



Advisory Announcement

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2019 Upper Cook Inlet Commercial Salmon Fishery Season Summary

The 2019 Upper Cook Inlet (UCI) commercial harvest of approximately 2.1 million salmon was 37% less than the previous 10-year average annual harvest of 3.2 million fish (Table 1). While all five species of Pacific salmon are present in UCI, sockeye salmon are the most valuable, accounting for nearly 93% of the total value during the past 20 years. The 2019 preseason forecast projected a total run of 6.0 million sockeye salmon (Table 2). The estimated actual run, based on preliminary data, was 5.2 million fish, or 13% less than forecast. The exvessel value of the 2019 harvest of all salmon species of approximately \$18 million was 40% less than the previous 10-year average annual ex-vessel value of \$30 million. All species-specific exvessel values were below average in 2019 for UCI.

UCI salmon escapements in 2019 were mixed. In total, there are seven sockeye salmon systems, sixteen king salmon systems, four coho salmon systems, and one chum salmon system with escapement goals that were monitored in 2019 (Table 3). For the 2019 season, sockeye salmon escapement objectives were exceeded at the Kenai River (inriver goal), Kasilof River, and Fish Creek; were met at Chelatna and Judd lakes; and were below at Larson Lake. The final escapement estimate for Packers Lake was incomplete due to a video malfunction. Run timing of sockeye salmon inlet-wide was estimated to be at least two days late (based on offshore test fish data). A total of seven out of 16 king salmon sustainable escapement goals (SEGs) were met in the Susitna River and West Cook areas; two of the 16 systems were unassessed in 2019 due to turbid water. The lower end of the Kenai River early-run king salmon Optimal Escapement Goal (OEG) was achieved, but the late-run Kenai River king salmon SEG was not achieved. The Little Susitna River king salmon SEG was achieved, but the lower end of the Deshka River king salmon SEG was not achieved. Coho salmon assessments were above the goal at Jim Creek, within the goal at Fish Creek and Deshka River, and below the goal at the Little Susitna River. Finally, the chum salmon aerial census SEG was met in the Chinitna Bay tributaries.

SOCKEYE SALMON

2019 Run and Fishery Summary

The 2019 total run of sockeye salmon to UCI, which includes estimates of commercial, sport, personal use, educational, subsistence harvests, and escapement of approximately 5.2 million fish was 800,000 fish, or 13% less than the preseason forecast (Table 2). Sockeye salmon runs fell short of forecast at the Kenai River by approximately 184,000 fish, at the Kasilof River by 203,000 fish, and at Fish Creek by 29,000 fish. The number of sockeye salmon returning to the Susitna River and all other systems (minor systems) were 23 to 41% less than forecasted for 2019.

In 2019, the peak day of sockeye salmon passage in the Kenai River occurred on July 28, with a count of 99,038 fish. This was the highest daily sockeye salmon passage at the Kenai River sonar since 2014. During the previous 10 years, the average date where 50% of the yearly sonar passage occurred in the Kenai River was July 24. In 2019, 50% of the total passage did not occur until July 28. A weak Kenai River king salmon run (late-run) resulted in paired restrictive actions in the sport fishery and the Upper Subdistrict (ESSN) commercial fishery. For the ESSN fishery, this meant less fishing time than what is normally allowed in sockeye salmon management plans. The final passage estimate of 1,849,054 sockeye salmon exceeded the upper end of the Kenai River sockeye salmon inriver goal (1,100,000 to 1,300,000) by more than 500,000 fish. Estimates of sport fishery harvest above the Kenai River Mile 19 sonar site are not currently available, so performance relative to the SEG range is unknown. Additionally, the Kasilof River sockeye salmon run of 378,416 fish exceeded the Kasilof River BEG of 140,000–340,000 fish. The passage mid-point occurred on July 17, which was one day later than the midpoint from the previous 10 years. The peak daily passage of 17,102 occurred on July 10.

The 2019 UCI commercial harvest of 1.7 million sockeye salmon was approximately 34% less than the 2009–2018 average annual harvest of 2.6 million fish. This was the second smallest harvest in the past 10 years (2009–2018). Sockeye salmon prices varied during the season, but based on an estimated average price of \$1.80 per pound, the total exvessel value of the 2019 UCI sockeye salmon harvest was approximately \$17 million, representing 93% of the total exvessel value of salmon in UCI.

Upper Subdistrict Set Gillnet and Central District Drift Gillnet Fisheries

The 2019 UCI preseason forecast included a total run of approximately 6.0 million sockeye salmon (Table 2), including a total harvest estimate (sport, personal use and commercial) of 4.0 million fish, and a commercial fisheries harvest of approximately 3.0 million fish.

The sockeye salmon run forecast to the Kenai River in 2019 was 3.8 million fish, which meant management of the drift and ESSN fisheries fell into the provisions of the middle run size tier (2.3 to 4.6 million fish). In this run size tier, from July 8 through August 10, the ESSN fishery is normally open for the regulatory Monday and Thursday 12-hour fishing periods, with up to 51 additional fishing hours per week. However, on June 18, the Division of Sport Fish issued emergency order (EO) 2-KS-1-23-19 prohibiting the use of bait in the Kenai River king salmon sport fishery beginning July 1, 2019. In response, commercial fishing EO 2S-04-19 was issued on June 19, which modified 5AAC 21.320(a)(2) *Weekly Fishing Periods* with set gillnets in the Kenai and Kasilof sections of the Upper Subdistrict. In the Upper Subdistrict of the Central District (Figure 1), excluding the East Foreland Section (statistical area 244-42), salmon could be taken only during fishing periods established by EO from July 1 through July 31, 2019. From July 1 through July 31, 2019, fishing periods were open for no more than 48 hours per week, with a 36-hour continuous closure beginning between 7:00 p.m. Thursday and 7:00 a.m. Friday. This paired restriction announcement in the ESSN fishery also included gear restrictions for only the second time since 2014, which is when the option to restrict gear was first placed into regulation. The specific gear restrictions are identified in 5 AAC 21.359(e)(3)(A)(i), which states that if bait is prohibited in the Kenai River king salmon sport fishery in order to achieve the SEG, then the number of set gillnets operated in the Kenai and Kasilof section set gillnet fishery may also be restricted to no more than four set gillnets that are each not more than 35 fathoms in length, 105 fathoms in aggregate length, and 29 meshes in depth, or no more than two set gillnets that are each

not more than 35 fathoms in length and 45 meshes in depth. These set gillnet gear restrictions were in effect in the Kenai and Kasilof Sections, of the Upper Subdistrict beginning July 1, 2019.

From the beginning of the ESSN fishing season on June 27 through the end of July, the commercial fishing management strategy was largely predicated upon maximizing harvest of sockeye salmon while closely monitoring late-run king salmon abundance in the Kenai River. The Kasilof Section (statistical areas 244-31, 244-22 and 244-21; Figure 2) setnet fishery opened on Thursday, June 27. The Kenai and East Foreland sections set gillnet fishery (statistical areas 244-32, 244-41, and 244-42; Figure 2) open by regulation on the first Monday or Thursday on or after July 8; in 2019. This meant Monday, July 8 was the first day of fishing for those sections. Kasilof River sockeye salmon run timing appeared late and weak in late June and early July. By June 30, Kasilof River sockeye salmon escapement was 44,987, approximately 50% of the ten-year average of 87,931. Consequently, only three fishing periods were provided from June 27 to July 7. In total, from June 27 through August 15, the Kasilof Section set gillnet fishery was open on 18 different days. From July 8 through August 14, the Kenai and East Foreland sections were open on 14 different days. Three fishing opportunities were provided in the Kasilof Section setnet fishery within one-half mile of shore (July 13, July 21, and August 2). Fishing time was also provided in the North Kalifornsky Beach stat area (244-31) within 600-feet of shore on the same three days as the Kasilof one-half mile fishery (July 13, July 21, and August 2). The Kasilof River Special Harvest Area was not opened in 2019.

On July 26, the department made a formal inseason estimate of the total sockeye salmon run to date, including an estimate of the run yet to come. Based on offshore test fish (OTF) data, the 2019 sockeye salmon run was expected to be two to four days late and the Kenai River sockeye salmon total run was still expected to exceed 2.3 million fish. Based on this inseason projection, management of the ESSN and Central District drift fisheries remained in the middle tier provisions for Kenai River sockeye salmon run sizes between 2.3 and 4.6 million fish. Additionally, UCI Commercial Fishing Announcement No. 18, issued on July 26, rescinded Emergency Order 2S-04-19 and removed gear restrictions in the ESSN fishery. However, because the Kenai River sport fishery remained restricted to fishing with no bait, fishing periods in the Upper Subdistrict continued to be issued by EO only.

On August 1, with paired restrictions no longer in effect, the ESSN fishery was opened from 7:00 a.m. to 11:00 p.m. in the Kasilof, Kenai, and East Foreland sections. By Sunday, August 4, the passage estimate for late-run Kenai River king salmon was 9,586, suggesting the lower end of the SEG would not be achieved. Based on this assessment and assuming the run was on-time but weak, the August 5, August 8, August 12, and August 15 regular fishing periods in the ESSN fishery were closed, effectively ending the season. Despite the time and gear restrictions and period closures, the final count of 11,868 Kenai River late-run king salmon failed to meet the lower end of the SEG.

Drift gillnetting opens in the Central District by regulation on the third Monday in June or June 19 whichever is later, which meant the drift fishery opened on June 20 for the 2019 season. The drift fishery was open for district-wide fishing periods from the beginning of the season through July 8. From July 9 through July 15, both regular fishing periods are limited to Drift Area 1 and the Expanded Kenai and Expanded Kasilof sections (Expanded Corridors; Figures 3 and 4). For the middle-sized run tier, the department has the option of opening the drift fishery for one additional fishing period in Drift Area 1 and the Expanded Corridors during the July 9–15 time frame. The regular fishing periods on July 11 and July 15 occurred by regulation in Drift Gillnet Area 1 and

the Expanded Corridors. Additional fishing opportunity was provided in the Kasilof Section only on July 13 to harvest sockeye salmon returning to the Kasilof River. The optional third Drift Gillnet Area 1 fishing period from July 9 through July 15 was not utilized. From July 16 through July 31, fishing during one regular 12-hour fishing period per week is restricted to one or more of the following sections: Expanded Kenai Section, Expanded Kasilof Section, Anchor Point Section, or Drift Area 1. The remaining 12-hour weekly fishing period is restricted to one or more of the first three sections just mentioned, but not Drift Area 1. All additional fishing time provided the drift fishery from July 16 through July 31 is to be limited to either or both the Expanded Corridors or Anchor Point Section. On July 29, the fishery was opened in Drift Gillnet Area 1 and Area 2 (Figure 4) plus the Expanded Corridors and was then extended only in the Expanded Corridors and the Anchor Point Section. A district-wide period was not used on July 29 over concerns for northern bound salmon. On August 1, August 8, and August 12, drift gillnetting was open district-wide.

An aerial survey of Chinitna River/Clearwater Creek was conducted on August 13, 2019. This survey produced an estimate of approximately 9,600 chum salmon within these streams, which was approximately 1,600 fish above the SEG of 3,500–8,000 fish. Therefore, Chinitna Bay was opened to set and drift gillnetting on Tuesdays and Fridays beginning on August 16. Regularly scheduled Monday and Thursday drift gillnet fishing periods for Drift Areas 3 and 4 (Figure 5) began August 15. All UCI commercial fisheries were closed by EO on October 4 for the 2019 season.

Upper Subdistrict Set Gillnet Harvest 2019

The total 2019 sockeye salmon harvest in the ESSN fisheries was 784,279 fish. From June 25 through August 15, the Kasilof Section was open on 18 different days, harvesting approximately 335,400 sockeye salmon, which was 32% less than the previous 10-year (excluding 2012) average of 490,700 fish. Harvest from 2012 was excluded from the historical harvest due to extensive fishery closures. From July 8 through August 14, the Kenai and East Foreland sections were open on 14 different days, producing a total sockeye salmon harvest of 450,000 fish. This was 17% greater than the previous 10-year (also excluding 2012) average annual sockeye salmon harvest of 379,000 fish for those sections.

Drift Gillnet Harvest 2019

From June 19 through August 14, the drift fleet fished a total of 26 days as follows: one day in the regular Kasilof Section; two days in the Expanded Corridors; 11 days in the Expanded Corridors and Anchor Point sections; one day in Drift Gillnet Areas 1 and 2; four days in Drift Gillnet Area 1 and the Corridors and Anchor Point sections; and nine days in all of the Central District. Beginning on Thursday, August 15, all Monday/Thursday regular drift fishing periods were restricted to Drift Gillnet Areas 3 and 4. The total UCI drift gillnet harvest in 2019 was approximately 749,101 sockeye salmon, which was about 53% less than the average annual harvest of 1.6 million fish from the previous 10 years. The peak day of harvest in the drift fleet occurred on Thursday, July 18, where 339 vessels harvested approximately 114,240 sockeye salmon, or 336 fish per boat. The previous 10-year average peak day harvest per boat was 919 fish.

A comparative examination of the 2019 sockeye salmon harvest between the ESSN and drift gillnet fisheries showed the drift fishery proportion of the harvest was moderately less than the previous 10-year average. The 2019 drift harvest of 749,101 sockeye salmon was 49% of the total harvest between the two gear types, compared to the previous 10-year average of 56%. The ESSN

fishery harvested approximately 784,279 fish, or 51% of the total UCI sockeye salmon harvest, compared to their previous 10-year average of 44% (2012 was excluded from historical harvest due to extensive fishery closures).

Western Subdistrict

The Western Subdistrict (Figure 1) set gillnet fishery opened for regular fishing periods on Monday, June 17. This fishery primarily harvests sockeye salmon returning to the Crescent River. In 2019, sockeye salmon harvest rates in the set gillnet fishery from the beaches near the Crescent River area were consistent with historical harvest rates when the fishery was provided additional fishing time due to increased sockeye salmon passage into the Crescent River. Therefore, an EO was issued on July 9 opening that portion of the Western Subdistrict south of the latitude of Redoubt Point from 6:00 a.m. until 10:00 p.m. on Mondays, Thursdays, and Saturdays each week from July 11 through August 8. In 2019, approximately 58,389 sockeye salmon were harvested by setnetters in the Western Subdistrict. This was 41% greater than the average annual harvest of approximately 41,000 fish during the previous 10 years.

Kustatan Subdistrict

The Kustatan Subdistrict includes those waters from the Drift River terminal to the Northern District boundary near the West Foreland (Figure 1). From 1993 to 2018, approximately nine permit holders per year reported harvest from this area. In 2019, 13 permit holders reported harvest. The majority of participation and harvest (more than 92% of the harvest) typically comes from the Big River sockeye salmon fishery, which is an early season fishery limited to one net per permit holder and occurs from June 1–24. Approximately 3,484 sockeye salmon were harvested in the Kustatan Subdistrict in 2019, of which 1,740 were harvested during the Big River fishery. The 2019 sockeye salmon harvest was approximately 7% less than the average annual harvest of 3,268 fish during the previous 10 years.

Kalgin Island Subdistrict

The Kalgin Island Subdistrict (Figure 1) opened for regular fishing periods beginning June 27 except for the west side of Kalgin Island which was open for commercial fishing on Mondays, Wednesdays, and Fridays from June 1 through June 24 as part of the Big River sockeye salmon fishery. In 2019, approximately 51,806 sockeye salmon were harvested from the Kalgin Island Subdistrict, with nearly 6,751 (8%) of those fish taken during the Big River sockeye salmon fishery. The average annual sockeye salmon harvest on Kalgin Island during the previous 10 years was approximately 54,336 fish, with roughly 11,500 of those fish harvested during the early season Big River fishery. A mid-season review of the video deployed at Packers Creek monitoring sockeye salmon escapement into Packers Lake supported one additional fishing period beyond the Monday and Thursday regular periods in the Kalgin Island Subdistrict. This additional period occurred on August 10. Unfortunately, due to a video system failure on August 11, the total assessment of the sockeye salmon escapement goal into Packers Creek was incomplete. The final count available for Packers Lake through August 11 was 7,719.

Northern District

Commercial fishing in the Northern District (Figure 1) in the directed king salmon fishery (see king salmon section below), was closed in 2019 due to low preseason estimates of king salmon abundance for northern Cook Inlet (NCI) stocks. In 2019, approximately 73,220 sockeye salmon were harvested in the Northern District. This harvest was 89% greater than the 2009–2018 average annual harvest

of 38,734 sockeye salmon, yet approximately 16% less than the 1966–2018 average of nearly 87,000 fish.

COHO SALMON

2019 Run and Fishery Summary

The 2019 harvest estimate of approximately 163,859 coho salmon in all commercial fisheries in UCI was 11% less than the previous 10-year (2009–2018) average annual harvest of approximately 185,000 fish (Table 1). The 2019 drift gillnet harvest of 88,618 coho salmon was 17% less than the previous 10-year average of approximately 107,000 fish. However, the Northern District set gillnet harvest of 52,000 coho salmon was the second largest harvest since 2000 and was approximately 41% greater than the 37,000 fish annual average harvest from the previous 10 years. The increase in Northern District setnet coho harvest may be due to less overall fishing time in the drift fishery, including less time in the Expanded Kenai and Kasilof corridors.

In UCI, there are four coho salmon systems with escapement goals: Fish Creek, Little Susitna, and Deshka rivers have weirs, while McRoberts Creek is counted with foot surveys. The goal at Fish Creek is an SEG of 1,200–4,400 fish. Coho salmon counts at the Fish Creek weir occurred from July 16 to September 22 and produced a final estimate of 3,158 fish. During the 2019 season, the sport fishing bag and possession limit for coho salmon was not increased. However, sport fishing was allowed at Fish Creek seven days per week, from 5 a.m. to 10 p.m.

The Little Susitna River has a coho salmon SEG of 10,100–17,700 fish. Coho salmon escapement was counted at the Little Susitna weir from July 7 through September 3. Due to the combination of very warm weather and low river conditions, fish passage was slow. After much needed rain and cooler temperatures from August 4 to August 9, nearly a third of the total coho passage occurred in the Little Susitna. The last push of 253 coho on September 2 was still not enough to meet the minimum SEG. The final coho salmon count in the Little Susitna River was 4,226.

The Deshka River coho salmon SEG of 10,200–24,100 fish was adopted at the 2017 UCI Alaska Board of Fisheries meeting. In the third year of assessing coho salmon escapement in this drainage as it related to the SEG, a total of 10,445 fish were counted through the weir by September 8.

Finally, there is a coho salmon foot survey SEG of 450–1,400 fish at McRoberts Creek, which drains into Jim Creek of the Knik River drainage. In 2019, the foot survey was conducted on September 26 and produced a count of 162 fish, which meant the SEG was not achieved for this system.

Based on an average price per pound of \$0.74, the estimated exvessel value of the 2019 commercial coho salmon fishery was approximately \$684,400 or 4% of the total exvessel value in Upper Cook Inlet. This was approximately 21% less than the recent 10-year (2009–2018) average exvessel value of \$863,000 for coho salmon in UCI.

PINK SALMON

Pink salmon runs in UCI are even-year dominant, with odd-year average annual harvests typically less than one-sixth of even-year harvests. The 2019 UCI commercial pink salmon harvest was estimated to be approximately 70,741 fish, which was 16% lower than the average annual harvest of nearly 84,573 fish from the previous 10 years of odd-year harvests (Table 1). Using an average weight of 3.07 lb/fish and an average price of \$0.21/lb, the estimated exvessel value for the 2019 pink salmon harvest was \$45,700 or 0.2% of the total exvessel value of salmon in UCI.

CHUM SALMON

The 2019 harvest of 129,176 chum salmon was approximately 25% lower than the previous 10-year average annual harvest of 172,000 fish (Table 1). The exvessel value of the 2019 UCI commercial chum salmon harvest was approximately \$321,909 or 2% of the total exvessel value in UCI.

KING SALMON

In UCI, there are two commercial fisheries where most king salmon are harvested. These include the set gillnet fisheries in the Northern District and in the Upper Subdistrict of the Central District. King salmon runs were expected to be below average across Southcentral Alaska for the 2019 season. As predicted, the 2019 king salmon return turned out to be below average and lower than the preseason forecasts, leading to both preseason and inseason conservation measures in all fisheries in order to reduce the harvest of king salmon stocks.

In the Northern District, the directed king salmon set gillnet fishery was closed for the entire 2019 season to reduce the harvest of NCI king salmon. In addition, subsistence fishing was reduced to two fishing periods a week in an effort to reduce the harvest of king salmon destined to streams throughout the NCI watershed. The estimated king salmon harvest in the Northern District regular salmon fishery in 2019 was 202 fish compared to a recent ten-year average of 174 king salmon.

The 2019 preseason run forecast for Deshka River king salmon was approximately 8,500 fish and below the Deshka River SEG of 13,000–28,000 fish. Based on this forecast, the 2019 run to the Deshka River would not be large enough to achieve the SEG, even with no harvest. The preseason outlook for all other NCI king salmon stocks in 2019 was also poor. Consequently, all sport fisheries in the Susitna drainage were initially closed. Warm summer temperatures with little to no rain stalled king salmon migration to the Deshka River where the cumulative count held at 7,500 for a 20-day period. The estimated final 2019 escapement of king salmon in the Deshka River was approximately 9,711 fish, which was below the lower end of the SEG. The Little Susitna River king salmon SEG of 2,100–4,300 was met in the 2019 season, with a preliminary weir count of 3,666 king salmon.

Late-run king salmon returning to the Kenai and Kasilof rivers are the primary king salmon stocks that are harvested in the ESSN fishery. Kenai River late-run king salmon are managed to meet an SEG of 13,500–27,000 large (≥ 75 cm mid eye to tail fork) fish. If restrictions are implemented in the sport fishery to achieve the SEG (from July 1 through July 31), restrictive “paired” actions are also required in the ESSN fishery.

The 2019 preseason forecast was for a total run of 21,746 large Kenai River late-run king salmon. Based on low preseason abundance projections for late-run kings and low abundance of the early-run king salmon stock, the 2019 late-run sport fishery in the Kenai River was restricted to no bait on July 1. As a result of the sport fishery being restricted to no bait, beginning July 1 the ESSN commercial fishery was restricted to fishing no more than 48 hours per week with a 36-hour “Friday” no-fishing window per week, and gear reresections were implemented (see above; Sockeye salmon, Upper Subdistrict Set Gillnet and Central District Drift Gillnet Fisheries). Beginning August 1, after the Kenai River king salmon sport fishery was closed, the paired restrictive provisions in the ESSN fishery are no longer in effect (by regulation), but the ESSN fishery is still managed to meet both king and sockeye salmon escapement goals. Low abundance

of king salmon in the Kenai River resulted in the entire ESSN fishery being closed from August 5 to the end of the season on August 15.

Late-run king salmon passage in the Kenai River was counted at the river mile 14 sonar site from July 1 through August 20. The preliminary 2019 sonar count of large late-run Kenai River king salmon was 14,020 with an escapement estimate of 11,671, fish accounting for sport fish harvest above the sonar site. Thus, the large fish SEG of 13,500-27,000 fish for Kenai River late-run king salmon was not achieved.

The 2019 UCI commercial harvest of all king salmon stocks was 3,148 fish, which was 58% less than the previous 10-year (2009–2018) average annual harvest of 7,408 fish (Table 1). Of this total, the ESSN fishery harvested 2,245 king salmon, or 71% of the harvest. The 2,245 king salmon harvested in the ESSN fishery included an estimated 1,024, or 46% that were large king salmon, and a total of 613, or 27% that were large Kenai River late-run origin fish. The drift gillnet fishery harvested 178 king salmon of all sizes and all stocks. Using a price of \$3.43 per pound for king salmon, the estimated exvessel value of the 2019 harvest was \$172,900, or approximately 1% of the total exvessel value of salmon in UCI.

Table 1.—Upper Cook Inlet commercial salmon harvest by species, 1970–2019.

| Year | King | Sockeye | Coho | Pink | Chum | Total |
|-------------------|--------|-----------|---------|-----------|-----------|------------|
| 1970 | 8,336 | 732,605 | 275,399 | 814,895 | 776,229 | 2,607,464 |
| 1971 | 19,765 | 636,303 | 100,636 | 35,624 | 327,029 | 1,119,357 |
| 1972 | 16,086 | 879,824 | 80,933 | 628,574 | 630,103 | 2,235,520 |
| 1973 | 5,194 | 670,098 | 104,420 | 326,184 | 667,573 | 1,773,469 |
| 1974 | 6,596 | 497,185 | 200,125 | 483,730 | 396,840 | 1,584,476 |
| 1975 | 4,787 | 684,752 | 227,379 | 336,333 | 951,796 | 2,205,047 |
| 1976 | 10,865 | 1,664,150 | 208,695 | 1,256,728 | 469,802 | 3,610,240 |
| 1977 | 14,790 | 2,052,291 | 192,599 | 553,855 | 1,233,722 | 4,047,257 |
| 1978 | 17,299 | 2,621,421 | 219,193 | 1,688,442 | 571,779 | 5,118,134 |
| 1979 | 13,738 | 924,415 | 265,166 | 72,982 | 650,357 | 1,926,658 |
| 1980 | 13,798 | 1,573,597 | 271,418 | 1,786,430 | 389,675 | 4,034,918 |
| 1981 | 12,240 | 1,439,277 | 484,411 | 127,164 | 833,542 | 2,896,634 |
| 1982 | 20,870 | 3,259,864 | 793,937 | 790,648 | 1,433,866 | 6,299,185 |
| 1983 | 20,634 | 5,049,733 | 516,322 | 70,327 | 1,114,858 | 6,771,874 |
| 1984 | 10,062 | 2,106,714 | 449,993 | 617,452 | 680,726 | 3,864,947 |
| 1985 | 24,088 | 4,060,429 | 667,213 | 87,828 | 772,849 | 5,612,407 |
| 1986 | 39,256 | 4,792,072 | 757,353 | 1,300,958 | 1,134,817 | 8,024,456 |
| 1987 | 39,440 | 9,469,248 | 449,750 | 109,389 | 349,150 | 10,416,977 |
| 1988 | 29,080 | 6,843,833 | 561,048 | 471,080 | 710,615 | 8,615,656 |
| 1989 | 26,738 | 5,011,159 | 339,931 | 67,443 | 122,051 | 5,567,322 |
| 1990 | 16,105 | 3,604,710 | 501,739 | 603,630 | 351,197 | 5,077,381 |
| 1991 | 13,542 | 2,178,797 | 426,498 | 14,663 | 280,230 | 2,913,730 |
| 1992 | 17,171 | 9,108,353 | 468,930 | 695,861 | 274,303 | 10,564,618 |
| 1993 | 18,871 | 4,755,344 | 306,882 | 100,934 | 122,770 | 5,304,801 |
| 1994 | 19,962 | 3,565,609 | 583,793 | 523,434 | 303,177 | 4,995,975 |
| 1995 | 17,893 | 2,952,096 | 447,130 | 133,578 | 529,428 | 4,080,125 |
| 1996 | 14,306 | 3,888,922 | 321,668 | 242,911 | 156,520 | 4,624,327 |
| 1997 | 13,292 | 4,176,995 | 152,408 | 70,945 | 103,036 | 4,516,676 |
| 1998 | 8,124 | 1,219,517 | 160,688 | 551,737 | 95,704 | 2,035,770 |
| 1999 | 14,383 | 2,680,518 | 126,105 | 16,176 | 174,554 | 3,011,736 |
| 2000 | 7,350 | 1,322,482 | 236,871 | 146,482 | 127,069 | 1,840,254 |
| 2001 | 9,295 | 1,826,851 | 113,311 | 72,560 | 84,494 | 2,106,511 |
| 2002 | 12,714 | 2,773,118 | 246,281 | 446,960 | 237,949 | 3,717,022 |
| 2003 | 18,503 | 3,476,161 | 101,756 | 48,789 | 120,767 | 3,765,976 |
| 2004 | 26,922 | 4,927,084 | 311,058 | 357,939 | 146,165 | 5,769,168 |
| 2005 | 27,667 | 5,238,699 | 224,657 | 48,419 | 69,740 | 5,609,182 |
| 2006 | 18,029 | 2,192,730 | 177,853 | 404,111 | 64,033 | 2,856,756 |
| 2007 | 17,625 | 3,316,779 | 177,339 | 147,020 | 77,240 | 3,736,003 |
| 2008 | 13,333 | 2,380,135 | 171,869 | 169,368 | 50,315 | 2,785,020 |
| 2009 | 8,750 | 2,045,794 | 153,210 | 214,321 | 82,808 | 2,504,883 |
| 2010 | 9,900 | 2,828,342 | 207,350 | 292,706 | 228,863 | 3,567,161 |
| 2011 | 11,248 | 5,277,995 | 95,291 | 34,123 | 129,407 | 5,548,064 |
| 2012 | 2,527 | 3,133,839 | 106,775 | 469,598 | 269,733 | 3,982,472 |
| 2013 | 5,398 | 2,683,224 | 260,963 | 48,275 | 139,365 | 3,137,225 |
| 2014 | 4,660 | 2,343,529 | 137,376 | 642,879 | 116,093 | 3,244,537 |
| 2015 | 10,798 | 2,649,667 | 216,032 | 48,004 | 275,960 | 3,200,461 |
| 2016 | 10,027 | 2,396,943 | 147,495 | 382,468 | 123,679 | 3,060,612 |
| 2017 | 7,369 | 1,838,110 | 293,811 | 168,042 | 239,425 | 2,546,757 |
| 2018 | 3,405 | 817,879 | 232,290 | 126,923 | 115,366 | 1,295,863 |
| 2019 ^a | 3,148 | 1,720,295 | 163,859 | 70,741 | 129,176 | 2,087,159 |
| 1970-2018 Avg | 14,956 | 2,991,208 | 291,293 | 384,672 | 394,016 | 4,076,144 |
| 2009-2018 Avg | 7,408 | 2,601,532 | 185,059 | 242,734 | 172,070 | 3,208,804 |

^a 2019 data are preliminary

Table 2.–Upper Cook Inlet sockeye salmon forecast versus actual run by river system, 2019.

| System | Forecast | Actual | % Difference |
|---------------|----------|--------|--------------|
| Kenai River | 3,814 | 3,630 | -4.8% |
| Kasilof River | 873 | 670 | -23.3% |
| Susitna River | 343 | 264 | -23.0% |
| Fish Creek | 124 | 95 | -23.4% |
| Minor Systems | 881 | 517 | -41.3% |
| Overall Total | 6,035 | 5,233 | -13.3% |

Table 3.–Upper Cook Inlet sockeye salmon goals and passage (or counts), 2019.

| System | 2019 Estimate | Goal type ^a | Lower goal | Upper goal |
|---------------|------------------------|------------------------|------------|----------------------|
| Kenai River | 1,849,054 ^b | Inriver | 1,000,000 | 1,300,000 |
| | | SEG | 700,000 | 1,200,000 |
| Kasilof River | 378,416 ^{b,c} | BEG | 160,000 | 340,000 ^c |
| | | OEG | 160,000 | 390,000 |
| Larson Lake | 9,689 | SEG | 15,000 | 35,000 |
| Chelatna Lake | 26,303 | SEG | 20,000 | 45,000 |
| Judd Lake | 44,145 | SEG | 15,000 | 40,000 |
| Fish Creek | 71,566 | SEG | 15,000 | 45,000 |
| Packers Creek | 7,719 ^d | SEG | 15,000 | 30,000 |

^a BEG=Biological Escapement Goal, SEG=Sustainable Escapement Goal, OEG=Optimum Escapement Goal, and Inriver=Inriver Goal.

^b Sonar estimate at river mile 19 on Kenai River and river mile 8 on Kasilof River; not escapement. Harvest upstream of sonar must be subtracted to estimate escapement. Sport harvest estimated from Statewide Harvest Survey; results for 2019 available spring of 2020 at the earliest.

^c The Kasilof River management goal in 2019 was the BEG.

^d Incomplete count. Video data collected from June 15 through August 11.

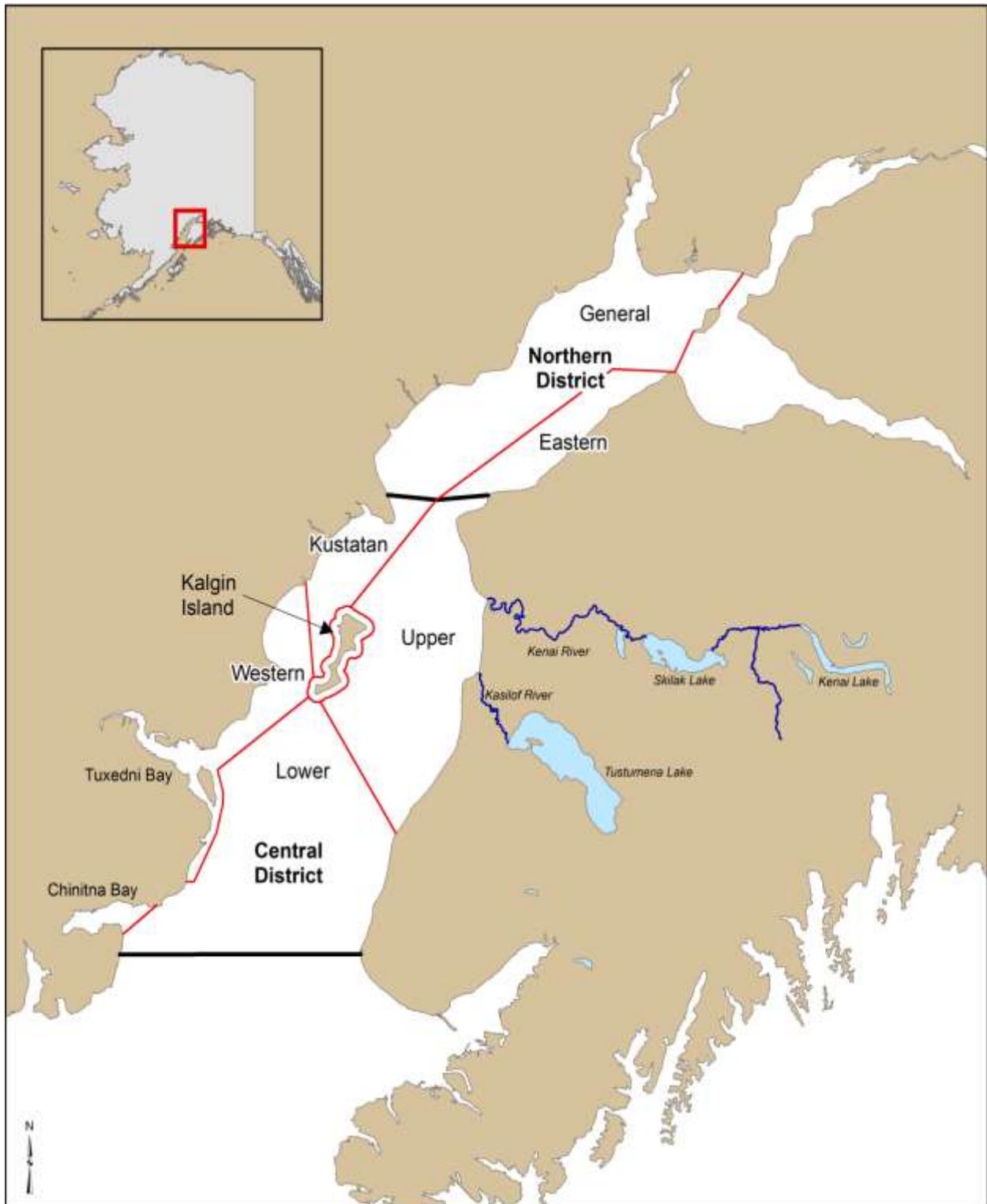


Figure 1.—Upper Cook Inlet commercial fisheries subdistrict fishing boundaries.

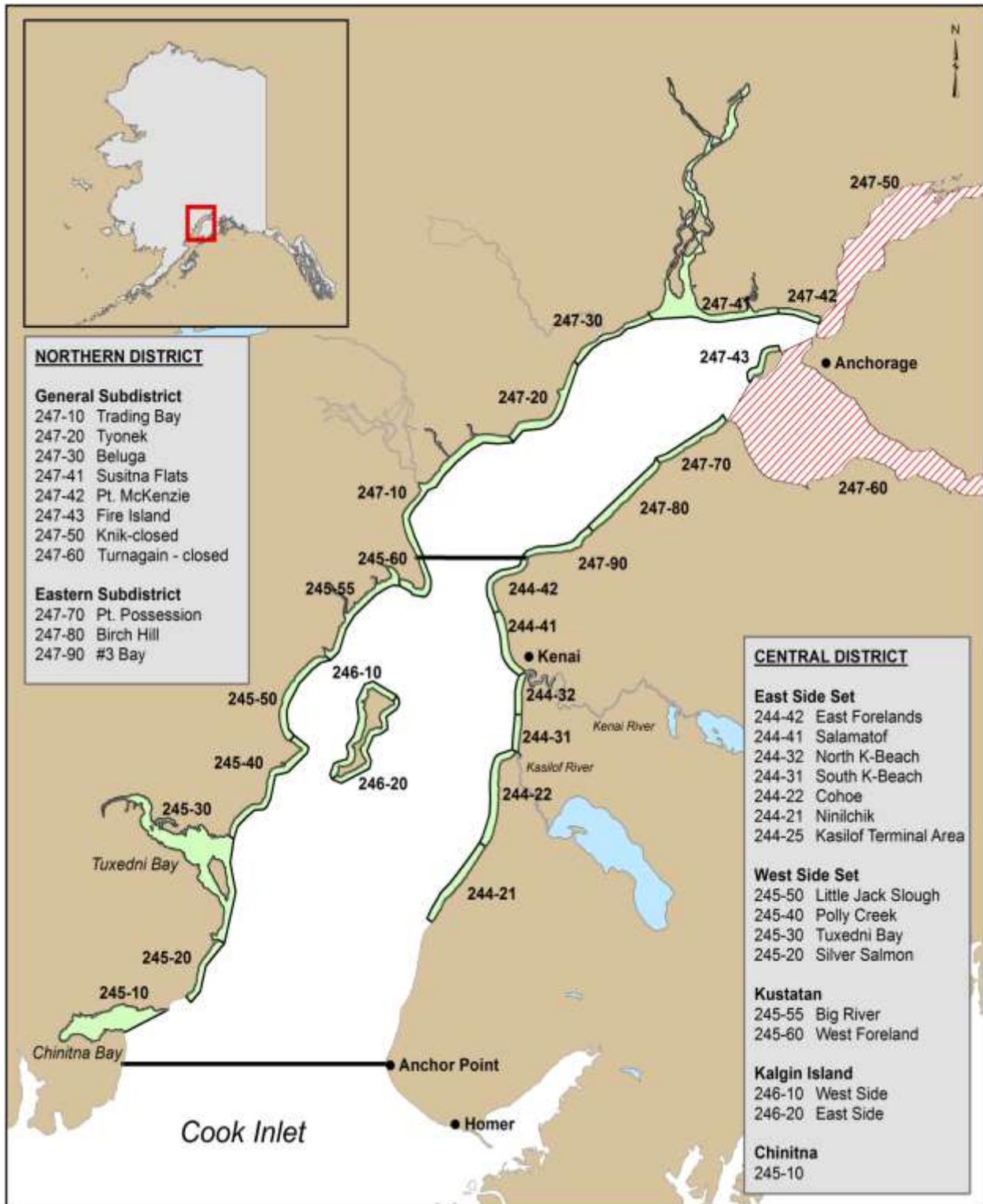


Figure 2.—Upper Cook Inlet commercial set gillnet statistical areas.

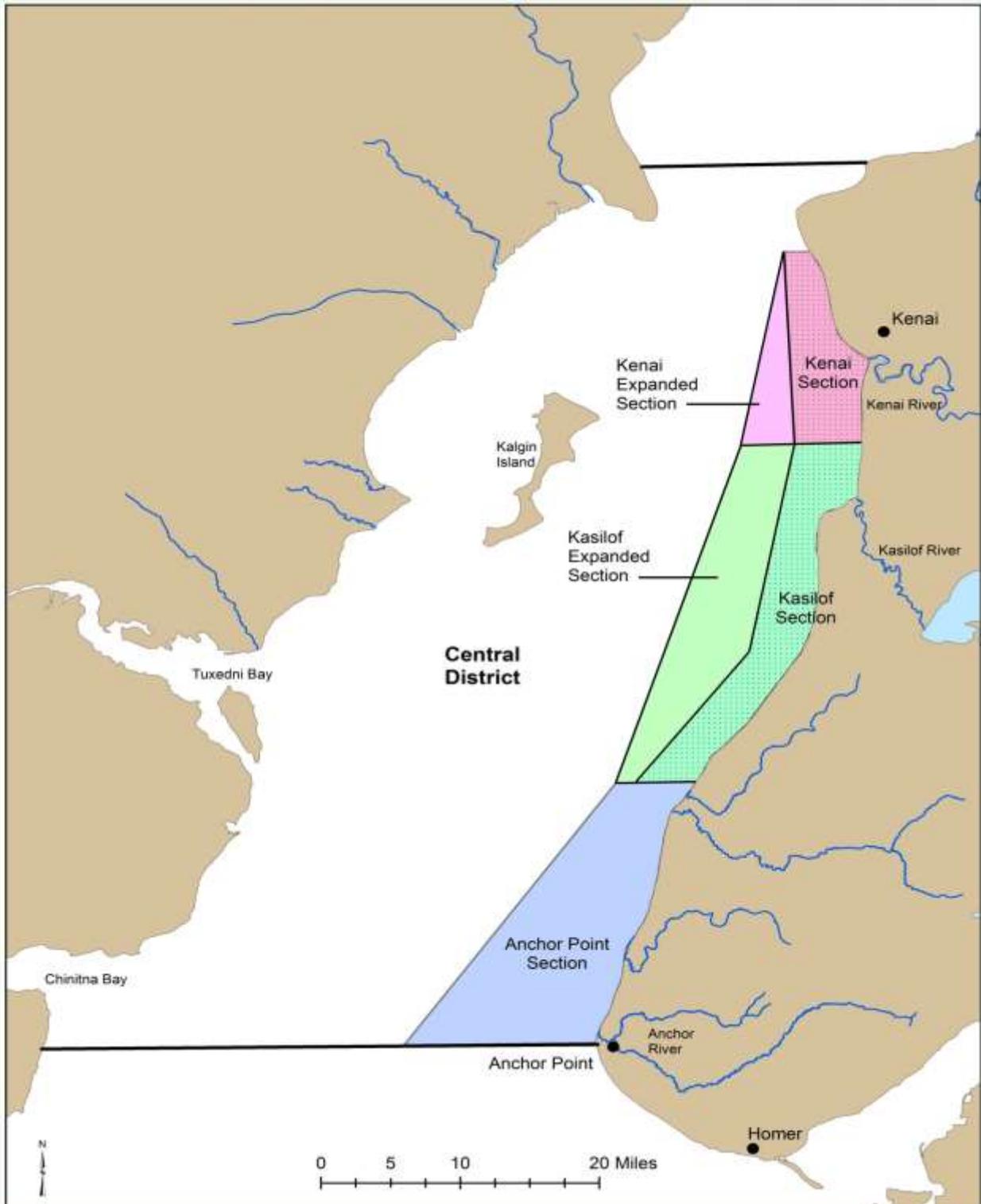


Figure 3.—Map of drift gillnet “corridor” boundaries, including the Kenai and Kasilof sections, Expanded Kenai and Expanded Kasilof sections, and the Anchor Point Section.

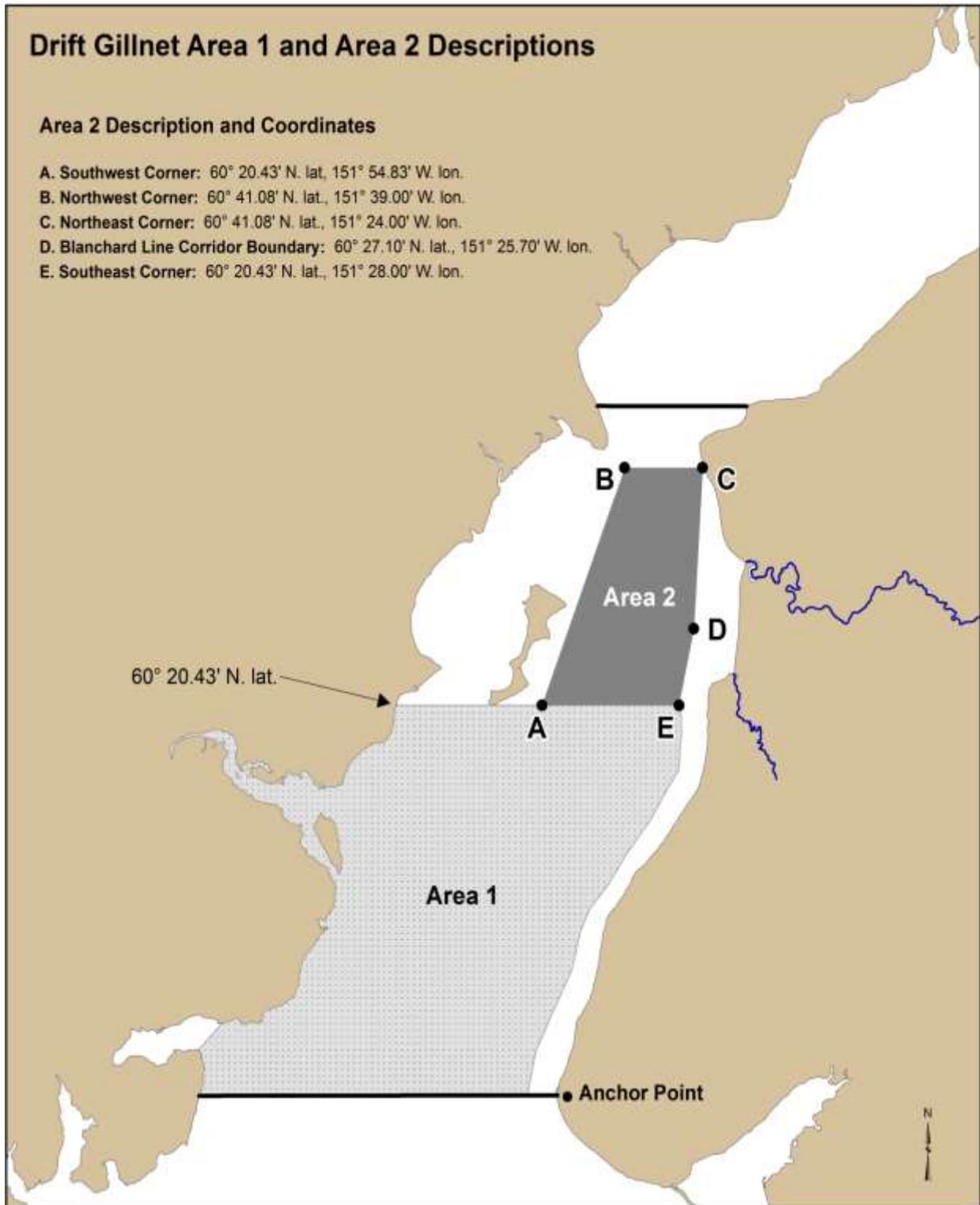


Figure 4.—Fishing boundaries for Drift Gillnet Areas 1 and 2.

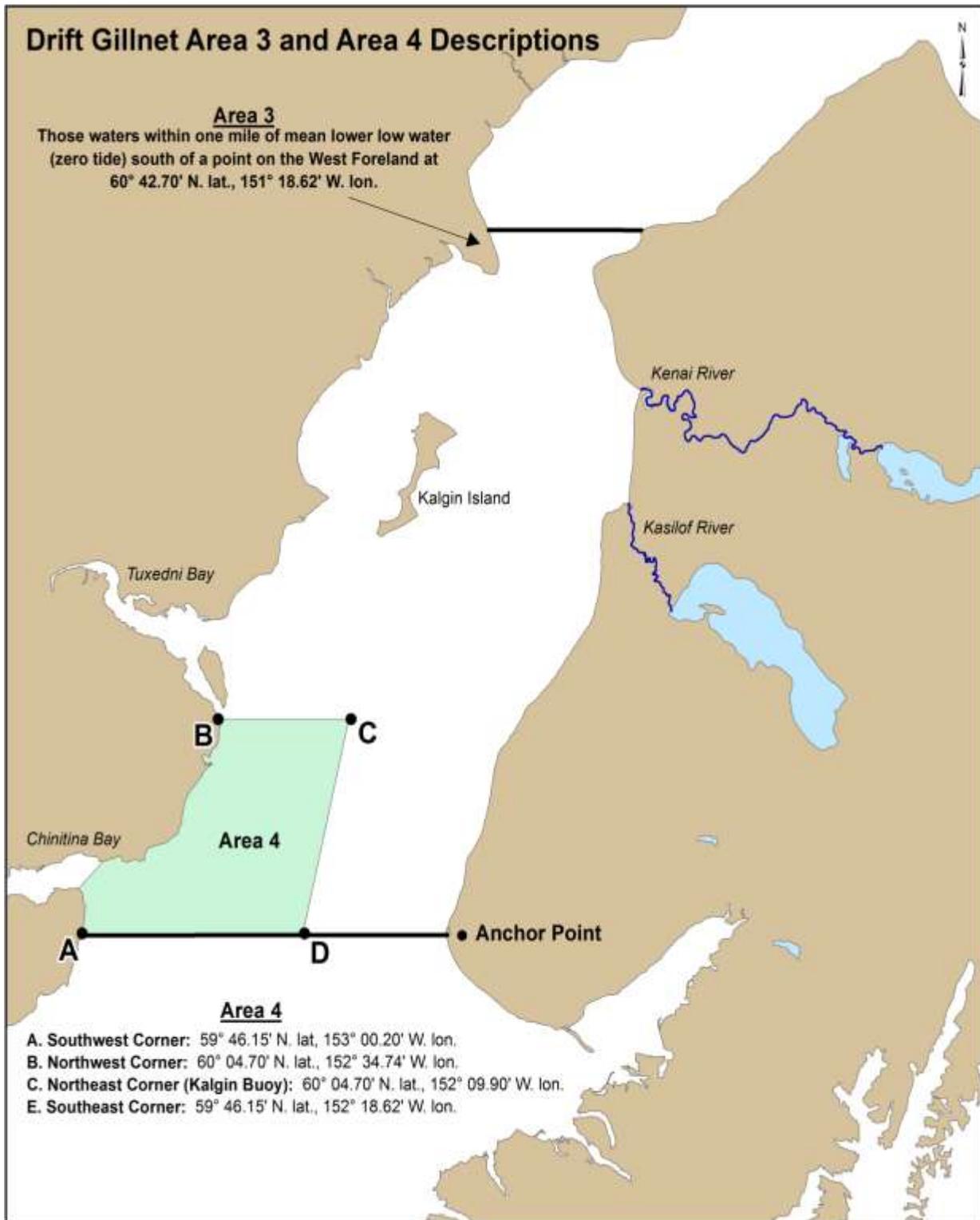


Figure 5.–Map of Drift Gillnet Areas 3 and 4.