]	4	1	38	8	26	34 [a]	7	169 [a]	15	138	379	260	302	232 [a]	87	62	13	68	65	72	58	52	51	56
06/26	4	0	5 [a]	20	10	48 [a]	31	4	173	15	143 [a]	400	270	350 [a]	263	91	63	13	71	69	75	67	59	53	60
06/27	6	3 [a]	8	25	14	50	13	2	178	18 [a]	151	425	284	401	276	93	65	15	75	73	79	77	62	54	64
06/28	10 [a]	8	0	15	5 [a]	11	25	7	188 [a]	26	151	440	289 [a]	412	301	99	69	23	75	76	80	79	68	58	67
06/29	4	9	3	18	3	3	21 [a]	16	192	35	154	458	292	415	322 [a]	116	70	30	76	79	81	79	73	67	70
06/30	1	4	3 [a]	12 [a]	3	22 [a]	0	9	194	38	156 [a]	471 [a]	295	437 [a]	322	125	71	34	78	81	82	83	73	72	72
07/01	6	12 [a]	7	15	12	11	2	9 [a]	200	51 [a]	163	486	307	448	324	133 [a]	73	44	81	83	85	86	73	77	75
07/02	14 [a]	1	6	9	1 [a]	3	9	8	214 [a]	52	169	495	308 [a]	451	333	141	78	45	84	85	85	86	75	82	77
07/03	3	9	7 [a]	3 [a]	5	9 [a]	17	6	217	60	176 [a]	498 [a]	313	461 [a]	350	147	79	53	87	86	87	88	79	86	80
07/04	11	6 [a]	3	8	5	7	20	6	228	67 [a]	179	506	318	468	370	153	83	59	89	87	88	89	83	89	83
07/05	4 [a]	9	3	7	8 [a]	10 [a]	5 [a]	1	232 [a]	76	182	513	326 [a]	477 [a]	375 [a]	154	85	67	90	88	90	91	85	90	85
07/06	6	8	1	9	0	2	6	2 [a]	238	85	183	522	326	479	381	156 [a]	87	74	91	90	90	92	86	91	87
07/07	0	3	1 [a]	15 [a]	0	9	8	3	238	87	184 [a]	537 [a]	326	488	388	159	87	77	92	92	90	93	88	92	88
07/08	3	5	4	0	0 [a]	4 [a]	14	2	240	93	189	537	326 [a]	492 [a]	403	160	88	81	94	92	90	94	91	93	90
07/09	7 [a]	5	3	1	0	5	5 [a]	0	248 [a]	98	191	538	326	496	408 [a]	160	91	88	95	92	90	95	92	93	92
07/10	2	1	0 [a]	3	0	4	0	2	250	99	191 [a]	541	326	500	408	162	92	87	95	93	90	96	92	94	92
07/11	0	2	2	2 [a]	0 [a]	0 [a]	0	0	250	102	193	543 [a]	326 [a]	500 [a]	408	162	92	89	96	93	90	96	92	94	93
07/12	1 [a]	1	0	2	0	1	4	0	251 [a]	103	193	545	326	501	411	162	92	90	96	94	90	96	93	94	93
07/13	1	1	0	2	0	0	2	2 [a]	252	105	193	548	326	501	414	163 [a]	92	92	96	94	90	96	93	95	93
07/14	0	0	1	1	8 [a]	0 [a]	2 [a]	1	252	105	194	549	334 [a]	501 [a]	416 [a]	165	92	92	97	94	92	96	94	96	94
07/15	1	2	0	0 [a]	0	0	2	1	253	106	194	549 [a]	334	501	418	166	93	93	97	94	92	96	94	97	94
07/16	8 [a]	0	0	0	8	0	2	2	261 [a]	106	194	549	341	501	420	168	95	93	97	94	95	96	95	98	95
07/17	0	1	0	3	6	1	2	0	261	107	194	551	347	503	422	168	95	94	97	95	96	96	95	98	95
07/18	2	0	0	0	2 [a]	2 [a]	0	2 [a]	263	107	194	551	349 [a]	504 [a]	422	170 [a]	96	94	97	95	97	96	95	99	96
07/19	0	0	0	14	0	1	0	2	263	107	194	566	349	505	422	172	96	94	97	97	97	97	95	100	96
07/20	3	0	0	1 [a]	0	5	0	0	266	107	194	567 [a]	349	510	422	172	97	94	97	97	97	98	95	100	96

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Table 4. (page 2 of 2)

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	(1984)	(1985)	(1986)	(1987)	1988	1989	1990	(1991)	Mean 84-90
07/21	0	0	2	2	0[a]	1	0	0	266	107	196	569	349[a]	511	422	172	97	94	96	96	97	96	95	100	97
07/22	0	0	2	0	0	6	4	0[a]	266	107	196	569	349	518	425	172[a]	97	94	99	96	97	99	96	100	97
07/23	0	0	0	3	0	0	0	0	266	107	196	572	349	518	425	172	97	94	99	96	97	99	96	100	97
07/24	1	0	3	0	1	0	2	0	267	107	201	572	350	518	427	172	96	94	100	96	97	99	96	100	97
07/25	0	0	0	0	0[a]	0	0	0[a]	267	107	201	572	350[a]	518	427	172[a]	96	94	100	96	97	99	96	100	97
07/26	2	0	0	0	2	0	4	0	268	107	201	572	352	518	431	172	96	94	100	96	96	99	97	100	96
07/27	0	2	0	4	2	0[a]	0	0	268	109	201	577	354	518[a]	431	172	96	96	100	99	96	99	97	100	96
07/28	0	0	0	0	0[a]	0	2	0	268	109	201	577	354[a]	518	433	172	96	96	100	99	96	99	96	100	96
07/29	0	2	0	0	0	0	4	0[a]	268	111	201	577	354	518	438	172[a]	96	97	100	99	96	99	99	100	99
07/30	0[a]	0	0	0	4	0	0	0	268[a]	111	201	577	358	518	438	172	96	97	100	99	99	99	99	100	99
07/31	3	0	0[a]	0	0	0	0	0	271	111	201[a]	577	358	518	438	172	99	97	100	99	99	99	99	100	99
08/01	2	0	0	0	0[a]	0	0[a]	0[a]	273	111	201	577	358[a]	518	438[a]	172[a]	100	97	100	99	99	99	99	100	99
08/02	0[a]	0[a]	0	0	0	1	0	0	273[a]	111[a]	201	577	358	519	438	172	100	97	100	99	99	99	99	100	99
08/03	0	0	0	1	0	0[a]	0	0	273	111	201	578	358	519[a]	438	172	100	97	100	99	99	99	99	100	99
08/04	0[a]	0	0[a]	0	0[a]	0	0	0	273[a]	111	201[a]	578	358[a]	519	438	172	100	97	100	99	99	99	99	100	99
08/05	0	0[a]	0	0	0	0.	0	0[a]	273	111[a]	201	578	358	519	438	172[a]	100	97	100	99	99	99	99	100	99
08/06	0	0	0	0	0	0	2[a]	0	273	111	201	578	358	519	439[a]	172	100	97	100	99	99	99	99	100	99
08/07	0	0	0[a]	2	0	0[a]	0	0	273	111	201[a]	580	358	519[a]	439	172	100	97	100	100	99	99	99	100	99
08/08	0	2[a]	0	0[a]	0[a]	0	0	0[a]	273	113[a]	201	580[a]	358[a]	519	439	172[a]	100	99	100	100	99	99	99	100	99
08/09	0[a]	0	0	0	0	1[a]	0	0	273[a]	113	201	580	358	520[a]	439	172	100	99	100	100	99	99	99	100	99
08/10	0	0	0	0	0[a]	0	2[a]	0	273	113	201	580	358[a]	520	441[a]	172	100	99	100	100	99	99	100	100	100
08/11	0	0	0[a]	2	3	0	0	0	273	113	201[a]	582	361	520	441	172	100	99	100	100	100	99	100	100	100
08/12	0	0[a]	0	0	0[a]	0[a]	0	0[a]	273	113[a]	201	582	361[a]	520[a]	441	172[a]	100	99	100	100	100	99	100	100	100
08/13	0[a]	0	0[a]	0[a]	0	2	0[a]	0	273[a]	113	201[a]	582[a]	361	522	441[a]	172	100	99	100	100	100	100	100	100	100
08/14	0	0	0	0	0	0	0	0[a]	273	113	201	582	361	522	441	172[a]	100	99	100	100	100	100	100	100	100
08/15	0	0[a]	0[a]	0	0[a]	0[a]	2	0	273	113[a]	201[a]	582	361[a]	522[a]	443	172	100	99	100	100	100	100	100	100	100
08/16	0[a]	0	0	0	0	0	0[a]	0	273[a]	113	201	582	361	522	443[a]	172	100	99	100	100	100	100	100	100	100
08/17	0	0	0	0[a]	0	0	0	0	273	113	201	582[a]	361	522	443	172	100	99	100	100	100	100	100	100	100
08/18	0	0	0[a]	0	0[a]	0[a]	0	0	273	113	201[a]	582	361[a]	522[a]	443	172	100	99	100	100	100	100	100	100	100
08/19	0	0[a]	0	0[a]	0	0	0	0[a]	273	113[a]	201	582[a]	361	522	443	172[a]	100	99	100	100	100	100	100	100	100
08/20	0[a]	1	0	0	0[a]	2	0[a]	0	273[a]	114	201	582	361[a]	523	443[a]	172	100	100	100	100	100	100	100	100	100
08/21	0	0	0[a]	0[a]	0	0	0	0	273	114	201[a]	582[a]	361	523	443	172	100	100	100	100	100	100	100	100	100
08/22	0	0[a]	0	0	0	0	0	0	273	114[a]	201	582	361	523	443	172	100	100	100	100	100	100	100	100	100
08/23	0[a]	0	0	0	0	0[a]	0	0	273[a]	114	201	582	361	523[a]	443	172	100	100	100	100	100	100	100	100	100
08/24	0	0	0	0[a]	0	0	0	0	273	114	201	582[a]	361	523	443	172	100	100	100	100	100	100	100	100	100
08/25	0	0	0[a]	0	0	0	0	0	273	114	201[a]	582	361	523	443	172	100	100	100	100	100	100	100	100	100
08/26	0	0[a]	0	0	0	0[a]	2	0[a]	273	114[a]	201	582	361	523[a]	445	172[a]	100	100	100	100	100	100	100	100	100
08/27	0[a]	0	0	0[a]	0[a]	0	0[a]	0	273[a]	114	201	582[a]	361[a]	523	445[a]	172	100	100	100	100	100	100	100	100	100
08/28	0	0	0[a]	0	0	0	0	0	273	114	201[a]	582	361	523	445	172	100	100	100	100	100	100	100	100	100
08/29	0	0[a]		0	0	0.[a]	0	0	273	114[a]		582	361	523[a]	445	172	100	100	100	100	100	100	100	100	100
08/30	0[a]	0		0		0	0	0	273[a]	114		582		523	445	172									
08/31	0			0[a]	a	0	0	0	273			582[a]	a	523	445	172									
09/01	0		a	0		a			273		a	582		a											
09/02	0			0					273			582													
09/03	0[a]		a	0[a]					273[a]		a	582[a]													
09/04	0			0					273			582													
09/05	0			0					273			582													
09/06	0[a]			0					273[a]			582													
09/07			a	0[a]							a	582[a]													
09/08				0								582													
09/09				0								582													
09/10				0								582													
09/11				0								582													

[a] Days when commercial fishing periods occured in District 1

Table 5. Cumulative drift CPUE and percentage by station and species for the Bethel test fishery, 1984–1991.

Species	Year	Cumulative[a] Drift CPUE	Station I CPUE[a]	Station I %	Station II CPUE[a]	Station II %	Station III CPUE[a]	Station III %
Chinook	1984	928	380	41.0	159	17.1	389	41.9
	1985	399	280	70.4	47	11.9	71	17.7
	1986	584	279	47.8	165	28.2	140	24.0
	1987	2249	1022	45.4	552	24.6	675	30.0
	1988	1344	808	60.2	186	13.8	350	26.0
	1989	1872	1221	65.2	135	7.2	516	27.6
	1990	1633	701	42.9	502	30.8	431	26.4
	1991	655	413	63.0	112	17.1	130	19.9
	Mean (84–90)	1287	670	53.3	249	19.1	367	27.7
Sockeye	1984	1261	706	56.0	308	24.4	247	19.6
	1985	3210	1978	61.6	724	22.6	508	15.8
	1986	11529	6354	55.1	2417	21.0	2758	23.9
	1987	5376	2285	42.5	1391	25.9	1699	31.6
	1988	3106	1968	63.4	683	22.0	455	14.6
	1989	1724	1047	60.7	442	25.7	235	13.6
	1990	2345	1032	44.0	982	41.9	331	14.1
	1991	1217	744	61.2	320	26.3	152	12.5
	Mean (84–90)	4079	2196	54.8	993	26.2	890	19.0
Chum	1984	5048	2383	47.2	1167	23.1	1498	29.7
	1985	2785	2042	73.3	353	12.7	389	14.0
	1986	7762	3187	41.1	2792	36.0	1784	23.0
	1987	12839	4266	33.2	4259	33.2	4313	33.6
	1988	11049	5594	50.6	3320	30.1	2134	19.3
	1989	6307	3148	49.9	2078	32.9	1082	17.1
	1990	6296	1979	31.4	3634	57.7	683	10.8
	1991	3093	1746	56.5	1207	39.0	140	4.5
	Mean (84–90)	7441	3228	46.7	2515	32.2	1698	21.1
Coho	1984	8929	4792	53.7	1507	16.9	2631	29.5
	1985	4335	3212	74.1	654	15.1	470	10.8
	1986	11529	6354	55.1	2417	21.0	2758	23.9
	1987	7156	5043	70.5	531	7.4	1582	22.1
	1988	11200	5489	49.0	3898	34.8	1814	16.2
	1989	9566	3387	35.4	3389	35.4	2791	29.2
	1990	6256	2257	36.1	2329	37.2	1670	26.7
	1991	4832	2140	44.3	1915	39.6	777	16.1
	Mean (84–90)	8424	4362	53.4	2103	24.0	1959	22.6

[a] Drift CPUE is an unweighted measure which should not be confused with mean tidal CPUE; does not include estimated CPUE for tides not fished.

Table 6. Cumulative drift CPUE by year and gillnet mesh size for chinook salmon caught in the Bethel test fishery.

Year	Cumulative[a] Drift CPUE	13.6 cm mesh CPUE[a]	13.6 cm mesh %	20.3 cm mesh CPUE[a]	20.3 cm mesh %
1984	485	280	58	205	42
1985	370	195	53	175	47
1986	327	227	70	99	30
1987	2082	1391	67	691	33
1988	1220	686	56	534	44
1989	1778	1116	63	663	37
1990	1633	756	46	878	54
1991	655	320	49	336	51
Mean (84–90)	1128	664	59	464	41

[a] Does not include estimated CPUE for tides not fished. Drift CPUE is an unweighted measure which should not be confused with mean tidal CPUE.

Table 7. Mean tidal CPUE for sockeye salmon catches in the Bethel test fishery, 1984–1991.

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	1984	1985	1986	1987	1988	1989	1990	1991	1984	1985	1986	1987	1988	1989	1990	1991	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–91
05/30	0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	0	0	0	0
05/31	0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	0	0	0	0
06/01	0	0	0	0	0	0	0		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0
06/02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06/03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06/04	0	0	0	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
06/05	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
06/06	0	0	0	3	0	3	0	0	0	0	0	9	0	3	0	0	0	0	0	0	0	0	0	0	0
06/07	3	0	6	9	0	0	0	0	3	0	6	18	0	3	0	0	0	0	0	1	0	0	0	0	0
06/08	0	0	8	17	12	0	0	0	3	0	14	35	12	3	0	0	0	0	1	1	1	0	0	0	1
06/09	0	0	13	13	14	3	0	0	3	0	27	48	27	6	0	0	0	0	1	2	2	1	0	0	1
06/10	0	0	3	16	12	3	0	0	3	0	30	64	38	9	0	0	0	0	1	2	3	1	0	0	1
06/11	5	0	21	16	43	20	8	0	8	0	50	80	82	29	8	0	1	0	2	3	5	4	1	0	2
06/12	0	0	6	112	62	12	3	0	8	0	56	191	143	40	11	0	1	0	2	7	10	5	1	0	4
06/13	2	0	11	49	47	11	0	3	10	0	68	240	191	51	11	3	2	0	3	9	13	6	1	0	5
06/14	6	0	6	9	14	27	16	3	16	0	73	249	205	78	27	6	3	0	3	9	14	10	2	1	6
06/15	0	0	46	42	9	24	14	3	16	0	121	290	214	102	41	9	3	0	5	11	14	13	4	1	7
06/16	7	0	102	168	7 [a]	15	20	0	23	0	223	458	221 [a]	117	60	9	4	0	9	17	15	15	5	1	9
06/17	7	0	49	252	26	15	63	12	30	0	273	710	247	132	123	21	5	0	11	26	16	17	11	4	12
06/18	22	3	79	69 [a]	48	46	16	51	52	3	352	779 [a]	296	178	139	71	9	0	14	26	20	22	12	12	15
06/19	0	13	119	17	98	26 [a]	38	11	52	16	471	796	394	207 [a]	177	83	9	1	19	29	26	26	16	14	18
06/20	14	0 [a]	34	47	26 [a]	19	31 [a]	39 [a]	66	16 [a]	505	843	419 [a]	226	207 [a]	122 [a]	11	1	21	31	28	28	19	21	20
06/21	5	12	145	76	135	53	15	9	71	28	650	919	554	278	222	130	12	2	27	33	37	35	20	22	24
06/22	26	11	169	166	135	58	14	43	97	40	819	1085	690	336	236	173	17	2	34	39	46	42	21	30	29
06/23	0	97	63	355	117	36 [a]	77	17	97	137	882	1440	807	372 [a]	313	190	17	8	36	52	54	47	26	33	35
06/24	31	0 [a]	33	142 [a]	63 [a]	40	60	6 [a]	128	137 [a]	915	1582 [a]	869 [a]	412	374	196 [a]	22	8	37	57	58	52	34	34	38
06/25	41 [a]	135	226	49	29	83	91 [a]	9	169 [a]	272	1141	1631	898	495	464 [a]	204	29	16	47	59	60	62	42	35	45
06/26	19	128	198 [a]	62	115	26 [a]	25	6	188	400	1339 [a]	1693	1013	521 [a]	489	210	32	24	55	61	68	65	44	36	50
06/27	48	126 [a]	202	34	69	53	43	21	236	526 [a]	1541	1727	1082	574	532	231	41	32	63	63	72	72	48	40	56
06/28	20 [a]	117	138	41	42 [a]	40	90	39	256 [a]	643	1679	1768	1124 [a]	614	622	270	44	39	69	64	75	77	56	46	60
06/29	3	256	20	37	9	35	104 [a]	25	259	899	1699	1805	1133	648	726 [a]	295	45	54	70	65	76	81	65	51	65
06/30	18	150	221 [a]	164 [a]	45	40 [a]	6	20	277	1049	1920 [a]	1969 [a]	1178	688 [a]	732	315	48	63	79	71	78	86	66	54	70
07/01	34	190 [a]	15	241	91	13	24	28 [a]	311	1239 [a]	1935	2211	1269	702	756	343 [a]	54	75	79	80	85	88	68	59	75
07/02	46 [a]	54	98	63	28 [a]	11	24	35	357 [a]	1293	2032	2273	1297 [a]	713	780	378	62	78	83	82	86	89	70	65	79
07/03	24	68	85 [a]	36 [a]	32	22 [a]	65	62	381	1361	2117 [a]	2309 [a]	1329	736 [a]	845	440	66	82	87	84	89	92	76	76	82
07/04	36	33 [a]	32	124	54	1	96	36	416	1394 [a]	2149	2433	1383	737	941	476	72	84	88	88	92	92	84	82	86
07/05	35 [a]	45	42	166	45 [a]	5 [a]	22 [a]	38	451 [a]	1439	2191	2599	1428 [a]	742 [a]	963 [a]	514	78	87	90	94	95	93	86	89	89
07/06	23	56	33	12	17	3	3	7 [a]	475	1495	2224	2611	1445	745	966	521 [a]	82	90	91	95	96	93	87	90	91
07/07	24	58	74 [a]	44 [a]	11	13	23	7	498	1553	2298 [a]	2655 [a]	1456	759	988	528	86	94	94	96	97	95	89	91	93
07/08	27	3	21	6	13 [a]	15 [a]	38	0	525	1556	2319	2662	1469 [a]	774 [a]	1027	528	91	94	95	96	98	97	92	91	95
07/09	17 [a]	23	11	30	10	3	29 [a]	27	542 [a]	1579	2330	2691	1478	777	1055 [a]	555	94	95	95	98	99	97	95	96	96
07/10	2	6	2 [a]	30	5	0	14	6	545	1584	2332 [a]	2722	1483	777	1069	561	94	96	95	99	99	97	96	97	97
07/11	2	12	9	4 [a]	4 [a]	2 [a]	6	3	547	1597	2341	2726 [a]	1488 [a]	779 [a]	1076	563	94	97	96	99	99	98	97	97	97
07/12	2 [a]	6	23	3	0	5	4	3	549 [a]	1603	2365	2729	1488	784	1080	566	95	97	97	99	99	98	97	98	97
07/13	0	5	17	7	0	4	8	3 [a]	549	1607	2382	2736	1488	788	1088	569 [a]	95	97	97	99	99	99	98	98	98
07/14	1	2	13	5	3 [a]	0 [a]	6 [a]	3	550	1609	2395	2741	1491 [a]	788 [a]	1093 [a]	572	95	97	98	99	99	99	98	99	98
07/15	3	0	2	3 [a]	2	0	8	3	553	1609	2397	2744 [a]	1492	788	1102	575	95	97	98	99	99	99	99	99	98
07/16	10 [a]	9	8	0	0	8	4	0	562 [a]	1619	2404	2744	1492	795	1106	575	97	98	98	99	99	100	99	99	99
07/17	2	4	6	2	3	1	0	2	564	1622	2411	2746	1496	797	1106	577	97	98	99	100	100	100	99	99	99
07/18	5	4	3	0	2 [a]	1 [a]	0	0 [a]	569	1626	2414	2746	1498 [a]	798 [a]	1106	577 [a]	98	98	99	100	100	100	99	99	99
07/19	4	3	4	6	0	1	2	0	573	1629	2418	2752	1498	799	1108	577	99	98	99	100	100	100	99	99	99
07/20	0	5	4	3 [a]	0	0	0	0	573	1635	2421	2755 [a]	1498	799	1108	577	99	99	99	100	100	100	99	99	99

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Table 7. (page 2 of 2)

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	1984	1985	1986	1987	1988	1989	1990	1991	1984	1985	1986	1987	1988	1989	1990	1991	1984	1985	1986	1987	1988	1989	1990	1991	Mean 84–91
07/21	2	5	7	0	0[a]	0	0	0	575	1639	2428	2755	1498[a]	799	1108	577	99	99	99	100	100	100	99	99	100
07/22	1	8	3	0	1	0	0	2[a]	576	1648	2431	2755	1499	799	1108	579[a]	99	100	99	100	100	100	99	100	100
07/23	0	3	3	0	0	0	0	2	576	1651	2434	2755	1499	799	1108	581	99	100	100	100	100	100	99	100	100
07/24	0	0	0	0	1	0	0	0	576	1651	2434	2755	1500	799	1108	581	99	100	100	100	100	100	99	100	100
07/25	2	0	0	0	0[a]	0	0	0[a]	578	1651	2434	2755	1500[a]	799	1108	581[a]	100	100	100	100	100	100	99	100	100
07/26	2	2	0	0	0	0	0	0	579	1653	2434	2755	1500	799	1108	581	100	100	100	100	100	100	99	100	100
07/27	0	0	1	0	0	0[a]	0	0	579	1653	2435	2755	1500	799[a]	1108	581	100	100	100	100	100	100	99	100	100
07/28	0	0	0	0	0[a]	0	2	0	579	1653	2435	2755	1500[a]	799	1109	581	100	100	100	100	100	100	100	100	100
07/29	0	0	2	0	0	0	0	0[a]	579	1653	2437	2755	1500	799	1109	581[a]	100	100	100	100	100	100	100	100	100
07/30	0[a]	0	2	0	0	0	1	0	579[a]	1653	2439	2755	1500	799	1111	581	100	100	100	100	100	100	100	100	100
07/31	0	0	0[a]	0	1	0	2	0	579	1653	2439[a]	2755	1501	799	1113	581	100	100	100	100	100	100	100	100	100
08/01	0	0	1	0	0[a]	0	0[a]	0[a]	579	1653	2441	2755	1501[a]	799	1113[a]	581[a]	100	100	100	100	100	100	100	100	100
08/02	0[a]	0[a]	0	2	0	0	0	0	579[a]	1653[a]	2441	2757	1501	799	1113	581	100	100	100	100	100	100	100	100	100
08/03	0	2	0	2	0	0[a]	0	0	579	1654	2441	2759	1501	799[a]	1113	581	100	100	100	100	100	100	100	100	100
08/04	0[a]	0	0[a]	0	0[a]	0	0	0	579[a]	1654	2441[a]	2759	1501[a]	799	1113	581	100	100	100	100	100	100	100	100	100
08/05	0	0[a]	0	0	0	0	0	0[a]	579	1654[a]	2441	2759	1501	799	1113	581[a]	100	100	100	100	100	100	100	100	100
08/06	0	0	1	0	0	0	2[a]	0	579	1654	2442	2759	1501	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/07	0	0	0[a]	0	0	0[a]	0	0	579	1654	2442[a]	2759	1501	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/08	0	0[a]	0	0[a]	0[a]	0	0	0[a]	579	1654[a]	2442	2759[a]	1501[a]	799	1114	581[a]	100	100	100	100	100	100	100	100	100
08/09	0[a]	0	0	0	0	0[a]	0	0	579[a]	1654	2442	2759	1501	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/10	0	0	3	0	0[a]	0	0[a]	0	579	1654	2444	2759	1501[a]	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/11	0	0	0[a]	0	0	0	0	0	579	1654	2444[a]	2759	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/12	0	0[a]	0	2	0[a]	0[a]	0	0[a]	579	1654[a]	2444	2761	1501[a]	799[a]	1114	581[a]	100	100	100	100	100	100	100	100	100
08/13	0[a]	0	0[a]	0[a]	0	0	0[a]	0	579[a]	1654	2444[a]	2761[a]	1501	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/14	0	0	0	0	0	0	0	0[a]	579	1654	2444	2761	1501	799	1114	581[a]	100	100	100	100	100	100	100	100	100
08/15	0	0[a]	0[a]	0	0[a]	0[a]	0	0	579	1654[a]	2444[a]	2761	1501[a]	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/16	0[a]	0	0	0	0	0	0[a]	0	579[a]	1654	2444	2761	1501	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/17	0	0	0	0[a]	0	0	0	0	579	1654	2444	2761[a]	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/18	0	0	0[a]	0	0[a]	0[a]	0	0	579	1654	2444[a]	2761	1501[a]	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/19	0	0[a]	0	0[a]	0	0	0	0[a]	579	1654[a]	2444	2761[a]	1501	799	1114	581[a]	100	100	100	100	100	100	100	100	100
08/20	0[a]	0	0	0	0[a]	0	0[a]	0	579[a]	1654	2444	2761	1501[a]	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/21	0	0	0[a]	0[a]	0	0	0	0	579	1654	2444[a]	2761[a]	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/22	0	0[a]	0	0	0	0	0	0	579	1654[a]	2444	2761	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/23	0[a]	0	0	0	0	0[a]	0	0	579[a]	1654	2444	2761	1501	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/24	0	0	1	1[a]	0	0	0	0	579	1654	2445	2762[a]	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/25	0	0	0[a]	0	0	0	0	0	579	1654	2445[a]	2762	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/26	0	0[a]	0	0	0	0[a]	0	0[a]	579	1654[a]	2445	2762	1501	799[a]	1114	581[a]	100	100	100	100	100	100	100	100	100
08/27	0[a]	0	0	0[a]	0[a]	0	0[a]	0	579[a]	1654	2445	2762[a]	1501[a]	799	1114[a]	581	100	100	100	100	100	100	100	100	100
08/28	0	0	0[a]	0	0	0	0	0	579	1654	2445[a]	2762	1501	799	1114	581	100	100	100	100	100	100	100	100	100
08/29	0	0[a]		0	0	0[a]	0	0	579	1654[a]		2762	1501	799[a]	1114	581	100	100	100	100	100	100	100	100	100
08/30	0[a]	0		0		0	0	0	579[a]	1654		2762		799	1114	581									
08/31	0			0[a]	[a]	0	0	0	579			2762[a]	[a]	799	1114	581									
09/01	0		[a]	0		[a]			579		[a]	2762		[a]											
09/02	0			0					579			2762													
09/03	0[a]		[a]	0[a]					579[a]		[a]	2762[a]													
09/04	0			0					579			2762													
09/05	0			0					579			2762													
09/06	0[a]			0					579[a]			2762													
09/07			[a]	0[a]							[a]	2762[a]													
09/08				0								2762													
09/09				0								2762													
09/10				0								2762													
09/11				0								2762													

[a] Days when commercial fishing periods occured in District 1

Table 6. Mean tidal CPUE for chum salmon catches in the Bethel test fishery, 1984–1991. Parentheses designate years in which escapement objectives were not achieved at Kogrukluk River weir and/or Aniak River sonar.

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	Mean 84–90
05/30	0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	0	0	0	0
05/31	0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	0	0	0	0
06/01	0	0	0	0	0	3	0		0	0	0	0	0	3	0		0	0	0	0	0	0	0	0	0
06/02	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06/03	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06/04	5	0	0	0	0	0	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06/05	0	0	6	3	9	3	0	0	5	0	6	3	9	6	0	0	0	0	0	0	0	0	0	0	0
06/06	0	0	10	12	0	0	3	0	5	0	16	16	9	6	3	0	0	0	0	0	0	0	0	0	0
06/07	0	0	0	6	3	6	0	0	5	0	16	22	12	11	3	0	0	0	0	0	0	0	0	0	0
06/08	2	0	8	9	11	10	0	0	7	0	24	30	23	22	3	0	0	0	1	1	0	1	0	0	0
06/09	10	0	28	15	38	9	0	0	17	0	53	45	61	30	3	0	1	0	1	1	1	1	0	0	1
06/10	10	0	6	6	29	12	0	0	28	0	59	52	90	42	3	0	1	0	1	1	2	2	0	0	1
06/11	3	0	9	21	63	3	0	0	30	0	68	72	153	45	3	0	1	0	2	1	3	2	0	0	1
06/12	15	0	9	13	91	17	3	3	45	0	77	86	244	62	6	3	2	0	2	2	5	2	0	0	2
06/13	8	3	0	19	87	20	0	0	53	3	77	105	331	82	6	3	2	0	2	2	6	3	0	0	2
06/14	11	0	9	3	19	7	13	6	63	3	86	108	350	90	18	9	3	0	2	2	7	3	1	1	3
06/15	5	3	38	10	45	36	0	0	68	5	124	117	395	126	18	9	3	0	3	2	8	5	1	1	3
06/16	31	3	46	42	26 [a]	24	3	0	100	8	170	159	421 [a]	150	21	9	4	1	4	3	8	6	1	1	4
06/17	41	8	121	122	56	4	22	0	141	16	290	281	477	154	43	9	6	1	7	6	9	6	2	1	5
06/18	75	6	108	41 [a]	195	49	20	0	216	25	398	322 [a]	671	203	63	9	9	2	10	7	13	8	2	1	7
06/19	9	65	151	6	160	68 [a]	28	0	225	90	549	328	832	271 [a]	91	9	9	7	14	7	16	10	3	1	9
06/20	20	115 [a]	64	60	50 [a]	44	9 [a]	25 [a]	245	205 [a]	613	388	881 [a]	315	100 [a]	34 [a]	10	15	15	8	17	12	4	3	12
06/21	52	3	67	24	143	76	30	3	297	207	700	412	1025	391	130	37	12	16	17	8	20	15	5	3	13
06/22	8	25	104	200	251	56	22	9	305	232	804	613	1276	446	152	46	13	17	20	13	25	17	6	4	16
06/23	108	28	203	103	246	79 [a]	53	14	413	260	1007	715	1522	525 [a]	205	60	17	20	25	15	29	20	8	5	19
06/24	167	3 [a]	112	48 [a]	86 [a]	167	77	6 [a]	580	263 [a]	1119	763 [a]	1608 [a]	692	282	66 [a]	24	20	28	16	31	27	10	5	22
06/25	166 [a]	52	460	66	16	206	32 [a]	9	746 [a]	315	1579	829	1624	900	314 [a]	74	31	24	39	17	31	34	12	6	27
06/26	86	65	177 [a]	100	63	111 [a]	49	32	832	380	1756 [a]	928	1687	1011 [a]	363	106	35	29	43	19	33	39	13	8	30
06/27	109	58 [a]	109	87	306	134	168	58	941	438 [a]	1865	1015	1993	1145	531	163	39	33	46	21	38	44	20	13	34
06/28	105 [a]	24	35	105	109 [a]	78	72	50	1045 [a]	463	1901	1120	2101 [a]	1223	603	213	44	35	47	23	40	47	22	17	37
06/29	22	180	6	268	108	122	87 [a]	64	1068	643	1907	1389	2210	1345	690 [a]	277	45	46	47	28	43	52	25	22	41
06/30	59	177	105 [a]	246 [a]	88	106 [a]	32	8	1126	820	2012 [a]	1635 [a]	2298	1452 [a]	722	285	47	62	49	33	44	56	27	23	45
07/01	115	77 [a]	3	152	382	115	67	30 [a]	1241	896 [a]	2015	1787	2680	1567	789	315 [a]	52	68	50	36	52	60	29	25	49
07/02	160 [a]	31	70	120	188 [a]	66	28	91	1401 [a]	928	2085	1906	2868 [a]	1633	817	406	59	70	51	39	55	63	30	32	52
07/03	66	24	193 [a]	34 [a]	437	78 [a]	200	22	1467	952	2277 [a]	1941 [a]	3306	1711 [a]	1017	427	61	72	56	40	64	66	37	34	56
07/04	209	5 [a]	123	62	469	57	214	33	1677	957 [a]	2401	2003	3775	1768	1231	461	70	72	59	41	73	68	45	36	61
07/05	163 [a]	40	309	177	192 [a]	182 [a]	188 [a]	6	1840 [a]	997	2709	2180	3966 [a]	1950 [a]	1419 [a]	466	77	75	67	44	76	75	52	37	67
07/06	48	25	140	389	120	59	26	0 [a]	1888	1022	2850	2569	4066	2009	1445	466 [a]	79	77	70	52	79	77	53	38	70
07/07	60	93	62 [a]	463 [a]	27	117	173	12	1948	1115	2912 [a]	3032 [a]	4114	2126	1618	478	82	84	72	62	79	81	59	39	74
07/08	48	3	68	38	34 [a]	65 [a]	136	9	1996	1118	2979	3070	4148 [a]	2190 [a]	1754	487	84	84	73	63	80	84	64	40	76
07/09	52 [a]	5	246	272	92	57	61 [a]	60	2048 [a]	1123	3225	3342	4240	2247	1815 [a]	547	86	85	79	68	82	86	67	44	79
07/10	39	0	34 [a]	208	148	66	81	46	2087	1123	3260 [a]	3550	4388	2314	1896	593	87	85	80	72	85	89	70	48	81
07/11	7	0	87	63 [a]	63 [a]	3 [a]	78	26	2093	1123	3347	3612 [a]	4471 [a]	2317 [a]	1975	619	88	85	82	74	86	89	73	50	82
07/12	16 [a]	3	163	53	65	7	74	43	2109 [a]	1126	3510	3665	4536	2324	2048	662	88	85	86	75	87	89	75	53	84
07/13	16	10	134	87	63	55	23	21 [a]	2125	1137	3644	3752	4599	2379	2071	683 [a]	89	86	90	77	89	91	76	55	85
07/14	7	0	25	255	38 [a]	35 [a]	33 [a]	28	2132	1137	3669	4007	4637 [a]	2414 [a]	2104 [a]	711	89	86	90	82	89	92	77	57	87
07/15	91	0	10	61 [a]	69	11	24	20	2224	1137	3679	4068 [a]	4706	2424	2128	731	93	86	90	83	91	93	78	59	88
07/16	24 [a]	6	16	33	82	20	37	12	2248 [a]	1142	3696	4101	4788	2445	2165	743	94	86	91	84	92	94	80	60	89
07/17	15	32	43	107	64	17	24	16	2262	1174	3739	4208	4852	2462	2190	758	95	88	92	86	94	94	80	61	90
07/18	14	9	43	125	57 [a]	23 [a]	59	51 [a]	2276	1183	3782	4333	4909 [a]	2485 [a]	2249	809 [a]	95	89	93	88	95	95	83	65	91
07/19	16	19	50	202	16	16	66	16	2292	1202	3831	4535	4925	2501	2315	825	96	91	94	93	95	96	85	66	93
07/20	9	7	36	170 [a]	29	29	73	16	2301	1209	3867	4706 [a]	4954	2530	2388	841	96	91	95	96	95	97	86	68	94

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Table 8. (page 2 of 2)

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	1984	(1985)	(1986)	(1987)	1988	(1989)	(1990)	(1991)	Mean 84-90
07/21	18	5	52	23	36 [a]	13	57	40	2318	1214	3919	4729	4990 [a]	2543	2445	882	97	91	96	97	96	97	90	71	95
07/22	1	12	34	12	10	7	40	57 [a]	2319	1225	3953	4740	4999	2551	2485	939 [a]	97	92	97	97	96	98	91	75	96
07/23	9	6	26	8	6	13	35	33	2328	1231	3979	4748	5005	2564	2520	971	96	93	96	97	96	98	93	78	96
07/24	3	2	29	28	24	0	24	12	2331	1233	4006	4776	5030	2564	2544	983	96	93	99	97	97	98	93	79	96
07/25	8	9	11	41	15 [a]	4	8	56 [a]	2339	1243	4019	4817	5045 [a]	2568	2552	1038 [a]	98	94	99	98	97	98	94	83	97
07/26	7	6	2	20	13	0	2	8	2346	1249	4021	4837	5058	2568	2554	1046	98	94	99	99	97	98	94	84	97
07/27	7	2	3	4	18	0 [a]	18	49	2353	1251	4023	4841	5075	2568 [a]	2572	1096	99	94	99	99	98	98	94	88	97
07/28	3	4	7	6	10 [a]	0	35	18	2356	1255	4031	4847	5085 [a]	2568	2607	1114	99	95	99	99	98	98	96	89	98
07/29	8	10	11	5	13	1	36	36 [a]	2364	1265	4042	4852	5098	2570	2643	1150 [a]	99	95	99	99	98	98	97	92	98
07/30	6 [a]	4	5	2	23	0	9	14	2370 [a]	1269	4047	4854	5120	2570	2651	1163	99	96	100	99	99	98	97	93	98
07/31	1	1	0 [a]	1	6	14	2	24	2370	1270	4047 [a]	4856	5126	2584	2653	1187	99	96	100	99	99	99	97	95	98
08/01	2	0	5	4	5 [a]	6	6 [a]	8 [a]	2372	1270	4051	4860	5131 [a]	2590	2659 [a]	1195 [a]	99	96	100	99	99	99	96	96	99
08/02	3 [a]	1 [a]	0	3	4	6	6	6	2375 [a]	1271 [a]	4051	4863	5135	2596	2665	1201	100	96	100	99	99	100	96	96	99
08/03	3	2	4	9	6	4 [a]	6	12	2378	1272	4055	4872	5142	2602 [a]	2671	1212	100	96	100	99	99	100	96	97	99
08/04	6 [a]	8	0 [a]	11	3 [a]	1	2	10	2383 [a]	1281	4055 [a]	4884	5145 [a]	2603	2672	1222	100	96	100	100	99	100	96	96	99
08/05	2	0 [a]	0	3	3	0	1	0 [a]	2385	1281 [a]	4055	4887	5146	2603	2673	1222 [a]	100	96	100	100	99	100	96	96	99
08/06	0	4	3	4	7	3	23 [a]	2	2385	1285	4058	4891	5155	2606	2697 [a]	1224	100	97	100	100	99	100	99	96	99
08/07	0	6	1 [a]	0	19	2 [a]	6	2	2385	1290	4059 [a]	4891	5174	2606 [a]	2703	1226	100	97	100	100	100	100	99	96	99
08/08	0	0 [a]	0	0 [a]	3 [a]	0	0	5 [a]	2385	1290 [a]	4059	4891 [a]	5177 [a]	2606	2703	1231 [a]	100	97	100	100	100	100	99	96	99
08/09	0 [a]	0	2	2	3	2 [a]	4	2	2385 [a]	1290	4062	4893	5180	2610 [a]	2707	1233	100	97	100	100	100	100	99	99	99
08/10	0	36	0	2	4 [a]	0	2 [a]	3	2385	1326	4062	4895	5184 [a]	2610	2708 [a]	1236	100	100	100	100	100	100	100	99	100
08/11	0	1	0 [a]	0	3	0	2	4	2385	1327	4062 [a]	4895	5187	2610	2710	1240	100	100	100	100	100	100	100	99	100
08/12	0	0 [a]	0	0	2 [a]	0 [a]	4	3 [a]	2385	1327 [a]	4062	4895	5189 [a]	2610 [a]	2714	1243 [a]	100	100	100	100	100	100	100	99	100
08/13	0 [a]	0	0 [a]	0 [a]	0	0	0 [a]	2	2385 [a]	1327	4062 [a]	4895 [a]	5189	2610	2714 [a]	1244	100	100	100	100	100	100	100	100	100
08/14	0	0	2	0	0	0	0	0 [a]	2385	1327	4063	4895	5189	2610	2714	1244 [a]	100	100	100	100	100	100	100	100	100
08/15	0	0 [a]	2 [a]	4	0 [a]	0 [a]	2	2	2385	1327 [a]	4066 [a]	4899	5189 [a]	2610 [a]	2716	1246	100	100	100	100	100	100	100	100	100
08/16	0 [a]	0	0	1	0	0	2 [a]	0	2385 [a]	1327	4066	4900	5189	2610	2718 [a]	1246	100	100	100	100	100	100	100	100	100
08/17	0	0	0	0 [a]	0	0	0	2	2385	1327	4066	4900 [a]	5189	2610	2718	1248	100	100	100	100	100	100	100	100	100
08/18	2	0	0 [a]	0	0 [a]	0 [a]	0	2	2387	1327	4066 [a]	4900	5189 [a]	2610 [a]	2718	1250	100	100	100	100	100	100	100	100	100
08/19	0	0 [a]	0	0 [a]	0	0	0	0 [a]	2387	1327 [a]	4066	4900 [a]	5189	2610	2718	1250 [a]	100	100	100	100	100	100	100	100	100
08/20	0 [a]	0	0	0	0 [a]	0	0 [a]	0	2387 [a]	1327	4066	4900	5189 [a]	2610	2718 [a]	1250	100	100	100	100	100	100	100	100	100
08/21	0	0	0 [a]	0 [a]	0	0	0	0	2387	1327	4066 [a]	4900 [a]	5189	2610	2718	1250	100	100	100	100	100	100	100	100	100
08/22	0	0 [a]	0	0	0	0	2	0	2387	1327 [a]	4066	4900	5189	2610	2720	1250	100	100	100	100	100	100	100	100	100
08/23	0 [a]	0	0	0	0	0 [a]	0	0	2387 [a]	1327	4066	4900	5189	2610 [a]	2720	1250	100	100	100	100	100	100	100	100	100
08/24	0	0	0	0 [a]	0	0	0	0	2387	1327	4066	4900 [a]	5189	2610	2720	1250	100	100	100	100	100	100	100	100	100
08/25	0	0	0 [a]	0	0	0	0	0	2387	1327	4066 [a]	4900	5189	2610	2720	1250	100	100	100	100	100	100	100	100	100
08/26	0	0 [a]	0	0	0	0 [a]	0	0 [a]	2387	1327 [a]	4066	4900	5189	2610 [a]	2720	1250 [a]	100	100	100	100	100	100	100	100	100
08/27	0 [a]	0	0	0 [a]	0 [a]	0	2 [a]	0	2387 [a]	1327	4066	4900 [a]	5189 [a]	2610	2722 [a]	1250	100	100	100	100	100	100	100	100	100
08/28	0	0	0 [a]	0	0	0	0	0	2387	1327	4066 [a]	4900	5189	2610	2722	1250	100	100	100	100	100	100	100	100	100
08/29	0	0 [a]		0	0	0 [a]	0	0	2387	1327 [a]		4900	5189	2610 [a]	2722	1250	100	100	100	100	100	100	100	100	100
08/30	0 [a]	0		0		0	0	0	2387 [a]	1327		4900		2610	2722	1250	100	100	100	100	100	100	100	100	100
08/31	0			0 [a]	a	0	0	0	2387			4900 [a]	a	2610	2722	1250	100	100	100	100	100	100	100	100	100
09/01	0		a	0		a			2387		a	4900		a											
09/02	0			0					2387			4900													
09/03	0 [a]		a	0 [a]					2387 [a]		a	4900 [a]													
09/04	0			0					2387			4900													
09/05	0			0					2387			4900													
09/06	0 [a]			0					2387 [a]			4900													
09/07			a	0 [a]							a	4900 [a]													
09/08				0								4900													
09/09				0								4900													
09/10				0								4900													
09/11				0								4900													

[a] Days when commercial fishing periods occured in District 1

Table 9. Mean tidal CPUE for coho salmon catches in the Bethel test fishery, 1984–1991. Parentheses designate years in which the escapement objective was not achieved at Kogrukluk River weir and/or District 2 commercial CPUE was <37.

Date	Daily CPUE								Cumulative CPUE								Percent Passage								
	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	Mean 84–90
07/13	0	0	0	0	2	2	0	0[a]	2	0	0	0	2	2	0	0[a]	0	0	0	0	0	0	0	0	0
07/14	0	0	0	0	0[a]	2[a]	0[a]	0	2	0	0	0	2[a]	4[a]	0[a]	0	0	0	0	0	0	0	0	0	0
07/15	0	0	2	0[a]	0	2	0	0	2	0	2	0[a]	2	6	0	0	0	0	0	0	0	0	0	0	0
07/16	2[a]	0	2	0	0	0	0	0	4[a]	0	4	0	2	6	0	0	0	0	0	0	0	0	0	0	0
07/17	2	2	2	0	4	2	0	0	6	2	6	0	6	6	0	0	0	0	0	0	0	0	0	0	0
07/18	3	0	2	0	0[a]	4[a]	0	2[a]	9	2	8	0	6[a]	12[a]	0	0[a]	0	0	0	0	0	0	0	0	0
07/19	7	2	4	0	0	0	4	2	16	3	11	0	6	12	4	2	0	0	0	0	0	0	0	0	0
07/20	7	4	4	0[a]	4	10	13	6	23	7	15	0[a]	10	22	17	8	1	0	0	0	0	1	1	0	0
07/21	5	5	10	0	2[a]	7	10	7	28	12	25	0	12[a]	30	27	15	1	1	1	0	0	1	1	1	1
07/22	5	20	8	7	4	16	7	4[a]	33	33	33	7	16	46	34	19[a]	1	2	1	0	0	2	1	1	1
07/23	12	0	21	2	0	6	3	6	45	33	54	9	16	51	37	25	1	2	1	0	0	2	1	1	1
07/24	9	2	54	0	12	6	8	4	54	35	107	9	28	57	45	29	2	2	2	0	1	2	2	2	2
07/25	16	24	29	0	16[a]	4	2	7[a]	69	59	136	9	44[a]	61	47	36[a]	2	3	3	0	1	2	2	2	2
07/26	12	21	26	0	8	0	2	2	81	80	163	9	53	61	49	38	2	4	4	0	2	2	2	2	2
07/27	18	8	74	2	44	2[a]	10	23	99	88	236	11	97	63[a]	59	61	3	5	5	1	3	2	2	4	3
07/28	29	15	20	2	72[a]	9	43	34	128	103	256	14	169[a]	72	102	95	4	6	6	1	5	3	4	6	4
07/29	60	40	64	12	28	8	35	42[a]	188	143	320	25	197	80	136	137[a]	6	8	7	1	6	3	5	8	5
07/30	201[a]	14	54	5	43	37	12	71	390[a]	157	374	30	239	117	148	208	12	9	8	1	7	4	6	13	7
07/31	154	29	31[a]	5	75	343	10	64	544	186	405[a]	35	314	460	158	271	17	10	9	2	9	18	6	16	10
08/01	179	50[a]	323	13	43[a]	218	26[a]	42[a]	722	237[a]	727	47	358[a]	678	184[a]	314[a]	22	13	16	2	10	26	7	19	14
08/02	104[a]	37	101	40	32	447	22	24	826[a]	274	828	87	390	1125	205	337	25	15	19	4	11	43	8	20	18
08/03	312	69	404	93	79	78[a]	21	118	1139	343	1233	180	468	1203[a]	226	455	35	19	28	8	14	46	9	28	23
08/04	45	60	419[a]	69	42[a]	24	54	124	1184	402	1652[a]	249	511[a]	1227	280	579	36	22	37	11	15	47	11	35	26
08/05	78	47[a]	253	27	45	159	65	10[a]	1262	450[a]	1905	276	556	1386	345	589[a]	38	25	43	12	16	53	14	36	29
08/06	169[a]	92	249	42	300	348	78[a]	32	1430[a]	542	2154	318	856	1734	423[a]	621	44	30	48	14	25	66	17	38	35
08/07	45	182	210[a]	103	370	195[a]	50	20	1475	724	2363[a]	421	1226	1929[a]	473	641	45	40	53	19	36	74	19	39	41
08/08	108	86[a]	86	53[a]	183[a]	54	73	64[a]	1583	809[a]	2450	475[a]	1409[a]	1983	546	705[a]	48	45	55	21	41	76	22	43	44
08/09	76[a]	114	180	34	41	185[a]	118	43	1659[a]	924	2630	509	1450	2168[a]	664	748	50	52	59	23	42	83	27	45	48
08/10	55	124	297	43	106[a]	33	58[a]	42	1715	1047	2927	551	1556[a]	2202	722[a]	790	52	59	65	25	45	84	29	48	51
08/11	105	218	87[a]	35	257	111	64	35	1819	1266	3014[a]	587	1813	2312	786	824	55	71	67	26	53	88	32	50	56
08/12	98	96[a]	326	189	256[a]	74[a]	210	248[a]	1918	1361[a]	3340	776	2070[a]	2386[a]	996	1072[a]	58	76	75	35	60	91	40	65	62
08/13	25[a]	75	96[a]	142[a]	68	24	180[a]	91	1943[a]	1437	3436[a]	918[a]	2138	2410	1176[a]	1163	59	80	77	41	62	92	47	71	65
08/14	24	29	64	348	174	17	166	40[a]	1966	1466	3501	1266	2312	2427	1342	1203[a]	60	82	78	56	67	93	54	73	70
08/15	113	84[a]	180[a]	205	185[a]	2[a]	258	36	2080	1550[a]	3681[a]	1470	2497[a]	2429[a]	1600	1239	63	87	82	65	73	93	64	75	75
08/16	10[a]	68	55	121	58	0	108[a]	20	2090[a]	1619	3735	1591	2555	2429	1708[a]	1259	64	90	84	71	74	93	69	76	78
08/17	279	19	48	107[a]	152	15	91	25	2368	1637	3784	1699[a]	2706	2444	1798	1284	72	91	85	76	79	93	72	78	81
08/18	304	23	101[a]	52	112[a]	4[a]	86	88	2672	1661	3885[a]	1751	2818[a]	2448[a]	1884	1371	81	93	87	78	82	93	76	83	84
08/19	204	8[a]	91	19[a]	35	6	61	35[a]	2876	1669[a]	3976	1770[a]	2853	2455	1945	1406[a]	87	93	89	79	83	94	78	85	86
08/20	6[a]	12	30	9	41[a]	14	83[a]	26	2882[a]	1680	4006	1779	2894[a]	2468	2029[a]	1433	88	94	90	79	84	94	82	87	87
08/21	28	17	94[a]	16[a]	10	35	39	38	2910	1698	4100[a]	1795[a]	2903	2503	2067	1471	89	95	92	80	84	95	83	89	88
08/22	110	0[a]	52	9	74	22	69	20	3020	1698[a]	4152	1804	2978	2525	2136	1491	92	95	93	80	87	96	86	91	90
08/23	4[a]	17	136	21	68	11[a]	131	10	3024[a]	1715	4288	1825	3046	2536[a]	2267	1501	92	96	96	81	89	97	91	91	92
08/24	8	8	100	25[a]	108	3	40	26	3032	1723	4388	1850[a]	3154	2539	2307	1527	92	96	98	82	92	97	93	93	93
08/25	33	12	26[a]	9	121	26	61	14	3065	1734	4414[a]	1859	3275	2564	2368	1540	93	97	99	83	95	98	95	94	94
08/26	26	0[a]	43	19	89	10[a]	56	42[a]	3091	1734[a]	4457	1878	3364	2574[a]	2424	1583[a]	94	97	100	84	98	98	98	96	95
08/27	24[a]	10	10	32[a]	64[a]	17	39[a]	17	3115[a]	1744	4467	1910[a]	3428[a]	2591	2463[a]	1600	95	97	100	85	100	99	99	97	96
08/28	14	34	4[a]	50	9	17	2	18	3129	1778	4471[a]	1960	3437	2609	2465	1618	95	99	100	87	100	99	99	98	97
08/29	48[a]	12[a]		35	4	6[a]	13	18	3177[a]	1790[a]		1995	3441	2615[a]	2477	1636	97	100		89	100	100	100	99	97
08/30	21[a]	0		48		2	8	9	3198[a]	1790		2043		2616	2485	1645	97	100		91		100	100	100	98
08/31	24			0[a]	[a]	7	0	0	3222			2043[a]	[a]	2624	2485	1645	98			91		100	100	100	97

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Table 9. (Page 2 of 2)

Date	Daily CPUE								Cumulative CPUE								Percent Passage						
	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	1984	(1985)	1986	(1987)	(1988)	1989	(1990)	(1991)	Mean 84–90
09/01	5		[a]	20		[a]			3228		[a]	2063		[a]			98			92					95
09/02	11			23					3239			2086					99			93					96
09/03	7 [a]			27 [a]					3246 [a]			2113 [a]					99			94					96
09/04	5			23					3251			2137					99			95					97
09/05	29			22					3280			2159					100			96					98
09/06	7 [a]			24					3287 [a]			2183					100			97					99
09/07				12								2195								98					98
09/08				15 [a]								2210								98					98
09/09				7								2217								99					99
09/10				19								2236								100					100
09/11				9								2245								100					100

[a] Days when commercial fishing periods occured in District 1

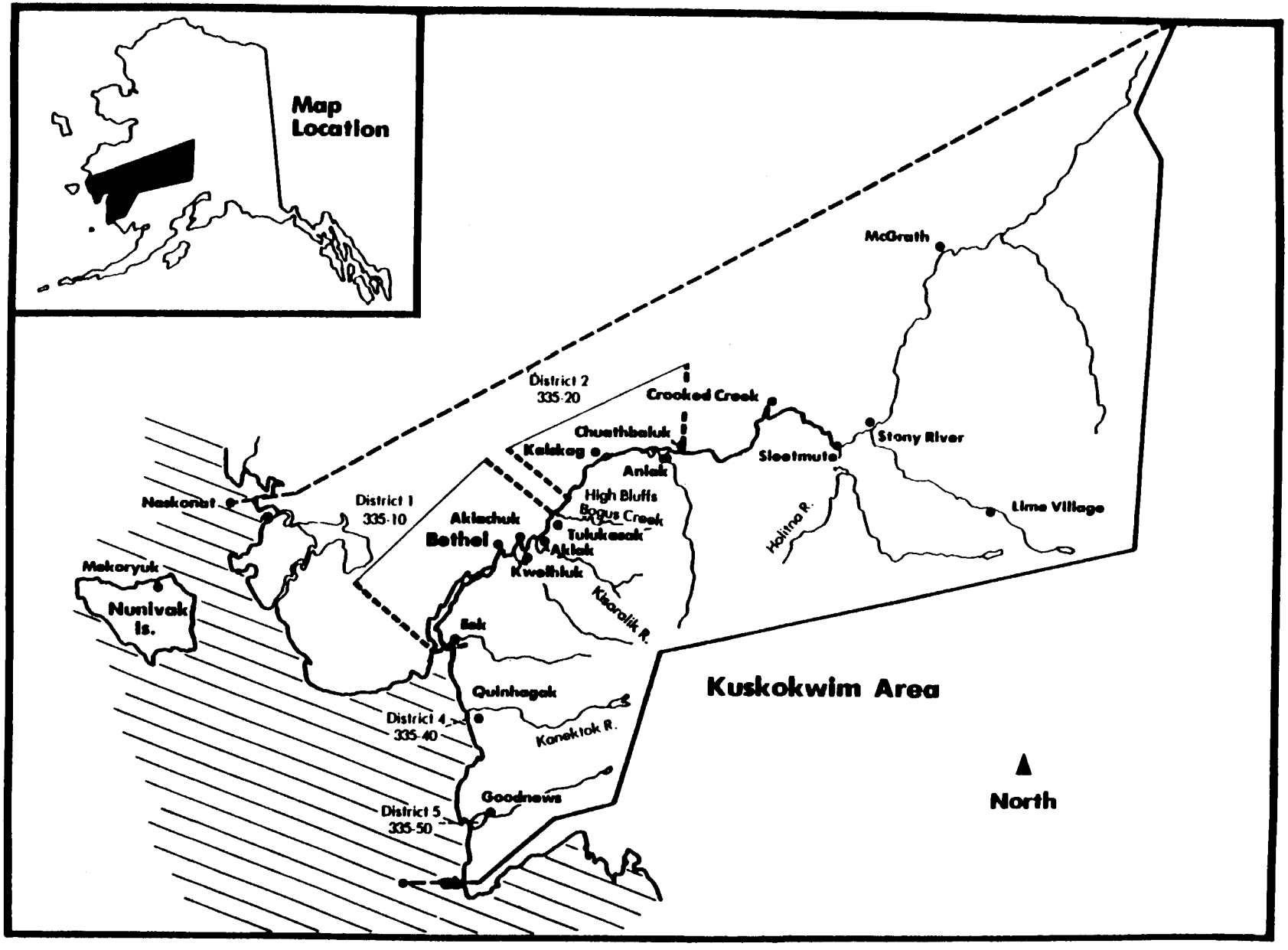

Figure 1. Kuskokwim commercial salmon management area.

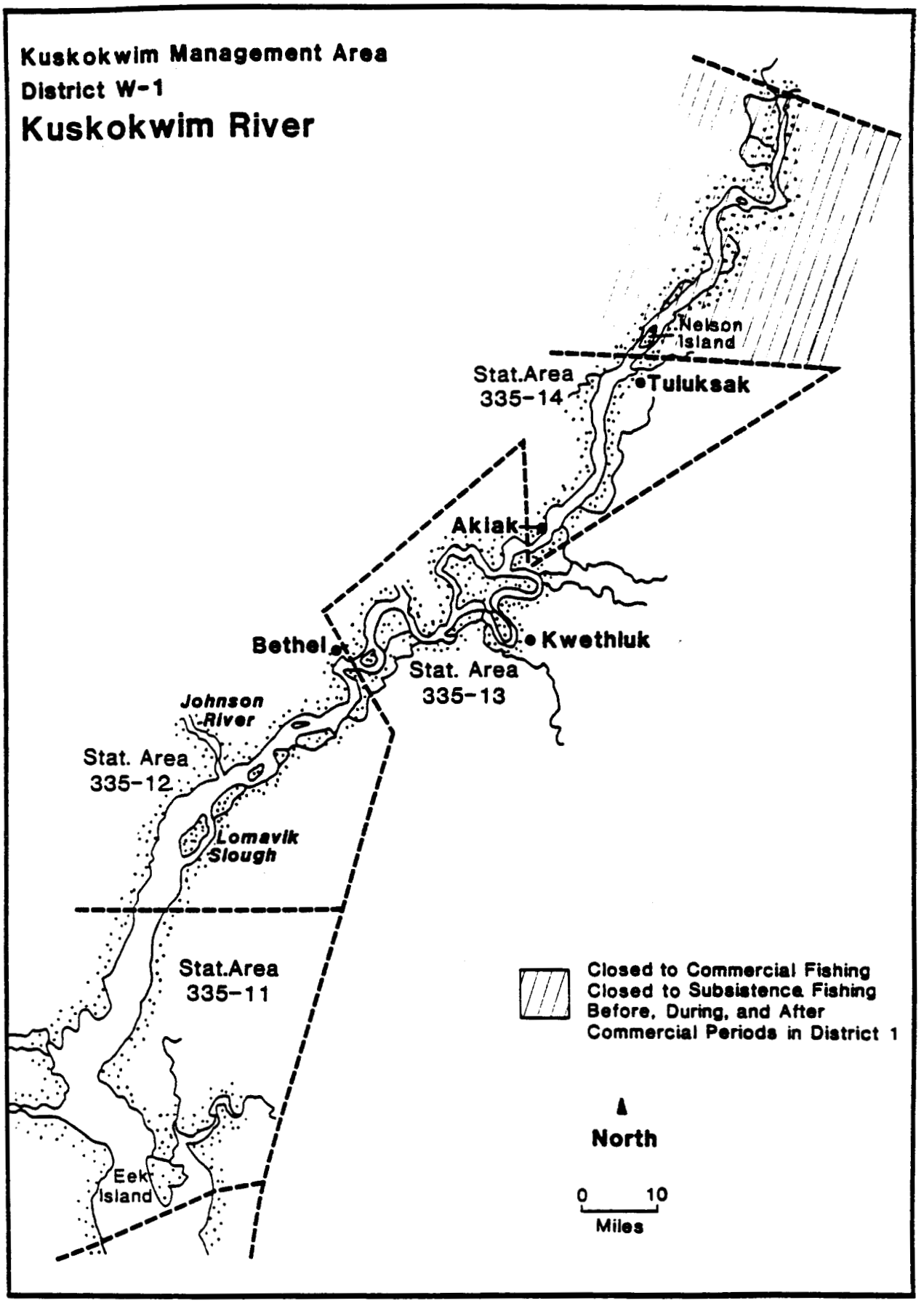

Figure 2. District 1 of the Kuskokwim commercial salmon management area.

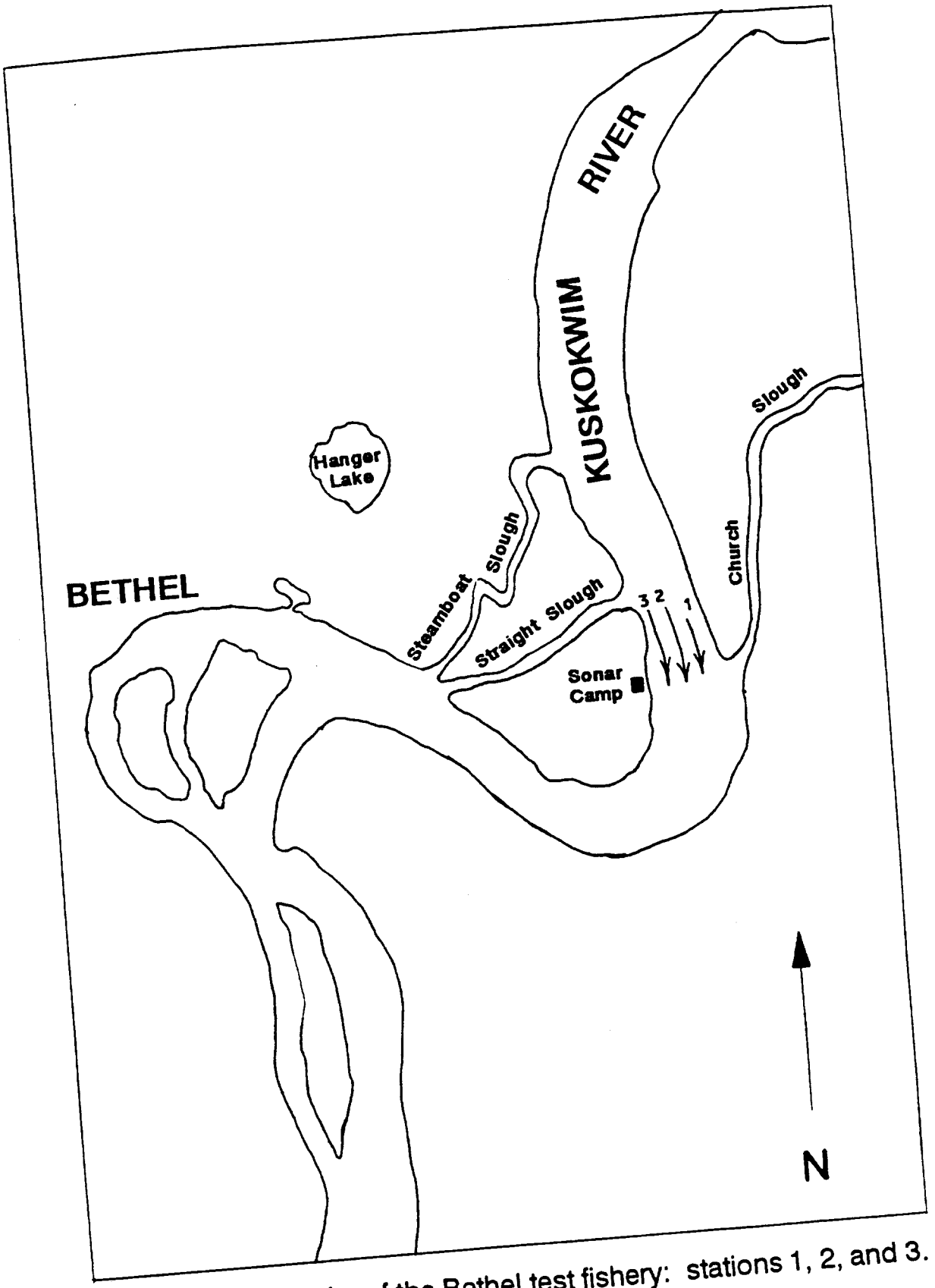

Figure 3. Project site of the Bethel test fishery: stations 1, 2, and 3.

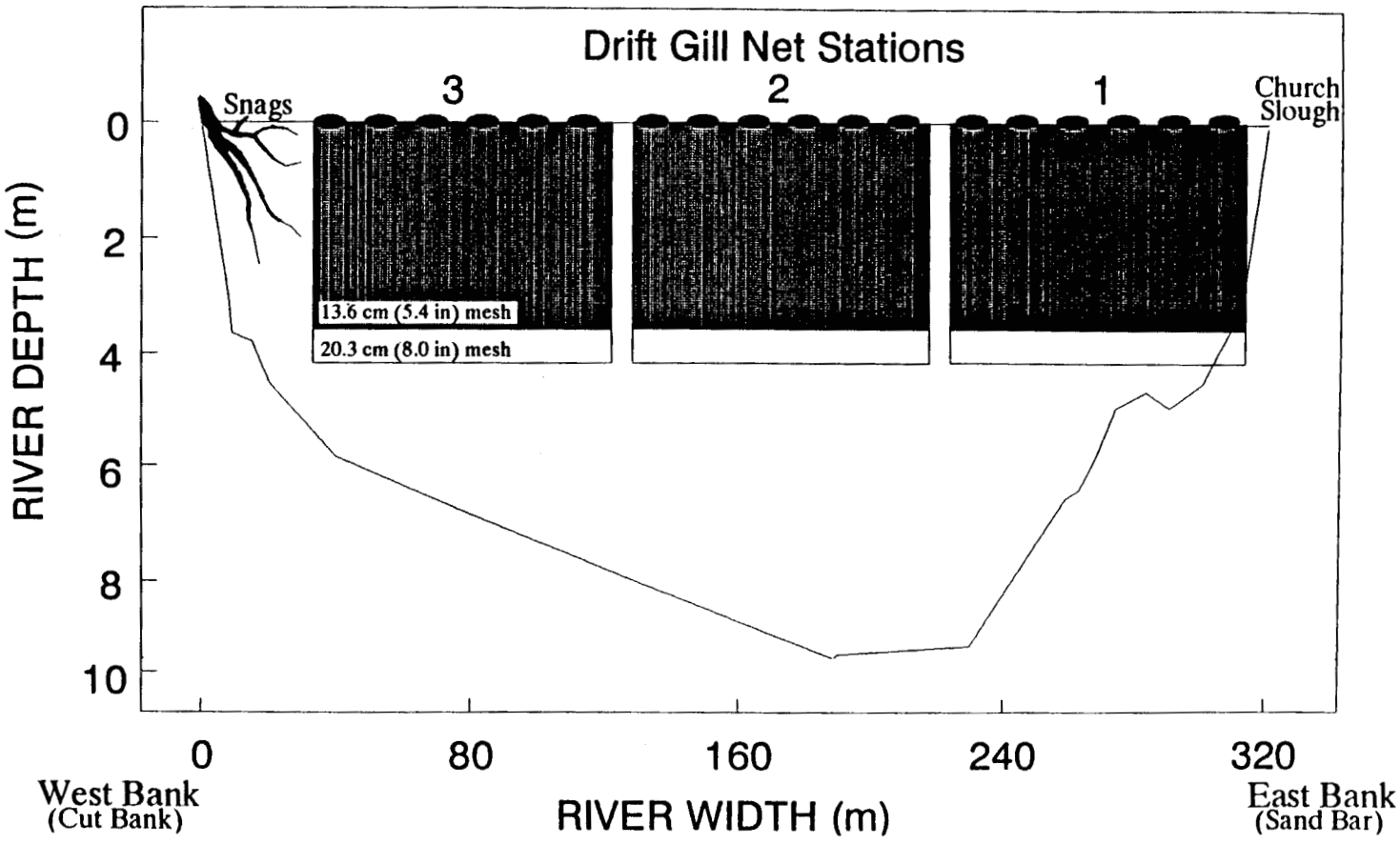

Figure 4. Profile of the Kuskokwim River approximately 4 mi upstream of Bethel and illustrating the approximate area covered by gillnets used in the 1991 Bethel test fishery.

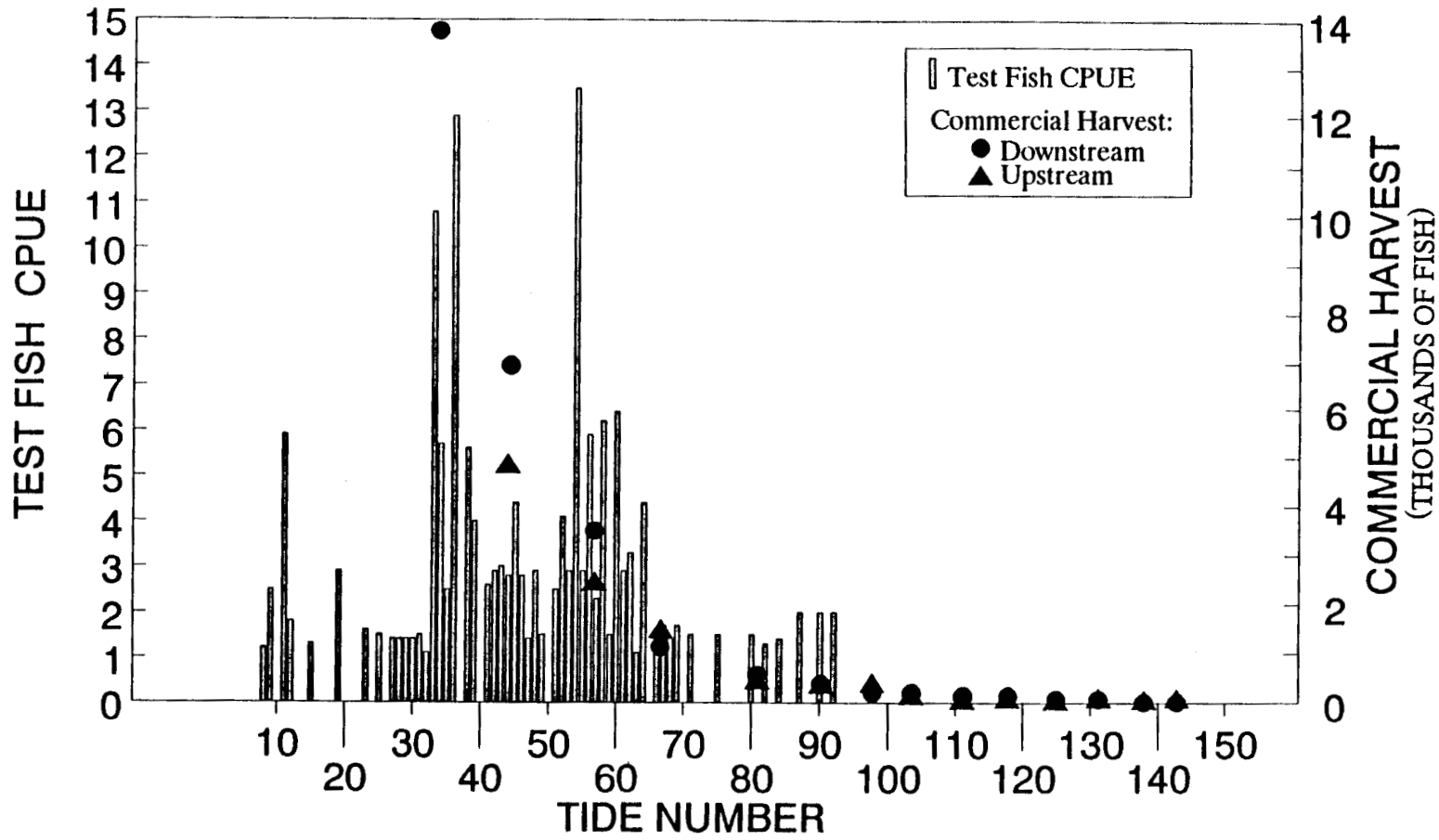

Figure 5. Comparison of the 1991 mean tidal CPUE for chinook salmon caught in the Bethel test fishery and District 1 commercial harvests above and below the test-fish site.

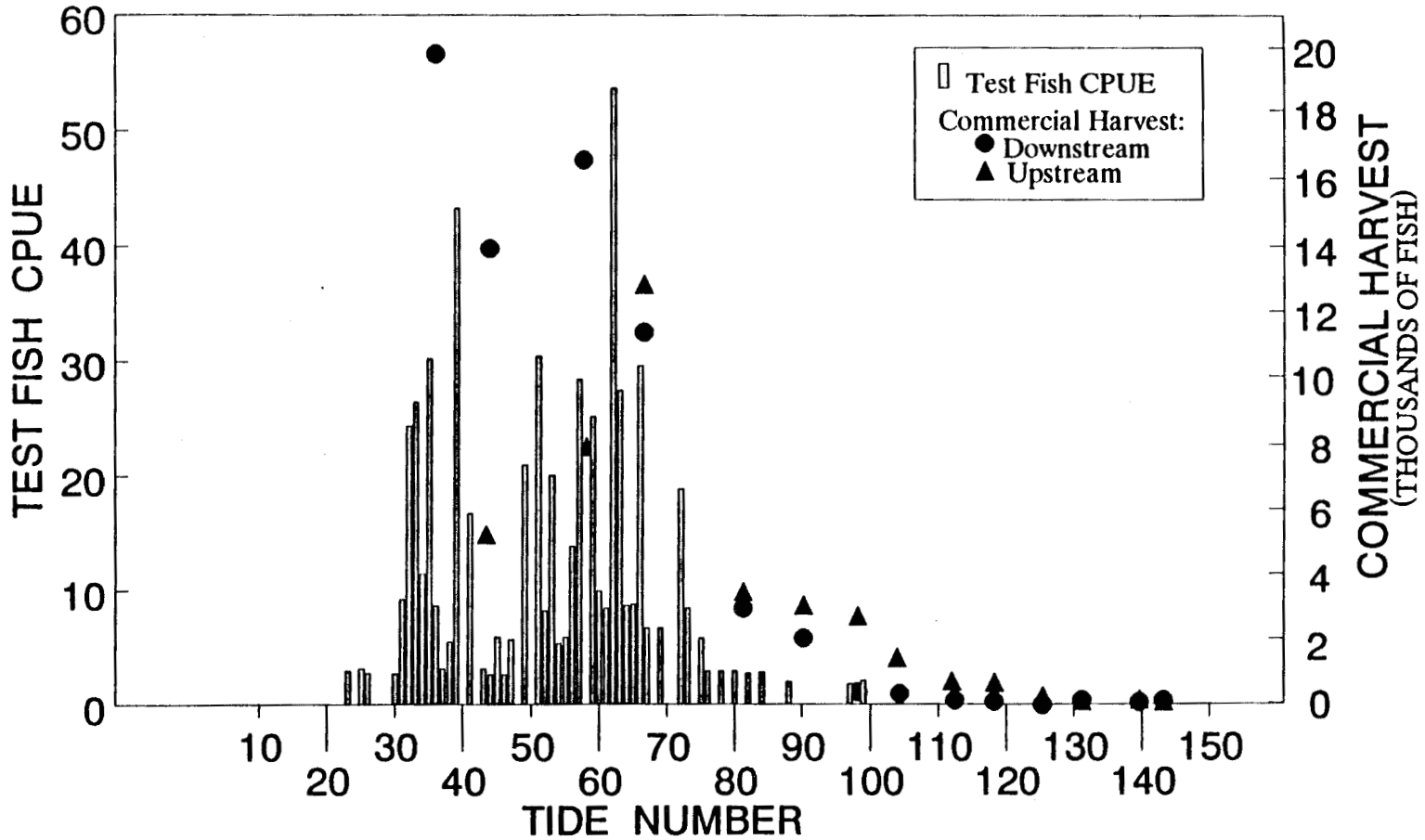

Figure 6. Comparison of the 1991 mean tidal CPUE for sockeye salmon caught in the Bethel test fishery and District 1 commercial harvests above and below the test-fish site.

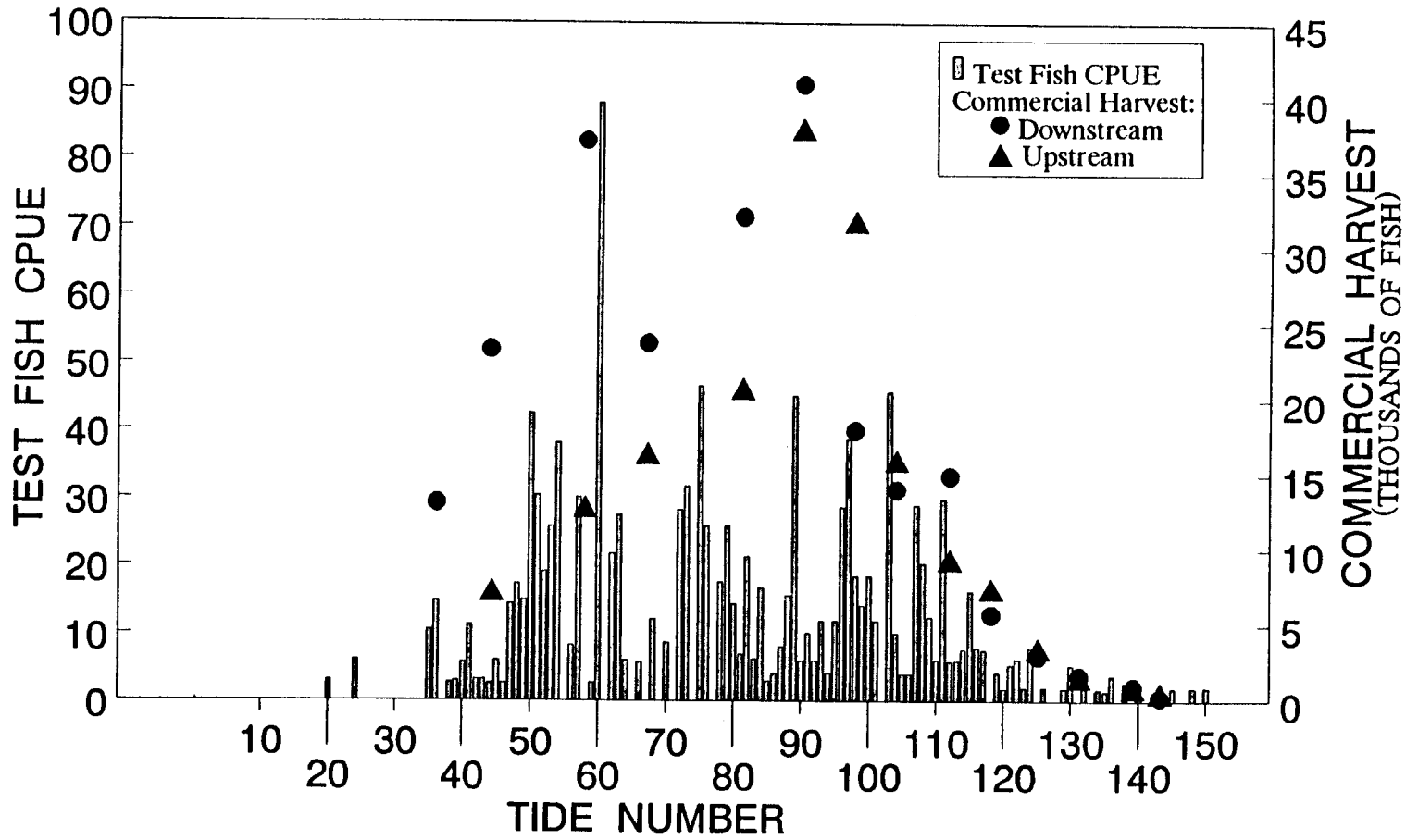

Figure 7. Comparison of the 1991 mean tidal CPUE for chum salmon caught in the Bethel test fishery and District 1 commercial harvests above and below the test-fish site.

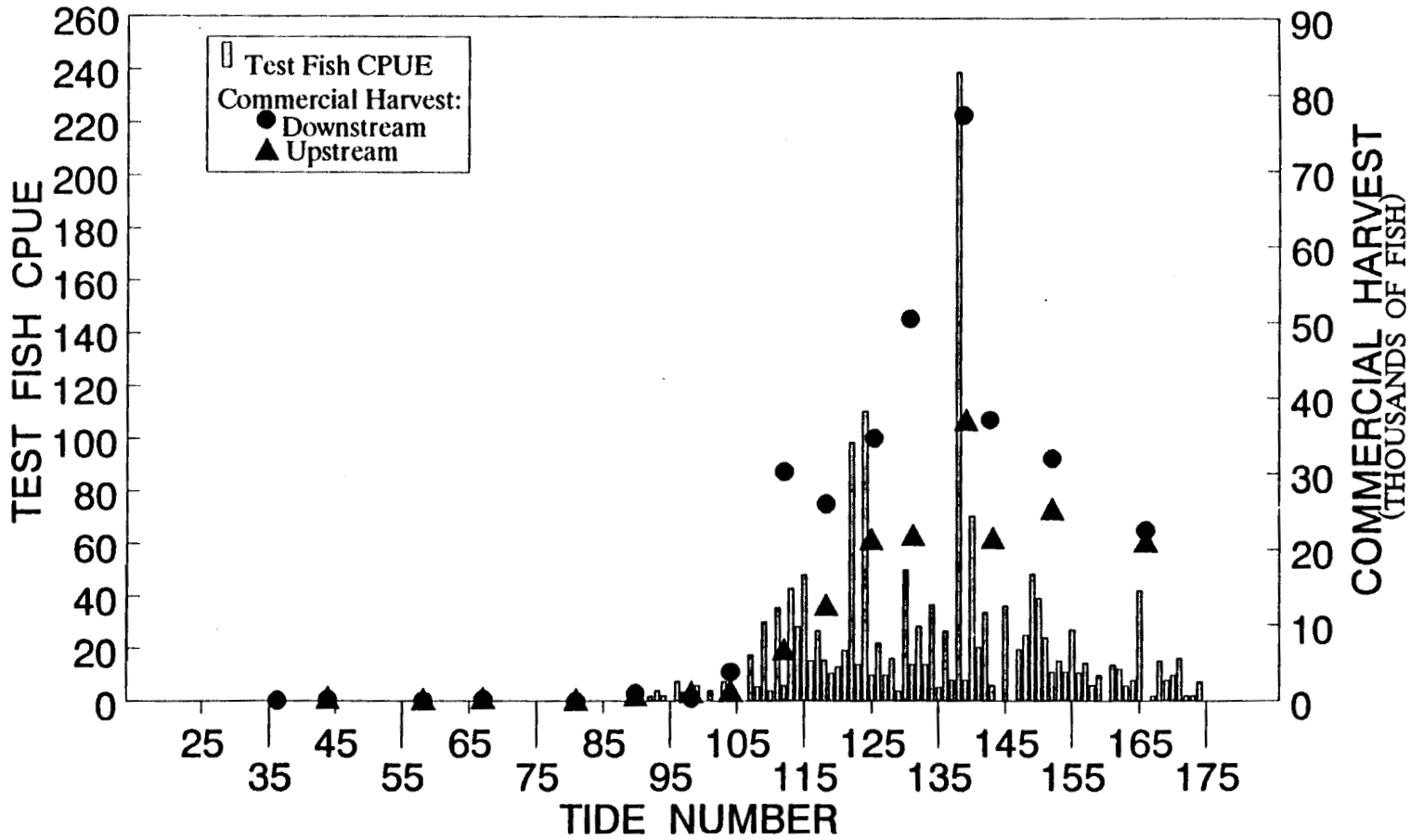

Figure 8. Comparison of the 1991 mean tidal CPUE for coho salmon caught in the Bethel test fishery and District 1 commercial harvests above and below the test-fish site.

APPENDIX

Appendix A. Catch and drift CPUE for the 1991 Bethel test fishery.

Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
06/02	1	1	1	8.0	50	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/02	1	2	3	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/02	1	3	2	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/02	1	4	3	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/02	2 TIDE NOT FISHED (BUDGET SAVINGS)													
06/03	3	5	1	8.0	50	15.0	0	0.0	0	0.0	0	0.0	0	0.0
06/03	3	6	2	8.0	50	16.0	0	0.0	0	0.0	0	0.0	0	0.0
06/03	3	7	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/03	3	8	1	5.4	50	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/03	4 TIDE NOT FISHED (BUDGET SAVINGS)													
06/04	5	9	2	8.0	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/04	5	10	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/04	5	11	1	5.4	50	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/04	5	12	2	5.4	50	23.0	0	0.0	0	0.0	0	0.0	0	0.0
06/04	6 TIDE NOT FISHED (BUDGET SAVINGS)													
06/05	7	13	1	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/05	7	14	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/05	7	15	3	5.4	45	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/05	7	16	2	5.4	45	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/05	8	17	2	8.0	50	24.5	1	4.9	0	0.0	0	0.0	0	0.0
06/05	8	18	3	8.0	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/05	8	19	1	5.4	50	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/05	8	20	3	5.4	50	23.0	0	0.0	0	0.0	0	0.0	0	0.0
06/06	9	21	1	8.0	50	24.0	2	10.0	0	0.0	0	0.0	0	0.0
06/06	9	22	3	8.0	50	23.5	0	0.0	0	0.0	0	0.0	0	0.0
06/06	9	23	2	5.4	46	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/06	9	24	1	5.4	46	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/07	10	25	1	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/07	10	26	3	8.0	50	12.0	0	0.0	0	0.0	0	0.0	0	0.0
06/07	10 DRIFT MISSED DUE TO MECHANICAL PROBLEM													
06/07	10 DRIFT MISSED DUE TO MECHANICAL PROBLEM													
06/07	11	27	1	8.0	50	22.5	1	5.3	0	0.0	0	0.0	0	0.0
06/07	11	28	2	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/07	11	29	3	5.4	46	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/07	11	30	1	5.4	46	21.5	3	18.2	0	0.0	0	0.0	0	0.0
06/08	12	31	2	8.0	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/08	12	32	3	8.0	50	18.0	0	0.0	0	0.0	0	0.0	0	0.0
06/08	12	33	1	5.4	46	17.5	0	0.0	0	0.0	0	0.0	0	0.0
06/08	12	34	2	5.4	46	18.0	1	7.2	0	0.0	0	0.0	0	0.0
06/08	13	35	1	8.0	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/08	13	36	2	8.0	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/08	13	37	3	5.4	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/08	13	38	2	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	14	39	2	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	14	40	3	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	14	41	1	5.4	50	25.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	14	42	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	15	43	1	8.0	50	23.0	1	5.2	0	0.0	0	0.0	0	0.0
06/09	15	44	3	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	15	45	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/09	15	46	1	5.4	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/10	16	47	1	8.0	50	18.0	0	0.0	0	0.0	0	0.0	0	0.0
06/10	16	48	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/10	16	49	2	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/10	16	50	3	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/10	17	51	1	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/10	17	52	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/10	17	53	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/10	17	54	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/11	18	55	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/11	18	56	3	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/11	18	57	1	5.4	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/11	18	58	2	5.4	50	24.0	0	0.0	0	0.0	0	0.0	0	0.0

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Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
06/11	19	59	1	8.0	50	21.5	1	5.6	0	0.0	0	0.0	0	0.0
06/11	19	60	2	8.0	50	16.5	0	0.0	0	0.0	0	0.0	0	0.0
06/11	19	61	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/11	19	62	2	5.4	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
06/12	20	63	2	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/12	20	64	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/12	20	65	1	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
06/12	20	66	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/12	21	67	1	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/12	21	68	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/12	21	69	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/12	21	70	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/13	22	71	1	8.0	50	24.5	0	0.0	0	0.0	0	0.0	0	0.0
06/13	22	72	3	8.0	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
06/13	22	73	2	5.4	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/13	22	74	3	5.4	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
06/13	23	75	1	8.0	50	19.0	1	6.3	0	0.0	0	0.0	0	0.0
06/13	23	76	2	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/13	23	77	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/13	23	78	1	5.4	50	21.0	0	0.0	1	5.7	0	0.0	0	0.0
06/14	24	79	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/14	24	80	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/14	24	81	1	5.4	50	20.0	0	0.0	0	0.0	2	12.0	0	0.0
06/14	24	82	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/14	25	83	1	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/14	25	84	2	8.0	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/14	25	85	3	5.4	50	19.5	1	6.2	1	6.2	0	0.0	0	0.0
06/14	25	86	2	5.4	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/15	26	87	2	8.0	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/15	26	88	3	8.0	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
06/15	26	89	1	5.4	50	22.5	0	0.0	1	5.3	0	0.0	0	0.0
06/15	26	90	3	5.4	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/15	27	91	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/15	27	92	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/15	27	93	1	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/15	27	94	3	5.4	50	21.0	1	5.7	0	0.0	0	0.0	0	0.0
06/16	28 TIDE NOT FISHED (HAZARDOUS WEATHER CONDITIONS)													
06/16	29	95	1	8.0	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/16	29	96	3	8.0	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
06/16	29	97	2	5.4	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/16	29	98	1	5.4	50	22.0	1	5.5	0	0.0	0	0.0	0	0.0
06/17	30	99	1	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/17	30	100	3	8.0	50	21.0	1	5.7	0	0.0	0	0.0	0	0.0
06/17	30	101	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/17	30	102	3	5.4	50	22.0	0	0.0	1	5.5	0	0.0	0	0.0
06/17	31	103	1	8.0	50	20.0	0	0.0	1	6.0	0	0.0	0	0.0
06/17	31	104	2	8.0	50	20.5	1	5.9	1	5.9	0	0.0	0	0.0
06/17	31	105	3	5.4	50	17.5	0	0.0	0	0.0	0	0.0	0	0.0
06/17	31	106	1	5.4	50	19.5	0	0.0	3	18.5	0	0.0	0	0.0
06/18	32	107	2	8.0	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/18	32	108	3	8.0	50	23.0	0	0.0	0	0.0	0	0.0	0	0.0
06/18	32	109	1	5.4	50	27.5	1	4.4	10	43.6	0	0.0	0	0.0
06/18	32	110	2	5.4	50	24.5	0	0.0	1	4.9	0	0.0	0	0.0
06/18	33	111	1	8.0	50	19.5	0	0.0	1	6.2	0	0.0	0	0.0
06/18	33	112	2	8.0	50	19.5	1	6.2	0	0.0	0	0.0	0	0.0
06/18	33	113	3	5.4	50	23.5	5	25.5	7	35.7	0	0.0	0	0.0
06/18	33	114	2	5.4	50	21.0	2	11.4	3	17.1	0	0.0	0	0.0
06/19	34	115	2	8.0	50	21.5	1	5.6	0	0.0	0	0.0	0	0.0
06/19	34	116	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/19	34	117	1	5.4	50	21.0	3	17.1	4	22.9	0	0.0	0	0.0
06/19	34	118	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
06/20	35	119	1	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/20	35	120	3	8.0	50	20.5	0	0.0	0	0.0	1	5.9	0	0.0
06/20	35	121	2	5.4	50	21.0	1	5.7	1	5.7	0	0.0	0	0.0
06/20	35	122	1	5.4	50	28.5	1	4.2	13	54.7	5	21.1	0	0.0

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Appendix A. (page 3 of 9)

Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
06/20	COMMERCIAL FISHING PERIOD													
06/20	36	123	1	8.0	50	21.0	2	11.4	0	0.0	0	0.0	0	0.0
06/20	36	124	3	8.0	50	23.0	2	10.4	1	5.2	0	0.0	0	0.0
06/20	36	125	2	5.4	50	21.5	1	5.6	2	11.2	1	5.6	0	0.0
06/20	36	126	3	5.4	50	20.0	4	24.0	1	6.0	4	24.0	0	0.0
06/21	37	127	1	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/21	37	128	2	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/21	37	129	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/21	37	130	1	5.4	50	19.5	0	0.0	1	6.2	0	0.0	0	0.0
06/21	38	131	2	8.0	50	21.0	1	5.7	0	0.0	0	0.0	0	0.0
06/21	38	132	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/21	38	133	1	5.4	50	22.0	2	10.9	2	10.9	1	5.5	0	0.0
06/21	38	134	2	5.4	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
06/22	39	135	1	8.0	50	22.5	3	16.0	0	0.0	0	0.0	0	0.0
06/22	39	136	2	8.0	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
06/22	39	137	3	5.4	50	20.0	0	0.0	3	18.0	1	6.0	0	0.0
06/22	39	138	2	5.4	50	21.0	0	0.0	12	68.6	0	0.0	0	0.0
06/22	40	139	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/22	40	140	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/22	40	141	1	5.4	50	21.0	0	0.0	0	0.0	2	11.4	0	0.0
06/22	40	142	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/23	41	143	1	8.0	50	23.5	2	10.2	0	0.0	2	10.2	0	0.0
06/23	41	144	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/23	41	145	2	5.4	50	21.5	0	0.0	3	16.7	1	5.6	0	0.0
06/23	41	146	1	5.4	50	21.5	0	0.0	3	16.7	3	16.7	0	0.0
06/23	42	147	1	8.0	50	20.5	2	11.7	0	0.0	0	0.0	0	0.0
06/23	42	148	3	8.0	50	22.5	0	0.0	0	0.0	0	0.0	0	0.0
06/23	42	149	2	5.4	50	19.5	0	0.0	0	0.0	1	6.2	0	0.0
06/23	42	150	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/24	43	151	1	8.0	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
06/24	43	152	2	8.0	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/24	43	153	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/24	43	154	1	5.4	50	19.5	1	6.2	1	6.2	1	6.2	0	0.0
06/24	44 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
06/25	45	155	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/25	45	156	3	8.0	50	20.5	2	11.7	0	0.0	0	0.0	0	0.0
06/25	45	157	1	5.4	50	20.5	1	5.9	1	5.9	2	11.7	0	0.0
06/25	45	158	2	5.4	50	20.0	0	0.0	1	6.0	0	0.0	0	0.0
06/25	46	159	1	8.0	50	26.0	0	0.0	0	0.0	0	0.0	0	0.0
06/25	46	160	3	8.0	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
06/25	46	161	2	5.4	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
06/25	46	162	1	5.4	50	23.0	1	5.2	1	5.2	1	5.2	0	0.0
06/26	47	163	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/26	47	164	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/26	47	165	1	5.4	50	21.0	1	5.7	2	11.4	5	28.6	0	0.0
06/26	47	166	3	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
06/26	48	167	1	8.0	50	20.5	2	11.7	0	0.0	1	5.9	0	0.0
06/26	48	168	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/26	48	169	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
06/26	48	170	1	5.4	50	21.0	0	0.0	0	0.0	5	28.6	0	0.0
06/27	49	171	1	8.0	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
06/27	49	172	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/27	49	173	2	5.4	50	20.5	0	0.0	2	11.7	0	0.0	0	0.0
06/27	49	174	1	5.4	50	24.0	0	0.0	6	30.0	6	30.0	0	0.0
06/27	50	175	1	8.0	50	21.0	0	0.0	0	0.0	2	11.4	0	0.0
06/27	50	176	2	8.0	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
06/27	50	177	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/27	50	178	1	5.4	50	24.0	0	0.0	0	0.0	17	85.0	0	0.0
06/28	51	179	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
06/28	51	180	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/28	51	181	1	5.4	50	24.0	2	10.0	11	55.0	11	55.0	0	0.0
06/28	51	182	2	5.4	50	20.5	0	0.0	1	5.9	1	5.9	0	0.0
06/28	52	183	1	8.0	50	22.0	3	16.4	0	0.0	0	0.0	0	0.0
06/28	52	184	2	8.0	50	20.5	0	0.0	1	5.9	0	0.0	0	0.0
06/28	52	185	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/28	52	186	2	5.4	50	22.0	0	0.0	3	16.4	7	38.2	0	0.0

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Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
06/29	53	187	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/29	53	188	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
06/29	53	189	1	5.4	50	21.0	2	11.4	7	40.0	9	51.4	0	0.0
06/29	53	190	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
06/29	54	191	1	8.0	50	22.0	2	10.9	0	0.0	0	0.0	0	0.0
06/29	54	192	3	8.0	50	21.5	2	11.2	0	0.0	0	0.0	0	0.0
06/29	54	193	2	5.4	50	20.5	0	0.0	0	0.0	3	17.6	0	0.0
06/29	54	194	1	5.4	50	22.5	6	32.0	2	10.7	11	58.7	0	0.0
06/30	55	195	1	8.0	50	20.5	2	11.7	0	0.0	4	23.4	0	0.0
06/30	55	196	3	8.0	50	20.0	0	0.0	1	6.0	0	0.0	0	0.0
06/30	55	197	2	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
06/30	55	198	3	5.4	50	20.5	0	0.0	2	11.7	0	0.0	0	0.0
06/30	56	199	1	8.0	50	20.0	3	18.0	0	0.0	0	0.0	0	0.0
06/30	56	200	2	8.0	50	20.5	0	0.0	0	0.0	1	5.9	0	0.0
06/30	56	201	3	5.4	50	20.5	0	0.0	1	5.9	0	0.0	0	0.0
06/30	56	202	1	5.4	50	22.0	1	5.5	4	21.8	3	16.4	0	0.0
07/01	57	203	2	8.0	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
07/01	57	204	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/01	57	205	1	5.4	50	26.0	2	9.2	11	50.8	13	60.0	0	0.0
07/01	57	206	2	5.4	50	20.5	0	0.0	1	5.9	0	0.0	0	0.0
07/01	COMMERCIAL FISHING PERIOD													
07/01	58	207	1	8.0	50	19.5	2	12.3	0	0.0	0	0.0	0	0.0
07/01	58	208	2	8.0	50	19.5	1	6.2	0	0.0	0	0.0	0	0.0
07/01	58	209	3	5.4	50	19.5	1	6.2	0	0.0	0	0.0	0	0.0
07/01	58	210	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/02	59	211	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/02	59	212	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/02	59	213	1	5.4	50	22.0	0	0.0	7	38.2	1	5.5	0	0.0
07/02	59	214	3	5.4	50	20.0	1	6.0	2	12.0	0	0.0	0	0.0
07/02	60	215	1	8.0	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
07/02	60	216	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/02	60	217	2	5.4	50	26.0	3	13.8	3	13.8	33	152.3	0	0.0
07/02	60	218	1	5.4	50	20.0	1	6.0	1	6.0	4	24.0	0	0.0
07/03	61	219	1	8.0	50	21.0	1	5.7	2	11.4	0	0.0	0	0.0
07/03	61	220	3	8.0	50	21.0	1	5.7	0	0.0	0	0.0	0	0.0
07/03	61	221	2	5.4	50	21.5	0	0.0	3	16.7	0	0.0	0	0.0
07/03	61	222	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/03	62	223	1	8.0	50	22.5	2	10.7	1	5.3	0	0.0	0	0.0
07/03	62	224	2	8.0	50	21.0	1	5.7	1	5.7	1	5.7	0	0.0
07/03	62	225	3	5.4	50	21.5	0	0.0	4	22.3	0	0.0	0	0.0
07/03	62	226	1	5.4	50	24.0	0	0.0	17	85.0	13	65.0	0	0.0
07/04	63	227	2	8.0	50	17.5	0	0.0	0	0.0	0	0.0	0	0.0
07/04	63	228	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/04	63	229	1	5.4	50	23.5	0	0.0	4	20.4	4	20.4	0	0.0
07/04	63	230	2	5.4	50	28.0	1	4.3	8	34.3	8	34.3	0	0.0
07/04	64	231	1	8.0	50	20.5	3	17.6	0	0.0	0	0.0	0	0.0
07/04	64	232	2	8.0	50	20.5	0	0.0	1	5.9	1	5.9	0	0.0
07/04	64	233	3	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/04	64	234	2	5.4	50	21.0	0	0.0	3	17.1	1	5.7	0	0.0
07/05	65	235	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/05	65	236	3	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
07/05	65	237	1	5.4	50	20.0	0	0.0	1	6.0	0	0.0	0	0.0
07/05	65	238	3	5.4	50	21.0	0	0.0	2	11.4	0	0.0	0	0.0
07/05	66	239	1	8.0	50	22.0	1	5.5	1	5.5	0	0.0	0	0.0
07/05	66	240	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/05	66	241	2	5.4	50	21.0	0	0.0	3	17.1	0	0.0	0	0.0
07/05	66	242	1	5.4	50	31.5	0	0.0	11	41.9	3	11.4	0	0.0
07/06	67 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
07/07	68	243	1	8.0	50	21.0	1	5.7	0	0.0	0	0.0	0	0.0
07/07	68	244	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/07	68	245	2	5.4	50	20.0	0	0.0	0	0.0	3	18.0	0	0.0
07/07	68	246	3	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/07	69	247	1	8.0	50	18.0	1	6.7	0	0.0	0	0.0	0	0.0
07/07	69	248	2	8.0	50	17.5	0	0.0	0	0.0	0	0.0	0	0.0
07/07	69	249	3	5.4	50	17.5	0	0.0	0	0.0	0	0.0	0	0.0
07/07	69	250	1	5.4	50	18.0	0	0.0	2	13.3	0	0.0	0	0.0

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Appendix A. (page 5 of 9)

Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
07/08	70	251	2	8.0	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
07/08	70	252	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/08	70	253	1	5.4	50	21.0	0	0.0	0	0.0	3	17.1	0	0.0
07/08	70	254	2	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/08	71	255	1	8.0	50	19.5	1	6.2	0	0.0	0	0.0	0	0.0
07/08	71	256	2	8.0	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/08	71	257	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/08	71	258	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
07/09	72	259	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/09	72	260	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/09	72	261	1	5.4	50	25.5	0	0.0	8	37.6	12	56.5	0	0.0
07/09	72	262	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/09	73	263	1	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/09	73	264	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/09	73	265	2	5.4	50	21.5	0	0.0	3	16.7	8	44.7	0	0.0
07/09	73	266	1	5.4	50	19.5	0	0.0	0	0.0	3	18.5	0	0.0
07/10	74	267	1	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/10	74	268	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/10	74	269	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/10	74	270	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/10	75	271	1	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/10	75	272	2	8.0	50	20.0	1	6.0	0	0.0	0	0.0	0	0.0
07/10	75	273	3	5.4	50	19.5	0	0.0	1	6.2	0	0.0	0	0.0
07/10	75	274	1	5.4	50	22.0	0	0.0	1	5.5	17	92.7	0	0.0
07/11	76	275	2	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/11	76	276	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/11	76	277	1	5.4	50	21.0	0	0.0	1	5.7	9	51.4	0	0.0
07/11	76	278	2	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/11	77	279	1	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/11	77	280	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/11	77	281	3	5.4	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
07/11	77	282	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/12	78	283	2	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/12	78	284	3	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/12	78	285	1	5.4	50	20.5	0	0.0	1	5.9	6	35.1	0	0.0
07/12	78	286	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/12	79	287	1	8.0	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/12	79	288	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/12	79	289	1	5.4	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/12	79	290	2	5.4	50	21.5	0	0.0	0	0.0	7	39.1	0	0.0
07/13	80	291	1	8.0	50	19.5	1	6.2	0	0.0	1	6.2	0	0.0
07/13	80	292	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/13	80	293	2	5.4	50	21.0	0	0.0	1	5.7	5	28.6	0	0.0
07/13	80	294	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/13	81	295	1	8.0	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
07/13	81	296	2	8.0	50	19.5	0	0.0	0	0.0	1	6.2	0	0.0
07/13	81	297	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/13	81	298	1	5.4	50	17.5	0	0.0	0	0.0	2	13.7	0	0.0
07/14	82	299	2	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/14	82	300	3	8.0	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
07/14	82	301	1	5.4	50	22.5	1	5.3	1	5.3	8	42.7	0	0.0
07/14	82	302	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
07/14	83	303	1	8.0	50	19.0	0	0.0	0	0.0	1	6.3	0	0.0
07/14	83	304	2	8.0	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/14	83	305	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/14	83	306	2	5.4	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/15	84	307	2	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/15	84	308	3	8.0	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/15	84	309	1	5.4	50	21.5	1	5.6	1	5.6	6	33.5	0	0.0
07/15	84	310	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/15	85	311	1	8.0	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/15	85	312	3	8.0	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/15	85	313	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/15	85	314	1	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/16	86	315	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/16	86	316	1	5.4	50	19.5	0	0.0	0	0.0	1	6.2	0	0.0
07/16	86	317	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/16	87	318	2	5.4	50	20.0	0	0.0	0	0.0	4	24.0	0	0.0

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Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
07/16	87	319	3	5.4	50	20.0	1	6.0	0	0.0	0	0.0	0	0.0
07/16	87	320	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/17	88	321	3	5.4	50	20.5	0	0.0	0	0.0	2	11.7	0	0.0
07/17	88	322	1	5.4	50	20.5	0	0.0	1	5.9	2	11.7	0	0.0
07/17	88	323	2	5.4	50	20.5	0	0.0	0	0.0	4	23.4	0	0.0
07/18	89	324	2	5.4	50	20.5	0	0.0	0	0.0	6	35.1	0	0.0
07/18	89	325	1	5.4	50	24.0	0	0.0	0	0.0	20	100.0	0	0.0
07/18	89	326	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/18	90 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
07/19	91	327	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/19	91	328	2	5.4	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/19	91	329	1	5.4	50	20.0	0	0.0	0	0.0	3	18.0	0	0.0
07/19	92	330	1	5.4	50	22.5	0	0.0	0	0.0	1	5.3	1	5.3
07/19	92	331	2	5.4	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/19	92	332	3	5.4	50	20.5	1	5.9	0	0.0	0	0.0	0	0.0
07/20	93	333	3	5.4	50	19.5	0	0.0	0	0.0	1	6.2	0	0.0
07/20	93	334	1	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/20	93	335	2	5.4	50	20.5	0	0.0	0	0.0	5	29.3	2	11.7
07/20	94	336	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	1	5.9
07/20	94	337	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/20	94	338	1	5.4	50	19.5	0	0.0	0	0.0	2	12.3	0	0.0
07/21	95	339	3	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
07/21	95	340	1	5.4	50	20.5	0	0.0	0	0.0	5	29.3	0	0.0
07/21	95	341	2	5.4	50	19.5	0	0.0	0	0.0	1	6.2	0	0.0
07/21	96	342	1	5.4	50	23.0	0	0.0	0	0.0	12	62.6	2	10.4
07/21	96	343	3	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/21	96	344	2	5.4	50	21.0	0	0.0	0	0.0	3	17.1	2	11.4
07/22	97	345	2	5.4	50	22.5	0	0.0	1	5.3	10	53.3	1	5.3
07/22	97	346	1	5.4	50	23.0	0	0.0	0	0.0	12	62.6	1	5.2
07/22	97	347	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/22	98 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
07/23	99	348	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	0	0.0
07/23	99	349	2	5.4	50	20.0	0	0.0	0	0.0	5	30.0	1	6.0
07/23	99	350	1	5.4	50	19.5	0	0.0	1	6.2	2	12.3	2	12.3
07/23	100	351	1	5.4	50	22.5	0	0.0	0	0.0	6	32.0	0	0.0
07/23	100	352	2	5.4	50	20.5	0	0.0	0	0.0	4	23.4	0	0.0
07/23	100	353	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
07/24	101	354	2	5.4	50	20.5	0	0.0	0	0.0	5	29.3	1	5.9
07/24	101	355	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/24	101	356	1	5.4	50	20.0	0	0.0	0	0.0	1	6.0	1	6.0
07/24	102	357	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
07/24	102	358	1	5.4	50	18.5	0	0.0	0	0.0	0	0.0	0	0.0
07/24	102	359	2	5.4	50	21.5	0	0.0	0	0.0	0	0.0	0	0.0
07/25	103	360	1	5.4	50	20.5	0	0.0	0	0.0	2	11.7	1	5.9
07/25	103	361	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
07/25	103	362	2	5.4	50	23.0	0	0.0	0	0.0	24	125.2	2	10.4
07/25	COMMERCIAL FISHING PERIOD													
07/25	104	363	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/25	104	364	1	5.4	50	20.0	0	0.0	0	0.0	5	30.0	0	0.0
07/25	104	365	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/26	105	366	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
07/26	105	367	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
07/26	105	368	1	5.4	50	20.0	0	0.0	0	0.0	1	6.0	1	6.0
07/26	106	369	1	5.4	50	20.0	0	0.0	0	0.0	2	12.0	0	0.0
07/26	106	370	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/26	106	371	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/27	107	372	2	5.4	50	21.0	0	0.0	0	0.0	13	74.3	6	34.3
07/27	107	373	3	5.4	50	19.0	0	0.0	0	0.0	1	6.3	1	6.3
07/27	107	374	1	5.4	50	19.5	0	0.0	0	0.0	1	6.2	2	12.3
07/27	108	375	3	5.4	50	20.5	0	0.0	0	0.0	3	17.6	1	5.9
07/27	108	376	1	5.4	50	22.5	0	0.0	0	0.0	6	32.0	2	10.7
07/27	108	377	2	5.4	50	21.0	0	0.0	0	0.0	2	11.4	0	0.0
07/28	109	378	1	5.4	50	30.0	0	0.0	0	0.0	2	8.0	1	4.0
07/28	109	379	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/28	109	380	2	5.4	50	25.0	0	0.0	0	0.0	6	28.8	18	86.4

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Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
07/28	110	381	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	1	6.0
07/28	110	382	1	5.4	50	20.0	0	0.0	0	0.0	2	12.0	1	6.0
07/28	110	383	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
07/29	111	384	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	1	6.2
07/29	111	385	2	5.4	50	21.0	0	0.0	0	0.0	8	45.7	9	51.4
07/29	111	386	1	5.4	50	22.0	0	0.0	0	0.0	8	43.6	9	49.1
07/29	COMMERCIAL FISHING PERIOD													
07/29	112	387	1	5.4	50	21.0	0	0.0	0	0.0	2	11.4	0	0.0
07/29	112	388	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	2	12.0
07/29	112	389	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
07/30	113	390	2	5.4	50	21.0	0	0.0	0	0.0	2	11.4	16	91.4
07/30	113	391	3	5.4	50	19.0	0	0.0	0	0.0	0	0.0	1	6.3
07/30	113	392	1	5.4	50	19.5	0	0.0	0	0.0	1	6.2	5	30.8
07/30	114	393	3	5.4	50	21.0	0	0.0	0	0.0	3	17.1	5	28.6
07/30	114	394	1	5.4	50	21.5	0	0.0	0	0.0	1	5.6	9	50.2
07/30	114	395	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
07/31	115	396	1	5.4	50	20.5	0	0.0	0	0.0	1	5.9	6	35.1
07/31	115	397	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	3	18.5
07/31	115	398	2	5.4	50	22.5	0	0.0	0	0.0	8	42.7	17	90.7
07/31	116	399	2	5.4	50	21.0	0	0.0	0	0.0	1	5.7	6	34.3
07/31	116	400	1	5.4	50	20.0	0	0.0	0	0.0	3	18.0	2	12.0
07/31	116	401	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/01	117	402	3	5.4	50	22.0	0	0.0	0	0.0	1	5.5	3	16.4
08/01	117	403	2	5.4	50	21.0	0	0.0	0	0.0	3	17.1	8	45.7
08/01	117	404	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	3	18.5
08/01	COMMERCIAL FISHING PERIOD													
08/01	118	405	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	4	23.4
08/01	118	406	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	4	23.4
08/01	118	407	3	5.4	50	23.0	0	0.0	0	0.0	0	0.0	0	0.0
08/02	119	408	2	5.4	50	19.0	0	0.0	0	0.0	0	0.0	3	18.9
08/02	119	409	3	5.4	50	22.0	0	0.0	0	0.0	0	0.0	0	0.0
08/02	119	410	1	5.4	50	19.0	0	0.0	0	0.0	2	12.6	2	12.6
08/02	120	411	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/02	120	412	1	5.4	50	21.0	0	0.0	0	0.0	0	0.0	4	22.9
08/02	120	413	2	5.4	50	22.5	0	0.0	0	0.0	1	5.3	3	16.0
08/03	121	414	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	5	30.8
08/03	121	415	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	1	5.9
08/03	121	416	2	5.4	50	22.5	0	0.0	0	0.0	3	16.0	4	21.3
08/03	122	417	2	5.4	50	21.0	0	0.0	0	0.0	1	5.7	8	45.7
08/03	122	418	1	5.4	50	28.0	0	0.0	0	0.0	3	12.9	40	171.4
08/03	122	419	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	14	78.1
08/04	123	420	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/04	123	421	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	3	17.6
08/04	123	422	1	5.4	50	20.0	0	0.0	0	0.0	1	6.0	4	24.0
08/04	124	423	1	5.4	50	24.0	0	0.0	0	0.0	2	10.0	17	85.0
08/04	124	424	2	5.4	50	28.0	0	0.0	0	0.0	1	4.3	29	124.3
08/04	124	425	3	5.4	50	25.5	0	0.0	0	0.0	2	9.4	26	122.4
08/05	125 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
08/06	126	426	2	5.4	50	20.0	0	0.0	0	0.0	1	6.0	1	6.0
08/06	126	427	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	3	17.6
08/06	126	428	1	5.4	50	22.5	0	0.0	0	0.0	0	0.0	8	42.7
08/06	127	429	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/06	127	430	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	3	17.6
08/06	127	431	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/07	128	432	1	5.4	50	22.5	0	0.0	0	0.0	0	0.0	7	37.3
08/07	128	433	3	5.4	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
08/07	128	434	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/07	129	435	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/07	129	436	1	5.4	50	21.0	0	0.0	0	0.0	1	5.7	2	11.4
08/07	129	437	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/08	130	438	3	5.4	50	20.0	0	0.0	0	0.0	1	6.0	0	0.0
08/08	130	439	2	5.4	50	23.0	0	0.0	0	0.0	0	0.0	13	67.8
08/08	130	440	1	5.4	50	25.0	0	0.0	0	0.0	2	9.6	17	81.6
08/08	131 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
08/09	132	441	1	5.4	50	21.0	0	0.0	0	0.0	0	0.0	7	40.0
08/09	132	442	2	5.4	50	21.5	0	0.0	0	0.0	1	5.6	6	33.5
08/09	132	443	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0

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Appendix A. (page 8 of 9)

Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
08/09	133	444	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/09	133	445	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/09	133	446	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	6	36.0
08/10	134	447	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/10	134	448	1	5.4	50	23.0	0	0.0	0	0.0	1	5.2	15	78.3
08/10	134	449	2	5.4	50	22.5	0	0.0	0	0.0	0	0.0	6	32.0
08/10	135	450	1	5.4	50	27.5	0	0.0	0	0.0	1	4.4	1	4.4
08/10	135	451	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/10	135	452	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/11	136	453	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	2	12.3
08/11	136	454	1	5.4	50	21.5	0	0.0	0	0.0	2	11.2	11	61.4
08/11	136	455	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/11	137	456	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/11	137	457	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/11	137	458	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	4	24.0
08/12	138	459	1	5.4	50	24.5	0	0.0	0	0.0	0	0.0	22	107.8
08/12	138	460	2	5.4	50	30.0	0	0.0	0	0.0	2	8.0	81	324.0
08/12	138	461	3	5.4	50	28.0	0	0.0	0	0.0	0	0.0	67	287.1
08/12	COMMERCIAL FISHING PERIOD													
08/12	139	462	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0
08/12	139	463	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0
08/12	139	464	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/13	140	465	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/13	140	466	1	5.4	50	23.0	0	0.0	0	0.0	1	5.2	29	151.3
08/13	140	467	2	5.4	50	18.0	0	0.0	0	0.0	0	0.0	9	60.0
08/13	141	468	1	5.4	50	21.5	0	0.0	0	0.0	0	0.0	9	50.2
08/13	141	469	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
08/13	141	470	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/14	142	471	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/14	142	472	1	5.4	50	22.5	0	0.0	0	0.0	0	0.0	19	101.3
08/14	142	473	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/14	COMMERCIAL FISHING PERIOD													
08/14	143	474	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/14	143	475	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/14	143	476	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	3	18.0
08/15	144	477	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/15	144	478	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/15	144	479	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/15	145	480	2	5.4	50	21.0	0	0.0	0	0.0	0	0.0	8	45.7
08/15	145	481	3	5.4	50	21.0	0	0.0	0	0.0	0	0.0	8	45.7
08/15	145	482	1	5.4	50	21.0	0	0.0	0	0.0	1	5.7	3	17.1
08/16	146	483	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/16	146	484	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/16	146	485	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/16	147	486	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	8	46.8
08/16	147	487	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/16	147	488	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/17	148	489	2	5.4	50	21.0	0	0.0	0	0.0	1	5.7	9	51.4
08/17	148	490	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	3	18.0
08/17	148	491	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/18	149	492	3	5.4	50	33.0	0	0.0	0	0.0	0	0.0	1	3.6
08/18	149	493	2	5.4	50	22.5	0	0.0	0	0.0	0	0.0	23	122.7
08/18	149	494	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	3	18.5
08/18	150	495	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	11	64.4
08/18	150	496	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	5	29.3
08/18	150	497	3	5.4	50	20.0	0	0.0	0	0.0	1	6.0	4	24.0
08/19	151	498	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	2	12.3
08/19	151	499	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/19	151	500	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	9	54.0
08/19	152 TIDE NOT FISHED (COMMERCIAL FISHING PERIOD)													
08/20	153	501	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/20	153	502	1	5.4	50	21.0	0	0.0	0	0.0	0	0.0	4	22.9
08/20	153	503	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	4	23.4
08/20	154	504	1	5.4	50	25.0	0	0.0	0	0.0	0	0.0	2	9.6
08/20	154	505	3	5.4	50	24.5	0	0.0	0	0.0	0	0.0	0	0.0
08/20	154	506	2	5.4	50	25.5	0	0.0	0	0.0	0	0.0	5	23.5

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Date	Tide No.	Drift No.	Stat. No.	Mesh Size (in)	Net Length (fath)	Fishing Time (min)	Chinook Catch	Chinook CPUE	Sockeye Catch	Sockeye CPUE	Chum Catch	Chum CPUE	Coho Catch	Coho CPUE
08/21	155	507	2	5.4	50	25.5	0	0.0	0	0.0	0	0.0	1	4.7
08/21	155	508	1	5.4	50	27.0	0	0.0	0	0.0	0	0.0	11	48.9
08/21	155	509	3	5.4	50	26.0	0	0.0	0	0.0	0	0.0	6	27.7
08/21	156	510	3	5.4	50	24.5	0	0.0	0	0.0	0	0.0	0	0.0
08/21	156	511	2	5.4	50	24.5	0	0.0	0	0.0	0	0.0	0	0.0
08/21	156	512	1	5.4	50	29.5	0	0.0	0	0.0	0	0.0	8	32.5
08/22	157	513	1	5.4	50	25.5	0	0.0	0	0.0	0	0.0	5	23.5
08/22	157	514	2	5.4	50	25.0	0	0.0	0	0.0	0	0.0	3	14.4
08/22	157	515	3	5.4	50	23.5	0	0.0	0	0.0	0	0.0	1	5.1
08/22	158	516	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/22	158	517	3	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
08/22	158	518	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	3	18.0
08/23	159	519	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/23	159	520	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	5	29.3
08/23	159	521	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/23	160	522	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
08/23	160	523	3	5.4	50	21.0	0	0.0	0	0.0	0	0.0	0	0.0
08/23	160	524	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	0	0.0
08/24	161	525	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/24	161	526	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	7	41.0
08/24	161	527	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/24	162	528	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/24	162	529	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/24	162	530	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	4	24.6
08/25	163	531	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/25	163	532	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/25	163	533	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/25	164	534	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0
08/25	164	535	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/25	164	536	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0
08/26	165	537	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/26	165	538	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	6	35.1
08/26	165	539	2	5.4	50	21.0	0	0.0	0	0.0	0	0.0	16	91.4
08/26	COMMERCIAL FISHING PERIOD													
08/26	166	540	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/26	166	541	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/26	166	542	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/27	167	543	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/27	167	544	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/27	167	545	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/27	168	546	3	5.4	50	20.0	0	0.0	0	0.0	0	0.0	0	0.0
08/27	168	547	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	2	12.0
08/27	168	548	1	5.4	50	21.0	0	0.0	0	0.0	0	0.0	6	34.3
08/28	169	549	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	3	18.0
08/28	169	550	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	1	6.2
08/28	169	551	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/28	170	552	2	5.4	50	20.5	0	0.0	0	0.0	0	0.0	3	17.6
08/28	170	553	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/28	170	554	1	5.4	50	20.5	0	0.0	0	0.0	0	0.0	2	11.7
08/29	171	555	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/29	171	556	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	1	6.2
08/29	171	557	2	5.4	50	20.0	0	0.0	0	0.0	0	0.0	7	42.0
08/29	172	558	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/29	172	559	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/29	172	560	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/30	173	561	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/30	173	562	1	5.4	50	20.0	0	0.0	0	0.0	0	0.0	1	6.0
08/30	173	563	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/30	174	564	3	5.4	50	21.5	0	0.0	0	0.0	0	0.0	1	5.6
08/30	174	565	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/30	174	566	1	5.4	50	21.5	0	0.0	0	0.0	0	0.0	3	16.7
08/31	175	567	1	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/31	175	568	2	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
08/31	175	569	3	5.4	50	19.5	0	0.0	0	0.0	0	0.0	0	0.0
Total							117	655.1	234	1216.7	573	3092.8	931	4832.0

Appendix B. Annual summary statistics for the Bethel test fishery, escapement projects and the commercial catch in the Kuskokwim River.

Species	Year	Test Fish Cum. Catch	Test Fish Cum. CPUE	Kogrukluk Weir	Aniak Sonar	Chinook Index	Commercial CPUE (June and July) Dist. 1	Commercial CPUE (June and July) Dist. 2
Chinook	Objective:			10,000		15,642		
	1984	231	273	4,928		8,901		
	1985	79	114	4,438		9,231		
	1986	127	201	4,296		7,446		
	1987	384	582	b		14,882		
	1988	238	361	11,194		16,633	1.13	6.40
	1989	314	523	11,940		20,659	1.17	3.15
	1990	283	445	10,219		21,884	2.19	3.82
Mean (84–90):		237	357	7,836		14,234	1.50	4.46
	1991	117	172	7,280		14,782	1.17	1.34
% of Mean/Obj.:		49	48	73		95	78	30
Sockeye	Objective:			2,000				
	1984	267	579	4,130				
	1985	694	1,654	4,366			7.30	8.31
	1986	869	2,445	4,179			5.59	11.76
	1987	943	2,762	b			4.33	8.87
	1988	583	1,501	6,158			1.92	7.68
	1989	256	799	5,810			1.29	2.77
	1990	406	1,114	8,406			3.47	5.93
Mean (84–90):		574	1,551	5,508			3.98	7.55
	1991	234	581	16,458			3.36	4.48
% of Mean/Obj.:		41	37	823			84	59
Chum	Objective:			30,000	250,000			
	1984	1,186	2,387	41,484	275,261			
	1985	616	1,327	17,181	253,048		13.04	29.62
	1986	1,688	4,066	15,511	209,080		18.12	25.92
	1987	2,302	4,900	b	193,464		18.06	33.12
	1988	2,107	5,189	41,881	401,511		28.75	62.82
	1989	937	2,610	39,548	243,936		20.40	51.96
	1990	1,105	2,722	26,765	300,408		18.05	49.51
Mean (84–90):		1,420	3,314	30,395	268,101		19.40	42.16
	1991	573	1,250	24,193	282,475		11.87	44.06
% of Mean/Obj.:		40	38	81	113		61	105
Coho[a]	Objective:			25,000				
	1984	2,152	3,222	29,824			15.62	
	1985	1,091	1,790	16,536			14.23	28.58
	1986	2,714	4,471	26,230			21.28	40.58
	1987	1,227	2,043	24,238			14.34	39.96
	1988	1,989	3,441	12,799			13.73	25.69
	1989	1,703	2,624	b			13.36	37.60
	1990	1,093	2,485	b			14.19	21.62
Mean (84–90):		1,710	2,868	21,925			15.25	32.34
	1991	931	1,647	9,963			15.19	18.87
% of Mean/Obj.:		54	57	40			100	58

[a] Test fish data through 31 August.

[b] No counts or counts are incomplete.

Appendix C. Commercial chinook salmon catches by fishing period and year for Districts 1 and 2 of the Kuskokwim River, 1988 – 1991 (Francisco et al. 1992).

Year	Date	Hours Fished	District 1 Catch	District 1 Fishermen Hours	District 1 CPUE	District 2 Catch	District 2 Fishermen Hours	District 2 CPUE
1988	16 Jun	6	12,640	4,816	2.62			
	20 Jun	6	11,708	3,672	3.19			
	24 Jun	6	9,710	3,864	2.51	669	78	8.58
	28 Jun	6	5,350	3,654	1.46	746	102	7.31
	02 Jul	6	3,531	3,480	1.01	468	114	4.11
	05 Jul	6	2,340	3,474	0.67			
	08 Jul	6	1,891	3,624	0.52			
	11 Jul	6	1,628	3,588	0.45			
	14 Jul	6	1,751	3,582	0.49			
	18 Jul	6	1,107	3,450	0.32			
	21 Jul	6	621	3,234	0.19			
	25 Jul	6	329	2,964	0.11			
	28 Jul	6	333	3,312	0.10			
	Total		52,939	46,714	1.13	1,883	294	6.40
1989	19 Jun	6	9,204	2,988	3.08			
	23 Jun	6	6,011	2,218	2.71			
	26 Jun	6	1,862	1,006	1.85			
	30 Jun	6	9,232	5,129	1.80	610	120	5.08
	03 Jul	6	4,600	3,770	1.22	371	108	3.44
	05 Jul	6	3,311	3,311	1.00	264	84	3.14
	08 Jul	6	3,136	3,733	0.84	3	84	0.04
	11 Jul	6	1,691	3,676	0.46			
	14 Jul	6	1,216	3,576	0.34			
	18 Jul	6	868	2,630	0.33			
	27 Jul	6	210	3,364	0.06			
	Total		41,341	35,401	1.17	1,248	396	3.15
1990	20 Jun	6	16,690	3,780	4.42			
	25 Jun	6	16,031	3,666	4.37			
	29 Jun	6	9,428	3,870	2.44	641	84	7.63
	05 Jul	6	4,071	3,546	1.15	467	90	5.19
	09 Jul	6	2,804	3,534	0.79	255	102	2.50
	14 Jul	6	2,127	5,000	0.43	209	136	1.54
	Total		51,151	23,396	2.19	1,572	412	3.82
88–90 Average			48,477		1.50	1568		4.46
1991	20 Jun	6	13,813	3,606	3.83			
	24 Jun	6	12,612	3,696	3.41			
	01 Jul	6	5,966	3,774	1.58	483	102	4.74
	06 Jul	6	2,102	3,534	0.59	341	96	3.55
	13 Jul	6	904	3,426	0.26	112	108	1.04
	18 Jul	6	452	3,408	0.13	49	102	0.48
	22 Jul	6	233	3,258	0.07	28	114	0.25
	25 Jul	6	186	3,198	0.06	20	136	0.15
	29 Jul	6	134	3,204	0.04	21	126	0.16
	Total		36,402	31,104	1.17	1,054	786	1.34
	Percent of 1988–90 Ave.		75		78	67		30

Appendix D. Historical mean and median dates of salmon migration at the Bethel test-fish site, 1984 – 1991.

Species	Year	Mean Date	Variance	Median Date
Chinook	1984	22 June	99.9	21 June
	1985	28 June	290.6	3 July
	1986	22 June	335.2	22 June
	1987	24 June	464.6	22 June
	1988	22 June	543.4	20 June
	1989	24 June	389.0	24 June
	1990	26 June	148.7	25 June
	1991	25 June	87.6	25 June
	Mean (84–90):	24 June	324.5	24 June
Sockeye	1984	N.A.	N.A.	1 July
	1985	30 June	106.8	29 June
	1986	27 June	221.4	26 June
	1987	25 June	244.6	23 June
	1988	24 June	206.1	23 June
	1989	24 June	193.2	24 June
	1990	28 June	59.3	28 June
	1991	28 June	53.7	29 June
	Mean (84–90):	26 June	147.3	26 June
Chum	1984	1 July	49.6	1 July
	1985	4 July	476.7	30 June
	1986	2 July	362.7	1 July
	1987	6 July	397.3	6 July
	1988	1 July	435.9	1 July
	1989	1 July	349.1	29 June
	1990	7 July	118.5	5 July
	1991	12 July	163.3	11 July
	Mean (84–90):	3 July	312.8	2 July
Coho	1984	9 August	76.7	9 August
	1985	10 August	52.4	9 August
	1986	10 August	248.9	7 August
	1987	16 August	333.0	14 August
	1988	11 August	227.6	11 August
	1989	6 August	173.9	5 August
	1990	13 August	59.0	14 August
	1991	10 August	76.9	11 August
	Mean (84–90):	11 August	167.4	10 August

Appendix E. Commercial sockeye salmon catches by fishing period and year for Districts 1 and 2 of the Kuskokwim River, 1985 – 1991 (Francisco et al. 1992).

Year	Date	Hours Fished	District 1 Catch	District 1 Fishermen Hours	District 1 CPUE	District 2 Catch	District 2 Fishermen Hours	District 2 CPUE
1985	20 Jun	6	5,246	2,538	2.07	115	48	2.40
	24 Jun	6	25,536	2,928	8.72	340	66	5.15
	27 Jun	6	26,155	2,952	8.86	739	72	10.26
	01 Jul	6	31,082	3,084	10.08	1,100	90	12.22
	04 Jul	6	16,114	2,760	5.84			
	Total		104,133	14,262	7.30	2,294	276	8.31
1986	26 Jun	6	40,468	3,084	13.12	616	18	34.22
	30 Jun	6	22,633	3,456	6.55	1,171	78	15.01
	03 Jul	6	15,766	3,336	4.73	265	48	5.52
	07 Jul	6	8,347	3,516	2.37	26	12	2.17
	10 Jul	6	5,468	3,192	1.72	179	36	4.97
	Total		92,702	16,584	5.59	2,257	192	11.76
1987	18 Jun	8	9,102	4,208	2.16			
	24 Jun	8	24,355	4,856	5.02			
	30 Jun	8	39,112	4,512	8.67			
	03 Jul	6	44,030	3,480	12.65	511	90	5.68
	07 Jul	6	9,196	3,468	2.65	1,459	132	11.05
	11 Jul	6	4,611	3,582	1.29			
	15 Jul	6	2,301	3,414	0.67			
	20 Jul	6	774	3,306	0.23			
	Total		133,481	30,826	4.33	1,970	222	8.87
1988	16 Jun	8	7,408	4,816	1.54			
	20 Jun	6	14,502	3,672	3.95			
	24 Jun	6	19,894	3,864	5.15	1,041	78	13.35
	28 Jun	6	17,628	3,654	4.82	639	102	6.26
	02 Jul	6	15,102	3,480	4.34	579	114	5.08
	05 Jul	6	7,284	3,474	2.10			
	08 Jul	6	3,623	3,624	1.00			
	11 Jul	6	2,467	3,588	0.69			
	14 Jul	6	822	3,582	0.23			
	18 Jul	6	396	3,450	0.11			
	21 Jul	6	164	3,234	0.05			
	25 Jul	6	109	2,964	0.04			
	28 Jul	6	70	3,312	0.02			
	Total		89,469	46,714	1.92	2,259	294	7.68
1989	19 Jun	8	5,495	2,988	1.84			
	23 Jun	8	7,011	2,218	3.16			
	26 Jun	8	3,746	1,006	3.72			
	30 Jun	6	10,214	5,129	1.99	587	120	4.89
	03 Jul	6	5,808	3,770	1.54	238	108	2.20
	05 Jul	6	2,917	3,311	0.88	176	84	2.10
	08 Jul	6	3,177	3,733	0.85			
	11 Jul	6	1,565	3,676	0.43	95	84	1.13
	14 Jul	6	796	3,576	0.22			
	18 Jul	6	451	2,630	0.17			
	Total		41,180	32,037	1.29	1,096	396	2.77
1990	20 Jun	6	10,318	3,780	2.73			
	25 Jun	6	27,024	3,666	7.37			
	29 Jun	6	18,774	3,870	4.85	735	84	8.75
	05 Jul	6	10,759	3,546	3.03	561	90	6.23
	09 Jul	6	8,757	3,534	2.48	580	102	5.69
	14 Jul	8	5,467	5,000	1.09	567	136	4.17
	Total		81,099	23,396	3.47	2,443	412	5.93
85–90 Average			90,344		3.98	2,053		7.55
1991	20 Jun	6	19,732	3,606	5.47			
	24 Jun	6	19,262	3,696	5.21			
	01 Jul	6	24,428	3,774	6.47	1,200	102	11.76
	06 Jul	6	24,219	3,534	6.85	613	96	6.39
	13 Jul	6	6,458	3,426	1.88	981	108	9.08
	18 Jul	6	5,128	3,408	1.50	365	102	3.58
	22 Jul	6	3,085	3,258	0.95	117	114	1.03
	25 Jul	6	1,526	3,198	0.48	177	136	1.30
	29 Jul	6	732	3,204	0.23	70	128	0.55
	Total		104,570	31,104	3.36	3,523	786	4.48
	Percent of 1985–90 Ave.		116		84	172		59

Appendix F. Commercial chum salmon catches by fishing period and year for Districts 1 and 2 of the Kuskokwim River, 1985 – 1991 (Francisco et al. 1992).

Year	Date	Hours Fished	District 1 Catch	District 1 Fishermen Hours	District 1 CPUE	District 2 Catch	District 2 Fishermen Hours	District 2 CPUE
1985	20 Jun	6	19,762	2,538	7.79	647	48	13.48
	24 Jun	6	42,778	2,928	14.61	2,411	66	36.53
	27 Jun	6	47,443	2,952	16.07	2,263	72	31.43
	01 Jul	6	47,471	3,084	15.39	2,854	90	31.71
	04 Jul	6	28,581	2,760	10.36			
	Total		186,035	14,262	13.04	8,175	276	29.62
1986	26 Jun	6	68,947	3,084	22.36	439	18	24.39
	30 Jun	6	60,780	3,456	17.59	1,619	78	20.76
	03 Jul	6	65,839	3,336	19.74	1,249	48	26.02
	07 Jul	6	55,983	3,516	15.92	387	12	32.25
	10 Jul	6	48,990	3,192	15.35	1,282	36	35.61
	Total		300,539	16,584	18.12	4,976	192	25.92
1987	18 Jun	6	13,472	4,208	3.20			
	24 Jun	6	54,454	4,856	11.21			
	30 Jun	6	112,963	4,512	25.04			
	03 Jul	6	66,783	3,480	19.19	3,200	90	35.56
	07 Jul	6	103,059	3,468	29.72	4,152	132	31.45
	11 Jul	6	72,118	3,582	20.13			
	15 Jul	6	71,923	3,414	21.07			
	20 Jul	6	62,044	3,306	18.77			
	Total		556,816	30,826	18.06	7,352	222	33.12
1988	16 Jun	6	72,219	4,816	15.00			
	20 Jun	6	113,628	3,672	30.94			
	24 Jun	6	119,808	3,864	31.01	4,232	78	54.26
	28 Jun	6	154,027	3,654	42.15	6,087	102	59.68
	02 Jul	6	187,916	3,480	54.00	8,155	114	71.54
	05 Jul	6	163,971	3,474	47.20			
	08 Jul	6	138,772	3,624	38.29			
	11 Jul	6	137,450	3,588	38.31			
	14 Jul	6	116,930	3,582	32.64			
	18 Jul	6	57,749	3,450	16.74			
	21 Jul	6	39,643	3,234	12.26			
	25 Jul	6	24,893	2,964	8.40			
	28 Jul	6	16,028	3,312	4.84			
	Total		1,343,034	46,714	28.75	18,474	294	62.84
1989	19 Jun	6	41,789	2,988	13.99			
	23 Jun	6	65,650	2,218	29.60			
	26 Jun	6	32,373	1,006	32.18			
	30 Jun	6	131,629	5,129	25.66	7,353	120	61.28
	03 Jul	6	91,345	3,770	24.23	5,101	108	47.23
	05 Jul	6	85,727	3,311	25.89	3,542	84	42.17
	08 Jul	6	119,066	3,733	31.90			
	11 Jul	6	78,053	3,676	21.23	4,580	84	54.52
	14 Jul	6	44,401	3,576	12.42			
	18 Jul	6	26,407	2,630	10.04			
			5,716	3,364	1.70			
	Total		722,156	35,401	20.40	20,576	396	51.96
1990	20 Jun	6	30,306	3,780	8.02			
	25 Jun	6	58,944	3,666	16.08			
	29 Jun	6	74,911	3,870	19.36	3,838	84	45.69
	05 Jul	6	86,835	3,546	24.49	4,397	90	48.86
	09 Jul	6	91,411	3,534	25.87	5,163	102	50.62
	14 Jul	6	79,803	5,000	15.96	6,999	136	51.46
	Total		422,210	23,396	18.05	20,397	412	49.51
85–90 Average			588,465		19.40	13,325		42.16
1991	20 Jun	6	13,268	3,606	3.68			
	24 Jun	6	30,632	3,696	8.29			
	01 Jul	6	50,121	3,774	13.28	3,043	102	29.83
	06 Jul	6	40,060	3,534	11.34	2,381	96	24.80
	13 Jul	6	52,552	3,426	15.34	4,384	108	40.59
	18 Jul	6	78,797	3,408	23.12	6,534	102	64.06
	22 Jul	6	49,788	3,258	15.28	7,154	114	62.75
	25 Jul	6	30,083	3,198	9.41	7,686	136	56.51
	29 Jul	6	24,026	3,204	7.50	3,452	128	26.97
	Total		369,325	31,104	11.87	34,634	786	44.06
	Percent of 1985–90 Ave.		63		61	260		105

Appendix G. Commercial coho salmon catches by fishing period and year for Districts 1 and 2 of the Kuskokwim River, 1984 – 1991 (Francisco et al. 1992).

Year	Date	Hours Fished	District 1 Catch	District 1 Fishermen Hours	District 1 CPUE	District 2 Catch	District 2 Fishermen Hours	District 2 CPUE
1984	02 Aug	6	79,240	2,406	32.93			
	06 Aug	9	84,406	4,876	17.30			
	09 Aug	9	80,990	4,707	17.21			
	13 Aug	9	80,266	4,536	17.70			
	16 Aug	9	78,342	4,518	17.34			
	20 Aug	9	63,829	4,419	14.44			
	23 Aug	9	49,372	4,329	11.40			
	27 Aug	9	16,472	3,150	5.23			
	30 Aug	9	11,222	1,890	5.94			
	Total		544,141	34,833	15.62			
1985	01 Aug	6	34,052	2,922	11.65			
	05 Aug	6	54,819	3,162	17.34			
	08 Aug	6	76,149	3,150	24.81	739	48	15.40
	12 Aug	6	77,809	3,180	24.47	2,914	84	34.69
	15 Aug	6	28,013	2,646	10.59	2,005	66	30.38
	19 Aug	6	19,316	2,436	7.93			
	22 Aug	6	17,534	2,340	7.49			
	26 Aug	6	10,686	1,782	6.00			
	29 Aug	6	9,568	1,572	6.09			
	Total		329,948	23,190	14.23	5,658	198	28.58
1986	04 Aug	6	96,127	3,180	30.23			
	07 Aug	9	127,024	5,400	23.52	2,445	48	50.94
	11 Aug	6	62,215	3,318	24.78	2,677	60	44.62
	13 Aug	6	92,918	3,156	29.44	2,787	60	46.45
	15 Aug	6	55,633	3,114	17.87	5,761	162	35.56
	18 Aug	6	51,328	2,862	17.93	1,804	48	37.58
	21 Aug	6	50,640	2,790	18.15	1,325	36	36.81
	25 Aug	6	37,365	2,748	13.60			
	28 Aug	6	16,436	2,076	7.92			
	Total		609,686	28,644	21.28	16,799	414	40.58
1987	06 Aug	6	46,182	3,540	13.05			
	13 Aug	6	104,968	3,624	28.96	2,273	84	27.06
	17 Aug	6	73,867	3,570	20.69	3,374	84	40.17
	19 Aug	6	45,277	3,510	12.90	3,928	78	50.36
	21 Aug	6	33,601	3,240	10.37	4,571	108	42.32
	24 Aug	6	27,607	3,000	9.20			
	27 Aug	6	21,772	2,874	7.58			
	31 Aug	6	12,873	2,184	5.89			
	Total		366,147	25,542	14.34	14,146	354	39.96
1988	01 Aug	6	33,954	3,564	9.53			
	04 Aug	6	76,576	3,834	19.97			
	08 Aug	6	76,345	3,840	19.88	1,465	84	17.44
	10 Aug	6	53,874	3,576	15.07	3,823	96	39.82
	12 Aug	6	84,700	3,744	22.62	5,216	120	43.47
	15 Aug	6	59,724	3,678	16.24	2,317	126	18.39
	18 Aug	6	37,415	3,720	10.06	1,485	90	16.50
	20 Aug	6	24,046	3,462	6.95	1,573	102	15.42
	27 Aug	6	22,683	3,192	7.11			
	31 Aug	6	12,264	2,472	4.96			
	Total		481,581	35,082	13.73	15,879	618	25.69
1989	03 Aug	8	99,022	5,432	18.23			
	07 Aug	6	73,514	3,853	19.08	6,607	132	50.05
	09 Aug	6	103,158	3,864	26.70	5,714	108	52.91
	12 Aug	6	81,970	3,900	21.02			
	15 Aug	6	23,071	3,697	6.24	1,867	90	20.74
	18 Aug	6	5,938	2,284	2.60	2,733	120	22.78
	23 Aug	6	30,940	3,167	9.77			
	26 Aug	8	20,881	4,063	5.14			
	29 Aug	8	11,080	3,388	3.27			
	Total		449,574	33,848	13.36	16,921	450	37.60
1990	01 Aug	6	23,549	3,666	6.42			
	06 Aug	6	61,450	3,786	16.23	1,111	90	12.34
	10 Aug	6	58,251	3,918	14.87	1,946	90	21.62
	13 Aug	6	115,444	3,852	29.97	4,192	96	43.67
	16 Aug	9	68,605	5,850	11.73	2,239	153	14.63
	20 Aug	6	51,838	3,564	14.54	2,548	108	23.59
	27 Aug	6	16,030	3,204	5.00	1,780	102	17.45
	Total		395,167	27,840	14.19	13,816	639	21.62

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Year	Date	Hours Fished	District 1 Catch	District 1 Fishermen Hours	District 1 CPUE	District 2 Catch	District 2 Fishermen Hours	District 2 CPUE
84–90 avg			453,749	29,826	15.25	11,888	382	32.34
1991	01 Aug	6	38,284	3,612	10.60			
	05 Aug	6	56,262	3,858	14.58	1,596	136	11.74
	08 Aug	6	72,037	3,804	18.94	2,381	136	17.51
	12 Aug	8	114,581	5,296	21.64	1,829	128	14.29
	14 Aug	8	58,393	4,808	12.14	2,461	120	20.51
	19 Aug	6	57,364	3,540	16.20	1,689	114	14.82
	26 Aug	8	43,664	4,096	10.66	4,424	128	34.56
	Total		440,585	29,014	15.19	14,380	762	18.87
	Percent of 1984–90 Ave.		97	97	100	121	200	58

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