

CHAPTER 11: COOK INLET AREA

RC 153

INTRODUCTION

As shown in Figure 11-1, most of the waters of the Cook Inlet Management Area are within the Anchorage–Matsu–Kenai Nonsubsistence Area as established by the Joint Board [5 AAC 99.015 (3)]. Because subsistence fisheries are not permitted within nonsubsistence areas, noncommercial harvesting opportunities occur under sport, personal use, and educational fishing regulations (as well as limited opportunity under federal subsistence regulations). Commercial harvesters may retain finfish from lawfully taken commercial catch for home use (“home pack”). These fish are required to be reported on the commercial fish ticket, not on the subsistence salmon permit or personal use permit. In some parts of Alaska, in addition to gear authorized under subsistence fishing regulations, subsistence users report that substantial numbers of fish for home uses are taken with rod and reel (Fall, Turek, et al. 2009), which, in this area, is allowable gear under sport fishing regulations. Harvest summaries for the personal use, sport, educational, and commercial fisheries of the Upper Cook Inlet (UCI) Management Area can be found in annual management reports prepared by the ADF&G divisions of Sport Fish and Commercial Fisheries. A summary of the personal use salmon fisheries of the Cook Inlet Area follows the discussion of Cook Inlet subsistence fisheries.

Waters outside the nonsubsistence area include the Tyonek Subdistrict; the western portion of the Susitna River drainage; waters north of Point Bede that are west of a line from the easternmost point of Jakolof Bay and north of the westernmost point of Hesketh Island, including Jakolof Bay, and that are south of a line west of Hesketh Island; and those waters south of Point Bede which are west of the easternmost point of Rocky Bay, in Lower Cook Inlet.

Communities within the areas excluded from the nonsubsistence area include Skwentna (population 33 in 2014), Tyonek (population 175), Beluga (population 17), Seldovia (population 404 in the city and village CDP), Port Graham (population 169), and Nanwalek (formerly called English Bay, population 276). The population of the entire Cook Inlet area in 2014 was 457,532, including the Municipality of Anchorage (population 300,666), the Kenai Peninsula Borough (57,415), and the Matanuska-Susitna Borough (98,377). This represented 62% of the state’s total population in 2014.¹

PORT GRAHAM AND KOYUKTOLIK SUBDISTRICTS

History and Regulations

Subsistence regulations for this subsistence setnet fishery were first established by the BOF in 1980. The fishery is located along the southern shore of outer Kachemak Bay in the Port Graham and Koyuktolik subdistricts of the Southern District, and, beginning in 2002, the Port Chatham and Wind Bay subdistricts. Two predominately Alaska Native communities, Nanwalek and Port Graham, are located in the Port Graham Subdistrict. For detailed description of this subsistence fishery and other subsistence harvests and uses in Nanwalek and Port Graham, see Stanek (1985).

The fishery is open in the Port Graham and Koyuktolik subdistricts from April 1 through September 30 and in the Port Chatham and Windy Bay subdistricts from April 1 through August 1, from 10:00 PM Thursday to 10:00 AM Wednesday. The area open for the subsistence setnet fishery includes the entire shoreline of the subdistrict to a regulatory marker near the head of Port Graham Bay. There are no household bag or possession limits. The 3 primary species harvested are sockeye, pink, and coho salmon. The gear allowed includes set gillnets no longer than 35 fathoms, no deeper than 45 meshes, and no larger than a 6-in stretched mesh. Returns of sockeye salmon, which are a majority of the harvest in the subsistence fishery, have been poor for the past 20 years. However, in 2011 the return of sockeye salmon

1. Alaska Department of Labor and Workforce Development (ADLWD). Juneau. n.d. “Research and Analysis Homepage.” Accessed July 2016. <http://live.laborstats.alaska.gov/pop/index.cfm>

counted at the English Bay weir continued to surpass the inriver goal (Hollowell et al. 2012:5). In 2012, the return and harvest rates dropped again, with 961 sockeye salmon reported harvested by permit holders. Sockeye returns were much greater in 2013 with 4,888 sockeye salmon reported harvested, however in 2014 the number of sockeye harvest reported dropped significantly to 347 fish.

Harvest Assessment Methods

In the past, the Division of Subsistence issued household permits through cooperative agreements with the Port Graham and Nanwalek village councils. However, in 2012, responsibility for the distribution, collection, and summation of subsistence permits for the communities of Seldovia, Port Graham, and Nanwalek was transferred from the Division of Subsistence to the Division of Commercial Fisheries, Homer Office. When permits are issued, a separate monthly harvest calendar is also issued for recording daily household harvests. Home use salmon harvests by the 2 communities occur with the use of setnets and rod and reel gear. While the recording of harvests in the setnet fishery is mandatory, it is not in the rod and reel fishery. Therefore, fishers are asked to voluntarily record their rod and reel harvests on their harvest permits. In order to accommodate the recording of harvests in both fisheries, the recording device has 2 pages, 1 for each gear type, and is issued separately from the permit. Area assistants hired by each village council collect the calendars periodically throughout the season. Arctic char/Dolly Varden harvests are also recorded on the calendars.

Sockeye salmon returns to the English Bay lakes were severely depressed for much of the late 1980s and early 1990s, with runs failing to achieve minimum escapement goals for 9 consecutive years between 1985 and 1993. Returns in the late 1990s were enhanced as a result of a rehabilitation enhancement project initiated by ADF&G and subsequently run by the Nanwalek Salmon Enhancement Project in association with the Chugach Regional Resources Commission (CRRC) and the village of Nanwalek (Hammarstrom and Dickson 2006:62). Inseason escapement monitoring has taken place since 1994, with openings and closures in the subsistence and commercial fisheries controlled by emergency order. Inconsistent runs in recent years have been the result of disease outbreaks in the lake-rearing portion of the program and erratic adult behavior that caused difficulty in capturing broodstock (Hammarstrom and Dickson 2006:41). A newer hatchery at Port Graham, run by the Port Graham Hatchery Corporation, contributed 6% to the subsistence harvest in Lower Cook Inlet (Hammarstrom and Ford 2011:2) and in 2010 released more than 200,000 sockeye salmon fry into the English Bay Lakes system (Hammarstrom and Ford 2011:6).

Harvest Estimates for 2014

In 2012, responsibility for the distribution, collection, and summarizing of subsistence permits for the communities of Seldovia, Port Graham, and Nanwalek were transferred from the Division of Subsistence to the Division of Commercial Fisheries, Homer Office. The change in administration authority included some change in methodology for Port Graham and Nanwalek; the Division of Subsistence contracted local research assistants in the villages to ensure distribution and collection of permits. This approach was dropped by Commercial Fisheries and instead the permits were sent to the IRA councils for distribution.

In 2014, estimated salmon harvests for home uses in the Port Graham and Koyuktolik subdistricts totaled 584 salmon, including both subsistence setnet and reported rod and reel harvests (Table 11-1). The 2014 harvest was significantly lower than previous year (8,897 salmon), and also a major decrease from the historical average of 5,370 salmon.

In 2014, the number of permits issued was not recorded; however of those Port Graham residents that did obtain a permit, 5 returned permits and harvested 366 salmon (Table 11-2). Similarly, in Nanwalek the number of permits issued was not recorded, but residents returned 2 permits and harvested 218 salmon, a major decrease from 7,669 salmon in 2013 (Table 11-2). As shown in Table 11-2 and Figure 11-2, the combined harvest of the 2 communities of Nanwalek and Port Graham included 347 sockeye salmon, the species with the highest harvest (59% of the overall harvest), followed by coho salmon (10; 2%), chum

salmon (44; 8%), pink salmon (164; 28%), and Chinook salmon (19; 3%). Sockeye salmon harvests increased from 961 salmon in 2012 to 4,888 salmon in 2013, before dropping to 347 sockeye in 2014.

The Division of Subsistence conducted comprehensive household surveys in early 2015 in Nanwalek and Port Graham that collected harvest estimates for salmon and other resources for 2014 (Jones and Kostick 2016). The survey results suggest that the permit data substantially underestimated salmon harvests in the 2 communities in 2014. Based on the surveys, the estimated salmon harvest for Nanwalek in 2014 was 10,055 fish; of these, 9,163 salmon (91%) were taken with rod and reel, with most of the rest harvested with subsistence nets. The approximate composition of the harvest was 38% sockeye salmon, 33% pink salmon, 24% coho salmon, 5% chum salmon, and less than 1% Chinook salmon (Van Lanen 2016:236). For Port Graham, the surveys resulted in an estimated harvest for 2014 of 3,779 salmon. Of these, 2,384 salmon were taken in set nets (64%); rod and reel accounted for 33% of the harvest (1,219 salmon), trolling produced 7% (96 salmon, all Chinook), and commercial removal produced about 2% (86 salmon). In Port Graham, the approximate composition of the 2014 salmon harvest was 47% sockeye, 26% pink, 13% chum, 9% coho, and 5% Chinook (Kukkonen and Mitchell 2016:334–336).

SELDOVIA SUBSISTENCE FISHERY

History and Regulations

The BOF established this subsistence set gillnet fishery in 1995. The fishery is located on the south side of Kachemak Bay, near Seldovia, which is in the Southern District of the Lower Cook Inlet Fisheries Management Area. The subsistence fishery operates in a split season. The spring fishery, open April 1–May 30, targets natural Chinook salmon migrating through Lower Cook Inlet. The fall fishery, open the first 2 weekends of August, targets coho salmon.

In the spring season, fishing is allowed during two 48-hour periods each week, while in the fall season, fishing is open continuously during the 2-day weekends. The BOF has set a guideline harvest level (GHL) of 200 Chinook salmon and an annual possession limit of 20 Chinook salmon per household. There are no seasonal limits for other salmon species.

The area open to subsistence set gillnetting includes those waters along the eastern shore of Seldovia Bay as well as a short stretch outside Seldovia Bay to the west of Point Naskowhak. Seasons and bag limits were designed in 1995 to reduce potential interceptions of enhanced Chinook salmon bound for the stocking site in the Seldovia small boat harbor (Hollowell et al. 2012:14). The gear allowed includes set gillnets no longer than 35 fathoms, no deeper than 45 meshes, and no larger than a 6-in stretched mesh. Other standard permit conditions include prohibition of fishing within 300 ft of a dam, fish ladder, weir, culvert, or other artificial obstruction.

Harvest Assessment Methods

Household permits are issued by ADF&G prior to fishing, and harvests are recorded on the permits. Permits are also available from the harbormaster in Seldovia. Fishers are required to telephone daily harvest numbers to ADF&G or the harbormaster as well as to return their permits after each of the 2 fisheries. ADF&G sends reminder letters to permit holders if harvest records have not been returned in a timely manner, and telephone calls are also made to enhance permit returns.

The 2014 Season

There were 21 permits issued for the Seldovia subsistence fishery in 2014; 15 were returned (Table 11-3). The estimated harvest was 162 sockeye salmon (61% of the overall harvest), 7 pink salmon (3%), 91 chum salmon (34%), 7 Chinook salmon (2%), and no coho salmon harvest (Figure 11-3). All 21 permits that were issued in 2014 were issued to residents of Seldovia (Table 11-3).

Total salmon harvests in 1998 through 2005 were higher than the first 2 years of the fishery, the result of a longer season that began in 1998 when the BOF lengthened the season by 10 days in May. The

additional fishing time resulted in increased harvests of both Chinook and sockeye salmon from 1998 through 2003 (Table 11-4). However, Chinook salmon harvests have declined since 2004, with 53 harvested in 2005, 23 harvested in 2006, 24 in 2007, 4 harvested in 2008, 15 harvested in 2009, 3 harvested in 2010, and no harvests in 2011. The year 2012 marked an increase with 8 Chinook salmon harvested, but then in 2013 the Chinook harvest decreased to 3 Chinook salmon reported harvested. In 2014, the number of Chinook harvest increased to 7. Since the extension of fishing time in 1998, the 2006 season resulted in the lowest harvest estimate on record for total salmon harvested. The 2014 harvest was more than the 5-year (2009–2013) average of 209 salmon and 10-year (2004–2013) average of 203 salmon, and more than the historical average of 241 salmon (Table 11-4).

TYONEK SUBDISTRICT

History and Regulations

Subsistence salmon fishing regulations for the Tyonek Subdistrict were established by court order in 1980 and subsequently permanently established by the BOF. This setnet fishery is located in the Tyonek Subdistrict of the Northern District of Upper Cook Inlet. The subdistrict includes the area from 1 mile south of the mouth of the Chuitna River south to the easternmost part of Granite Point and from the mean point of high tide to the mean point of lower low tide. The area is unique in that all the lands within the subdistrict are owned by the Tyonek Native Corporation. This feature often raises issues of trespass for those individuals living outside the Tyonek Area who do not seek prior permission to land their boats or set their nets on the privately-owned uplands. For a detailed discussion of this fishery and other subsistence uses at Tyonek, see Jones et al. (2015), Holen and Fall (2011), Stanek et al. (2007), and Fall et al. (1984).

In 2011 the Alaska Board of Fisheries modified the Northern District King Salmon Management Plan (5 AAC 21.366). This modification was in response to reduced abundance of Chinook salmon in the Northern District. The sport fishery on the Chuitna River, which is at the northern edge of the Tyonek Subdistrict, was closed, and commercial fishing was closed from a point just south of the community to the Susitna River in 2011 (Shields and Dupuis 2012:10).

The season in this subsistence fishery operates in 2 parts. The first part, which focuses on Chinook salmon, is open on Tuesdays, Thursdays, and Fridays from May 15–June 15. The second part is open Saturdays from June 16–October 15. In 2011 the Alaska Board of Fisheries specified the amounts of salmon reasonably necessary for subsistence in the Tyonek subdistrict as 700–2,700 Chinook salmon and 150–500 other salmon. A permit is required and 5 AAC 01.595 (a)(3) specifies that each permit holder may harvest 70 Chinook salmon in the Tyonek Subdistrict and 25 other salmon for the head of household and an additional 10 salmon for each dependent of the permit holder.

Allowable gear for the Tyonek Subdistrict subsistence fishery includes set gillnets 10 fathoms in length, no deeper than 45 meshes, and a stretched mesh sized no larger than 6 in. When fishing, permit holders are required to be present at the net site. Other standard permit conditions include prohibition of fishing within 300 ft of a dam, fish ladder, weir, culvert, or other artificial obstruction.

Harvest Assessment Methods

Household permits are issued by ADF&G prior to fishing, and harvests are recorded on the permit. A Division of Subsistence staff person travels to Tyonek each April and issues approximately 40–50 permits within several hours. Permits are also available in the Anchorage ADF&G office or in the Tyonek village office. Reported harvests are not expanded in this fishery. Because of the high compliance with the permit requirement and the strong support of the Tyonek village government, ADF&G views the harvest estimates for this fishery as very reliable.

The 2014 Season

In 2014, 92 permits were issued for the Tyonek Subdistrict subsistence salmon fishery, including 61 permits issued to Tyonek residents (66%) and 31 permits issued to other Alaska residents, including 24 to residents of Anchorage (26%; Table 11-5). Residents of Tyonek accounted for 74% of the reported harvest total (1,169 salmon), including 82% of the reported Chinook salmon harvest (585 Chinook salmon) (Table 11-5).

The 2014 reported harvest of 1,572 salmon was higher than the historical average of 1,491 salmon. The 2014 harvest was notably higher than the 2011 harvest of 789 salmon, which was the lowest reported harvest since 1981, although the number of returned permits was higher than the historical average of 58 permits (Table 11-6). Of the total reported subsistence salmon harvest in 2014, 714 were Chinook salmon (45%), 457 were coho salmon (29%), 385 were sockeye salmon (25%), 12 were chum salmon (1%), and 4 were pink salmon (<1%) (Figure 11-4).

UPPER YENTNA RIVER FISH WHEEL FISHERY

History and Regulations

This subsistence fish wheel fishery began in 1996 as a personal use fishery and was reclassified as a subsistence fishery by the BOF in 1998. It is located in the mainstem of the Yentna River from its confluence with Martin Creek upstream to its confluence with the Skwentna River. The fishery occurs from July 15 through July 31. Fishing periods are from 4:00 AM to 8:00 PM Mondays, Wednesdays, and Fridays. For a more detailed discussion of this fishery see Holen and Fall (2011).

Legal gear includes a fish wheel equipped with a live box. Permit holders must be present at the fish wheel while the wheel is fishing. A season limit of 2,500 salmon was established for the fishery. Chinook salmon and rainbow/steelhead trout must be returned alive to the water. Seasonal limits for households are 25 salmon for a household of 1 plus 10 salmon for each additional household member. Other standard permit conditions include prohibition of fishing within 300 ft of a dam, fish ladder, weir, culvert, or other artificial obstruction.

Harvest Assessment Methods

A permit issued by ADF&G is required prior to fishing. Permits are available through the Division of Sport Fish offices in Palmer and Anchorage. Permit holders must record their harvests on the permit and return it to ADF&G. Participants must also report their daily harvest of salmon to the Palmer ADF&G office by noon of the day following an open period. In the view of ADF&G, compliance with the permit requirement is high, and harvest estimates for this fishery are very reliable.

Harvests in 2014

In 2014, 20 subsistence permits were issued for the Yentna River subsistence fish wheel fishery, and 18 were returned (tables 11-7 and 11-8). In 2014, 9 of the 20 permit holders resided in the Skwentna area (45%), with the remaining 11 permits held by residents of other Cook Inlet area communities (Figure 11-5). Permit holders living in the community of Skwentna in 2014 harvested 198 of the reported 460 salmon, or 43% of the harvest (Table 11-7).

Of the total harvest of 460 salmon reported in 2014, 328 were sockeye salmon (71%), 84 coho salmon (18%), 32 chum salmon (7%) and 17 pink salmon (4%), (Figure 11-6). There were no reported harvests of Chinook salmon nor is it legal to retain the harvest. The 2014 harvest of 460 salmon was higher than the 2013 harvest of 412 salmon. The 2014 harvest was less than the 5-year average of 561 salmon, less than the 10-year average of 538 salmon, and also less than the historical average of 557 salmon (Table 11-8).

FEDERAL SUBSISTENCE SALMON FISHERIES IN COOK INLET

Since 2007, federal regulations allow for the harvest of salmon, trout, and Dolly Varden by residents of Cooper Landing, Hope, and Ninilchik in the Kenai National Wildlife Refuge and Chugach National Forest. This includes the harvest of salmon by dip net in the Kenai River. In 2014, the total harvest in the federal fishery on the Kenai and Kasilof rivers was 1,943 salmon, all of which were sockeye salmon (Table 11-9). There were a total of 153 permits issued to residents of these 3 communities, with 84 permits issued to residents of Cooper Landing, 32 to residents of Hope, and 37 to residents of Ninilchik (Table 11-9).

Table 11-10 shows the harvest over time, but only includes the years 2007–2014 because this is a new fishery. In all 8 years, sockeye salmon are a majority of the harvest, with 2014 being the highest harvest, followed by 2008 at 1,716 sockeye salmon harvested by residents of the 3 Kenai Peninsula communities.

COOK INLET PERSONAL USE SALMON FISHERIES

Background

The BOF first established personal use salmon fisheries in the Cook Inlet Area in 1981 (Nelson et al. 1999:146). Since Alaska statehood in 1959, opportunities had been provided to harvest salmon for home uses with noncommercial set gillnets along various Cook Inlet beaches under subsistence regulations (Braund 1982rev.). In 1978, the new Alaska subsistence statute defined, for the first time, subsistence fishing as fishing for “customary and traditional” uses [AS 16.05.940(31, 33)]. In 1980, the BOF determined that only the noncommercial net fisheries in the Tyonek and Port Graham subdistricts met the criteria to qualify as customary and traditional subsistence fisheries. Therefore, the BOF created the “personal use” category of fishing regulations to continue providing opportunities for Alaskans to harvest salmon for home use with nets in areas of Cook Inlet that are generally accessible along the road system. In 1992, the Joint Board classified most of the Cook Inlet Area as a “nonsubsistence area,” where subsistence fishing may not be permitted. Thus, in these areas, personal use fisheries are the primary means by which Alaska residents may obtain salmon for home uses using setnets or dip nets.

Due primarily to court decisions and legislation, personal use fishing regulations for Cook Inlet changed frequently in the 1980s and early 1990s. In 1981, the BOF created personal use dip net fisheries targeting sockeye salmon in the Kasilof and Kenai rivers. Until 1996, these fisheries opened only after achievement of escapement goals was projected. Since then, they have taken place within a fixed season. In 1986, the BOF created a personal use dip net fishery at the mouth of Fish Creek (Knik Arm) focusing on sockeye salmon. A fourth Upper Cook Inlet dip net fishery began in 2008 in the lower portion of the Beluga River on the western shore of Cook Inlet; this fishery is open only to Alaska residents 60 years of age or older. In most years since 1981, personal use set gillnet fisheries in the Cook Inlet Area have been limited to Kachemak Bay and an area at the mouth of the Kasilof River. For more detail on the history of subsistence and personal use salmon fisheries in the Cook Inlet Area, see Braund (1982rev.), Fall and Stanek (1990), Brannian and Fox (1996), Nelson (1994), Nelson (1995), Nelson et al. (1999), and Dunker (2010). Table 11-11 summarizes harvest data for selected Cook Inlet personal use and subsistence fisheries that are no longer authorized by state regulations.

Upper Cook Inlet Personal Use Salmon Fisheries

Presently, personal use salmon fisheries in the Upper Cook Inlet Area are governed by the provisions of the Upper Cook Inlet Personal Use Salmon Fishery Management Plan (5 AAC 77.540). Participants must possess an Alaska resident sport fishing license and obtain an Upper Cook Inlet Personal Use Fishing Permit for their household. Permit holders and household members may participate in any of the upper inlet personal use salmon fisheries (except, as noted, the Beluga River fishery is only open to Alaska residents 60 years of age or older). For all the fisheries combined, the annual limit is 25 salmon for the

permit holder and 10 salmon for each additional household member. Permits must be returned to ADF&G at the end of the season with a record of the harvest.

In 2014, 36,159 permits were issued for Upper Cook Inlet personal use fisheries, excluding the Beluga River dip net fishery. For the 4 fisheries combined (including unknown fishing locations), the estimated harvest was 544,121 salmon, including 506,047 sockeye (93%), and there were lower totals for the other 4 species (Table 11-12). The estimated harvest in 2014 was higher than the previous two years in these fisheries, but was below the 5-year (2009–2013) average of 550,439 salmon. For 1996 through 2013, the average annual harvest was 337,930 salmon, although participation and harvest grew steadily (Table 11-13).

Table 11-14 reports the number of permits issued for these 4 Upper Cook Inlet personal use fisheries and the estimated harvest by place of residence of the permit holder. Residents of the Municipality of Anchorage (including Anchorage, Chugiak, Eagle River, JBER [Joint Base Elmendorf/Richardson], and Girdwood) held the most permits (56%) and accounted for 56% of the harvest, followed by Kenai Peninsula Borough residents (19% of permits; 19% of harvests), Matanuska–Susitna Borough residents (18% of permits; 19% of harvest), residents of other Alaska communities (4% of permits; 4% of harvest), and permit holders for whom a community of residence could not be established (3% of permits; 2% of harvest).

Kasilof River Personal Use Setnet Fishery

This fishery takes place at the mouth of the Kasilof River between regulatory markers approximately 1 mile on either side of the river. Legal gear is a set gillnet no more than 10 fathoms in length, 6 inches in mesh size, and 45 meshes in depth. The fishery is open daily from 6:00 AM to 11:00 PM from June 15 through June 24. In 2014, the total estimated harvest in the fishery was 22,770 salmon, of which 22,567 (99%) were sockeye salmon. (Note that the harvests for this setnet fishery plus the dip net fisheries in the Kasilof River, the Kenai River, and Fish Creek are reported through a single permit system, the combined estimated totals are reported above.) The average annual harvest from 1996 through 2013 was 19,576 salmon (Table 11-15).

Kasilof River Dip Net Fishery

This dip net fishery takes place in the lower mile of the Kasilof River 24 hours per day from June 25 through August 7. Retention of Chinook salmon in this fishery is prohibited. The estimated harvest in 2014 was 94,230 salmon, of which 94% was sockeye salmon. From 1996 through 2013, the average annual harvest in this fishery was 49,072 salmon (Table 11-16).

Kenai River Dip Net Fishery

This dip net fishery takes place in the lower Kenai River downriver of the Warren Ames Bridge. Fishing is open from July 10 through July 31, 7 days per week from 6:00 AM to 11:00 PM; when the abundance of sockeye salmon is greater than 2 million fish, the fishery may be open by emergency order 24 hours a day. No more than 1 Chinook salmon per permit may be retained in this fishery. Estimated harvests totaled 404,867 salmon in 2014, including 379,823 sockeye salmon (94%). The average annual harvest from 1996 through 2013 was 255,544 salmon, with harvest—along with participation—rising markedly over that period (Table 11-17).

Fish Creek Dip Net Fishery

This dip net fishery opens by emergency order if the department projects an escapement into Fish Creek (Knik Arm) of more than 50,000 sockeye salmon. The season is July 10 through July 31. Open waters extend from the terminus of Fish Creek upstream to one-quarter of a mile above the Knik–Goose Bay Road. No Chinook salmon may be retained in this fishery. In 2014, the fishery opened for the first time since 2011. In 2014 the estimated harvest totaled 12,169 salmon, 48% of which was sockeye salmon, 35% pink salmon and 16% coho salmon and <1% chum salmon. This was lower than the record harvest

of 29,304 salmon estimated for 2010. The fishery did not open from 2002 through 2008. The average annual harvest for those years with an open fishery from 1996 through 2013 was 9,298 salmon (Table 11-18).

Unknown Upper Cook Inlet Personal Use Dip Net Fishery

Because not all participants in the Upper Cook Inlet personal use dip net fisheries indicate the location of their fishing activities when they return their permits, an estimate of harvests in an “unknown” Upper Cook Inlet dip net fishery is produced annually. Harvests that could not be attributed to one of the 4 Upper Cook Inlet personal use fisheries (3 dip net fisheries and 1 set net fishery) (excluding the Beluga River fishery, which is discussed below) were estimated at 10,085 salmon in 2014, 92% of which was sockeye salmon (9,315 sockeye salmon reported harvested) (Table 11-19).

Beluga River Personal Use Salmon Fishery

Participation in this dip net fishery, which first took place in 2008, is limited to Alaska residents 60 years of age or older. The fishery is open 24 hours per day from July 10 to August 31 within the Beluga River, western Cook Inlet, from about one-quarter mile upstream of the Beluga River bridge to about 1 mile below the bridge. The fishery operates under the single seasonal limit for Cook Inlet Area personal use salmon fisheries (25 salmon for the permit holder and 10 additional salmon for each dependent), except only 1 Chinook salmon may be retained. Participants must report their harvest weekly to ADF&G, and the fishery closes when 500 salmon have been harvested (5 AAC 77.540(g)). Harvests totaled 46 salmon in 2014, compared to 88 salmon in 2013, 16 salmon in 2012, 159 salmon in 2011, 53 salmon in 2010, 225 salmon in 2009, and 66 salmon in 2008 (Table 11-20). Harvest data by place of residence are presently not available for this fishery, and totals for this fishery are not included with other Upper Cook Inlet personal use fisheries summarized in Table 11-14.

Lower Cook Inlet Personal Use Salmon Fisheries

Kachemak Bay Setnet Fishery

This setnet fishery along Kachemak Bay in the Lower Cook Inlet Management Area was a subsistence fishery before being reclassified as a personal use fishery in the early 1980s. By regulation, the fishery is open from August 16 through September 15, from 6:00 AM Monday until 6:00 AM Wednesday and from 6:00 AM Thursday until 6:00 AM Saturday. The fishery closes when a guideline harvest range of 1,000–2,000 coho salmon has been achieved. Participants must obtain a permit from the Homer ADF&G office—this is separate from the permit program for the Upper Cook Inlet personal use fisheries. Seasonal limits are 25 salmon for the permit holder and 10 salmon for each additional household member (5 AAC 77.549). Fishers must phone the Homer ADF&G office to report their daily harvests.

In 2014, the reported harvest, based on 154 returned permits (96% of the 1,260 permits issued), was 2,794 salmon, of which 2,273 (81%) were coho. The recent 10-year average harvest for this fishery (2004–2013) was 1,689 salmon (Table 11-21). Harvest data by place of residence are presently not available for this fishery. Table 11-21 also provides historical harvests for this fishery for 1969 through 2014.

China Poot Dip Net Fishery

This personal use dip net fishery first opened in 1980. It takes place in China Poot Bay, approximately 4 miles southeast of the Homer Spit, on the south side of Kachemak Bay. This area is not accessible by road. The fishery targets enhanced sockeye salmon (stocked by the Cook Inlet Aquaculture Association) that have escaped the commercial fishery. Personal use fishers must have a valid Alaska resident sport fishing license, but a permit is not required. The season is July 1 through August 7. Only sockeye salmon may be retained in this fishery, with a bag and possession limit of 6 fish (5 AAC 77.545). Since 1996, ADF&G has not estimated harvests in this fishery. Table 11-22 summarizes historical harvest data for this fishery for 1980–1995. During those years, sockeye salmon harvests ranged between 794 (in 1985) and

8,605 (in 1995) and averaged 3,373 sockeye salmon. The annual average participation in this fishery was 1,215 fishers.

OTHER SUBSISTENCE FISHERIES IN COOK INLET

Federal halibut subsistence harvest data are currently available for communities and tribes in the Cook Inlet area. Residents of Port Graham, Nanwalek, and Seldovia participate in this program, as well as tribal members living in other Cook Inlet Area communities. For the findings for 2014, see Fall and Lemons (2016).

There are no annual harvest assessment programs for other subsistence finfish fisheries in Cook Inlet. Harvest estimates based on comprehensive household surveys conducted by the Division of Subsistence are available in the CSIS for freshwater and marine species spanning multiple years for selected Cook Inlet communities. Of note in Lower Cook Inlet are rockfish (*Sebastes*) documented in Turek et al. (2009). Information on other fish species used in Upper Cook Inlet by Tyonek and Beluga residents can be found in Stanek et al. (2007).

Table 11-1.—Historical subsistence salmon harvests, Port Graham and Koyuktolik subdistricts, 1981–2014.

Year	Permits		Reported salmon harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1981	ND	57	138	2,670	825	177	874	4,684
1982	ND	61	124	2,354	1,493	220	2,932	7,123
1983	ND	46	67	2,480	471	95	187	3,300
1984	ND	24	45	3,262	510	6	673	4,496
1985	ND	24	146	1,177	621	26	345	2,315
1986	ND	44	125	647	481	14	1,062	2,329
1987	ND	55	21	901	914	114	714	2,664
1988	ND	48	104	1,021	844	110	1,756	3,835
1989	ND	44	51	157	1,155	74	1,495	2,932
1990	ND	60	265	1,162	1,417	151	2,960	5,955
1991	ND	63	163	688	2,053	221	4,587	7,712
1992	ND	71	200	535	1,150	236	1,421	3,542
1993	ND	56	277	1,148	913	257	2,663	5,258
1994	ND	70	300	830	1,370	504	1,979	4,983
1995	ND	87	585	1,795	538	376	1,273	4,567
1996	ND	75	310	1,744	939	276	749	4,018
1997	ND	26	202	325	203	153	511	1,394
1998	ND	19	169	289	243	240	459	1,400
1999	ND	74	485	3,157	1,747	1,104	2,023	8,516
2000	ND	67	259	4,664	1,831	953	1,606	9,313
2001	ND	49	133	1,085	1,295	228	1,454	4,195
2002	ND	79	346	10,620	1,057	488	1,831	14,342
2003	ND	52	465	5,534	1,006	532	1,572	9,109
2004	ND	80	312	3,525	1,303	213	1,600	6,953
2005	ND	68	292	2,126	1,193	180	1,608	5,399
2006	ND	53	275	2,559	1,200	296	2,131	6,461
2007 ^a	ND	24	92	532	0	63	74	761
2008	ND	48	124	4,352	1,448	269	2,682	8,875
2009	ND	44	44	3,497	528	140	914	5,123
2010 ^a	ND	35	30	1,630	1,448	308	1,054	4,470
2011	ND	53	53	5,702	1,491	511	2,632	10,389
2012	ND	8	24	961	414	31	482	1,912
2013	ND	14	17	4,888	2,685	897	410	8,897
2014	ND	7	19	347	10	44	164	584
5-year average (2009–2013)	-	31	34	3,336	1,313	377	1,098	6,158
10-year average (2004–2013)	-	43	126	2,977	1,171	291	1,359	5,924
Historical average (1981–2013)	-	51	1,277	1,709	670	881	3,423	5,370

Source Hollowell et al. (2015). ADF&G Division of Subsistence, 1981–2011.

Note There are no records indicating the numbers of permits issued for any year. Only the numbers of permits returned are recorded. For this reason, averages of the number of permits issued cannot be calculated (indicated with "-").

a. Harvest reports are incomplete.

Table 11-2.—Subsistence salmon harvests by community, Port Graham and Koyuktolik subdistricts, 2014.

Community	Permits		Reported salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
Nanwalek	ND	2	3	211	0	4	0	218
Port Graham	ND	5	16	136	10	40	164	366
Total	-	7	19	347	10	44	164	584

Source Hollowell et al. (2015).

Note There are no records indicating the numbers of permits issued for any year. Only the numbers of permits returned are recorded. For this reason, averages of the number of permits issued cannot be calculated (indicated with "-").

Table 11-3.—Subsistence salmon harvests by community, Seldovia, 2013.

Community	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
Seldovia	21	15	7	162	0	91	7	267
Total	21	15	7	162	0	91	7	267

Source Hollowell et al. (2014).

Table 11-4.—Historical subsistence salmon harvests, Seldovia, 1996–2014.

Year	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1996	43	42	51	9	0	0	0	60
1997	20	17	52	22	0	0	0	74
1998	22	20	143	65	0	8	0	216
1999	16	16	136	130	0	38	0	304
2000	22	22	179	252	0	16	0	447
2001	19	16	149	142	0	0	0	290
2002	20	20	124	234	13	11	31	413
2003	18	15	117	290	2	66	22	496
2004	14	12	102	69	5	18	65	258
2005	18	16	53	74	14	11	100	251
2006	17	11	23	12	0	0	31	66
2007	19	15	24	66	12	35	103	239
2008	11	9	4	38	50	6	79	177
2009	18	17	15	115	22	13	77	242
2010	16	12	3	133	41	47	88	312
2011	7	4	0	96	0	0	18	114

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Year	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
2012	20	7	8	79	0	0	54	141
2013	12	8	3	147	2	15	68	234
2014	21	15	7	162	0	91	7	267
5-year average (2009–2013)	15	10	6	114	13	15	61	209
10-year average (2004–2013)	15	11	23	83	15	14	68	203
Historical average (1997–2013)	18	16	66	110	9	16	41	241

Source: Hollowell et al. (2015); ADF&G Division of Subsistence, 1996–2011.

Table 11-5.–Subsistence salmon harvests by community, Tyonek Subdistrict, 2014.

Community	Permits		Reported salmon harvests					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
Anchorage	24	18	72	94	103	1	0	270
Big Lake	2	2	0	9	29	0	0	38
Eagle River	1	1	5	1	0	0	0	6
Palmer	1	1	3	0	4	0	0	7
Seward	1	1	16	0	0	0	0	16
Tyonek	61	48	585	262	309	9	4	1,169
Unknown	2	2	33	19	12	2	0	66
Total	92	73	714	385	457	12	4	1,572

Source: ADF&G Division of Subsistence, ASFDB 2015 (ADF&G 2016).

Table 11-6.–Historical subsistence salmon harvests, Tyonek Subdistrict, 1981–2014.

Year	Permits		Reported salmon harvests					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1981	70	NA	2,002	269	64	32	15	2,382
1982	69	NA	1,590	310	113	4	14	2,031
1983	75	NA	2,665	187	59	6	0	0
1984	75	NA	2,200	266	79	23	3	2,571
1985	76	NA	1,472	164	91	10	0	0
1986	65	NA	1,676	203	223	46	50	2,198
1987	64	61	1,610	166	149	24	10	1,959
1988	47	42	1,587	91	253	12	8	1,951
1989	49	47	1,250	85	115	1	0	0
1990	42	37	781	66	352	12	20	1,231
1991	57	54	902	20	58	0	0	980

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Year	Permits		Reported salmon harvests					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1992	57	44	907	75	234	19	7	1,242
1993	62	54	1,370	57	77	17	19	1,540
1994	58	49	770	85	101	22	0	978
1995	70	55	1,317	45	153	15	0	1,530
1996	73	49	1,039	68	137	7	21	1,272
1997	70	42	639	101	137	8	0	885
1998	74	49	1,027	163	64	2	1	1,257
1999	77	54	1,230	144	94	11	32	1,511
2000	60	59	1,157	63	87	0	6	1,313
2001	84	58	976	172	49	6	4	1,207
2002	101	71	1,080	209	115	4	9	1,417
2003	87	74	1,183	111	44	10	7	1,355
2004	97	75	1,345	93	130	0	0	1,568
2005	78	66	982	61	139	2	0	1,184
2006	82	55	943	20	14	1	0	978
2007	84	67	1,281	200	123	2	3	1,609
2008	94	77	1,178	121	194	9	13	1,515
2009	89	69	636	184	258	2	1	1,081
2010	105	77	843	212	167	2	2	1,226
2011	114	63	595	154	26	7	7	789
2012	89	69	840	176	138	2	4	1,160
2013	82	48	813	172	181	0	19	1,185
2014	92	73	714	385	457	12	4	1,572
5-year average (2009–2013)	96	65	745	180	154	3	7	1,088
10-year average (2004–2013)	91	67	946	139	137	3	5	1,230
Historical average (1981–2013)	75	58	1,209	137	128	10	8	1,491

Source ADF&G Division of Subsistence, ASFDB 2015 (ADF&G 2016).

Note NA = Information regarding the number of permits returned in 1981–1986 does exist; however, it was not available at the time this report was written.

Table 11-7.—Subsistence salmon harvests by community, Upper Yentna River, 2014.

Community	Permits		Estimated salmon harvest					
	Issued	Returned	Chinook ^a	Sockeye	Coho	Chum	Pink	Total
Big Lake	2	1	0	42	0	0	0	42
Skwentna	9	8	0	117	50	16	16	198
Talkeetna	1	1	0	0	0	0	0	0
Wasilla	3	3	0	78	7	0	0	85
Willow	3	3	0	45	20	15	0	80
Eagle River	1	1	0	0	0	0	0	0
Chugiak	1	1	0	46	7	1	1	55
Total	20	18	0	328	84	32	17	460

Source ADF&G Division of Subsistence, ASFDB 2015 (ADF&G 2016).

a. Regulations prohibit the retention of Chinook salmon in this fishery (5 AAC 01.593).

Table 11-8.—Historical subsistence and personal use salmon harvests, Upper Yentna River, 1996–2014.

Year	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook ^b	Sockeye	Coho	Chum	Pink	
1996 ^a	17	17	0	242	46	51	115	454
1997 ^a	24	21	0	549	83	10	30	672
1998	21	18	0	495	113	15	30	653
1999	18	16	0	516	48	13	18	595
2000	19	19	0	379	92	7	4	482
2001	16	15	0	545	50	4	10	608
2002	25	22	0	454	133	31	14	632
2003	19	15	0	553	67	8	2	630
2004	21	19	0	441	146	3	36	625
2005	18	17	0	177	42	25	24	268
2006	22	22	0	368	175	26	14	583
2007	22	22	0	367	66	18	17	468
2008	16	16	0	310	57	7	23	397
2009	17	17	0	253	14	6	0	273
2010	32	32	0	642	50	18	38	748
2011	25	25	0	598	90	21	337	1,046
2012	21	21	0	279	24	19	21	343
2013	22	19	0	160	92	32	128	412
2014	20	18	0	328	84	32	17	460
5-year average (2009–2013)	23	23	0	386	54	19	105	564
10-year average (2004–2013)	22	21	0	360	76	17	64	516
Historical average (1996–2013)	21	20	0	407	77	17	48	549

Source ADF&G Division of Subsistence, ASFDB 2015 (ADF&G 2016).

a. This fishery was classified as personal use in 1996 and 1997; it has been a subsistence fishery since 1998.

b. Regulations prohibit the retention of Chinook salmon in this fishery (5 AAC 01.593).

Table 11-9.—Federal subsistence salmon harvests by community, Kenai and Kasilof rivers, 2014.

Community	Permits		Reported salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
Cooper Landing	84	80	0	1,322	2	0	0	1,324
Hope	32	31	0	405	0	0	0	405
Ninilchik	37	34	0	214	0	0	0	214
Total	153	145	0	1,941	2	0	0	1,943

Source Jeffrey Anderson, USFWS, Kenai Fish & Wildlife Field Office, personal communication.

Table 11-10.—Historical federal subsistence salmon harvests, Kenai and Kasilof rivers, 2007–2014.

Year	Permits		Reported salmon harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
2007	136	131	0	742	5	0	0	747
2008	160	151	2	1,716	12	0	0	1,730
2009	160	138	0	1,104	9	0	0	1,113
2010	169	151	0	943	0	0	0	943
2011	131	123	0	1,090	0	0	0	1,090
2012	133	121	0	1,438	0	0	0	1,438
2013	142	138	0	1,515	4	0	0	1,519
2014	153	145	0	1,941	2	0	0	1,943

Source: Jeffry Anderson, USFWS, Kenai Fish & Wildlife Field Office, personal communication.

Table 11-11.—Miscellaneous Upper Cook Inlet personal use and subsistence salmon harvests, 1981–1995.

Year ^a	Permits		Reported salmon harvest					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
<i>Noncommercial gillnet fishery</i>								
1981	1,108	NA	68	466	12,713	305	149	13,701
<i>Fall coho personal use/subsistence</i>								
1983	295	NA	0	0	712	0	0	712
1984	309	NA	1	2	2,261	7	10	2,281
1985	998	NA	50	805	11,265	53	108	12,281
1986	892	NA	0	0	2,422	0	0	2,422
1987	486	NA	8	9	2,213	37	2	2,269
1988	449	NA	2	19	2,662	10	38	2,731
1989	365	NA	0	0	2,376	0	0	2,376
1990	420	NA	0	0	2,290	0	0	2,290
1991 ^b	360	NA	0	0	2,703	8	0	2,711
1993	535	NA	0	0	1,168	0	23	1,191
<i>Northern/Central districts subsistence/personal use setnet</i>								
1985 ^d	638	NA	117	2,218	1,427	121	90	3,973
1991	7,065 ^c	NA	496	20,855	3,372	1,596	517	26,836
1992	9,200 ^c	NA	957	28,949	8,821	1,753	1,217	41,697
1994	10,127 ^c	NA	1,260	36,701	9,509	1,601	1,653	50,724
1995	9,300 ^c	NA	1,294	45,259	9,678	1,665	1,236	59,132
<i>Knik Arm subsistence</i>								
1985	405	NA	4	1,649	2,055	212	48	3,968

Source: Ruesch and Fox (1996); Brannian and Fox (1996).

a. Years listed are only the years in which the fishery was open.

b. In 1991, the fall coho fishery operated as a personal use fishery separate from subsistence setnet fisheries (Ruesch and Fox 1992).

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- c. Summary data reported in Ruesch and Fox (1996) and in Brannian and Fox (1996) include dip net and setnet harvests. Here, only setnet harvests are included. See separate tables for the Kasilof River dip net fishery and the Kenai River dip net fishery for harvest data for those fisheries.
- d. In 1985, this subsistence fishery was open in areas generally open to commercial fishing, except for the Upper Subdistrict, which had a separate season and permit (called the "fall coho fishery" in this table). The Knik Arm subsistence gillnet fishery was also administered separately in 1985 (Ruesch 1987).
- e. For 1991, 1992, 1994, and 1995, the number of permits issued includes all Upper Cook Inlet dip net and setnet fisheries except the Tyonek subdistrict.

NA = Data not available.

Table 11-12.—Cook Inlet personal use salmon fisheries, 2014.

Year ^a	Permits		Estimated salmon harvest ^b					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
<i>Lower Cook Inlet</i>								
Kachemak Bay setnet	160	154	13	310	2,273	178	20	2,794
China Poot Bay dip net ^a								
Subtotal, Lower Cook Inlet	160	154	13	310	2,273	178	20	2,794
<i>Upper Cook Inlet</i>								
Kasilof River setnet ^c			50	22,567	30	18	105	22,770
Kasilof River dip net ^c			0	88,513	2,606	342	2,769	94,230
Kenai River dip net ^c			0	379,823	4,710	1,194	19,140	404,867
Fish Creek dip net ^c			0	5,829	1,895	227	4,218	12,169
Unknown Upper Cook Inlet ^c			0	9,315	129	78	563	10,085
Subtotal, common permit fisheries^c	35,989	27,866	50	506,047	9,370	1,859	26,795	544,121
Beluga River dip net	10	10	0	32	12	1	1	46
Subtotal, Upper Cook Inlet	35,999	27,876	50	506,079	9,382	1,860	26,796	544,167
Cook Inlet Total	36,159	28,030	63	506,389	11,655	2,038	26,816	546,961

Source: ADF&G Division of Sport Fish

a. Permits are not issued for this fishery and harvest estimates are not produced.

b. Estimated harvests for all fisheries except Kachemak Bay setnet. Only reported harvests are available.

c. A single permit is issued for the Kasilof setnet, Kasilof dip net, Kenai dip net, and Fish Creek dip net fisheries. In some cases, returned permits did not indicate the area fished.

Table 11-13.—Estimated personal use salmon harvests, Upper Cook Inlet personal use fishery total, 1996–2014.

Year	Permits		Estimated salmon harvest					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1996	14,576	13,452	452	145,545	4,811	350	2,973	154,131
1997	14,919	13,756	464	148,940	777	88	844	151,113
1998	15,535	13,190	549	176,581	2,685	220	1,933	181,968
1999	17,197	14,216	1,108	208,589	1,413	168	2,078	213,356
2000	16,107	13,582	1,102	149,267	3,638	290	2,482	156,779
2001	16,915	14,398	1,138	218,688	2,637	276	1,821	224,560
2002	17,568	14,284	1,070	259,623	3,271	757	8,470	273,191
2003	19,110	15,726	1,711	298,831	2,250	371	2,082	305,245
2004	21,910	17,748	1,098	350,091	3,754	502	2,715	358,160
2005	21,905	19,081	1,132	369,776	3,415	428	2,520	377,271
2006	18,563	16,532	1,405	216,047	3,759	746	12,434	234,391
2007	23,046	20,312	1,924	356,717	2,727	614	2,352	364,334
2008	23,722	20,259	1,601	318,594	3,249	727	11,869	336,040
2009	29,619	25,029	1,384	457,539	4,204	559	6,969	470,655
2010	31,590	25,222	1,059	514,255	8,405	1,090	6,482	531,291
2011	34,515	27,193	1,453	630,242	6,754	1,169	4,879	644,497
2012	34,315	27,080	167	629,757	5,512	627	4,854	640,757
2013	35,211	26,772	84	454,315	5,119	1,053	4,424	464,995
2014	35,989	27,866	50	506,047	9,370	1,859	26,795	544,121
5-year average (2009–2013)	33,050	26,259	829	537,222	5,999	900	5,522	550,439
10-year average (2004–2013)	27,440	22,523	1,131	429,733	4,690	752	5,950	442,239
Historical average (1996–2013)	22,574	18,768	1,050	327,967	3,799	558	4,566	337,930

Source ADF&G Division of Sport Fish

Note Does not include the Beluga River dip net fishery.

Table 11-14.—Personal use salmon harvest estimates by community, Upper Cook Inlet, 2014.

Community	Permits		Estimated salmon harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
Anchor Point	282	233	0	4,348	57	43	167	4,616
Clam Gulch	46	39	2	837	2	1	22	865
Cooper Landing	20	18	0	169	1	0	2	172
Fritz Creek	63	51	0	896	11	2	34	943
Halibut Cove	1	1	0	3	0	0	0	3
Homer	894	758	1	11,455	82	22	344	11,904
Hope	22	20	0	227	1	1	11	240
Kasilof	490	408	4	7,413	47	17	322	7,804
Kenai	1,769	1,434	8	26,376	264	71	1,456	28,175
Moose Pass	27	22	0	394	2	0	10	406
Nanwalek	1	1	0	17	0	0	3	20
Nikiski	239	175	0	3,273	25	19	241	3,558
Nikolaevsk	14	12	0	237	1	0	19	257
Ninilchik	183	162	0	2,566	8	3	138	2,715
Seldovia	9	6	0	147	1	0	5	153
Seward	228	189	0	2,862	21	10	114	3,008
Soldotna	2,133	1,790	3	30,483	274	53	1,595	32,407
Sterling	478	408	2	6,902	33	4	417	7,359
Subtotal, Kenai Peninsula Borough	6,899	5,727	21	98,605	828	247	4,902	104,603
Anchorage	16,937	12,910	15	234,558	4,537	1,063	12,025	252,197
Chugiak	710	590	0	10,862	122	19	436	11,439
Eagle River	2,099	1,756	1	29,770	485	73	1,512	31,840
Girdwood	245	198	0	3,374	21	5	132	3,532
Joint Base Elmendorf Richardson	334	218	0	4,085	161	19	288	4,553
Subtotal, Anchorage Municipality	20,325	15,672	16	282,650	5,325	1,179	14,392	303,562
Big Lake	222	170	0	2,693	105	11	200	3,009
Chickaloon	6	4	0	81	1	0	1	83
Houston	46	31	0	547	11	15	20	593
Palmer	1,817	1,448	6	25,062	556	78	1,474	27,177
Sutton	75	57	0	918	71	3	48	1,039
Talkeetna	90	68	0	1,475	30	5	98	1,608
Trapper Creek	29	22	0	474	2	0	4	481
Wasilla	4,126	3,175	2	60,294	1,889	257	4,341	66,783
Willow	164	126	0	2,422	49	6	97	2,574
Subtotal, Matanuska-Susitna Borough	6,575	5,101	9	93,966	2,713	375	6,284	103,347
Akiak	2	1	0	10	0	0	1	11
Akutan	1	1	0	6	0	0	0	6
Allakaket	1	0	0	10	0	0	1	11

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Community	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
Ambler	3	2	0	78	0	0	1	79
Anderson	4	3	0	78	0	0	2	80
Arctic Village	4	1	0	54	1	0	3	58
Atkasuk	1	1	0	13	0	0	4	17
Barrow	63	33	0	1,351	9	1	84	1,446
Bethel	13	6	0	91	2	0	4	98
Buckland	2	1	0	14	0	0	1	15
Cantwell	5	5	0	47	0	0	0	47
Central	1	1	0	28	0	0	0	28
Chenega Bay	1	0	0	10	0	0	1	11
Chevak	1	0	0	10	0	0	1	11
Chignik Lagoon	1	0	0	10	0	0	1	11
Circle	2	1	0	32	0	0	1	33
Clear	4	4	0	142	0	0	0	142
Copper Center	4	3	0	94	0	0	1	95
Cordova	4	3	0	35	0	0	1	36
Crooked Creek	1	0	0	10	0	0	1	11
Delta Junction	37	34	0	886	1	0	37	924
Denali National Park	26	23	0	382	2	0	20	404
Dillingham	1	1	0	7	0	0	0	7
Eielson AFB	19	14	0	172	2	0	8	182
Ester	11	8	0	147	1	0	6	154
Fairbanks	626	496	0	10,224	100	18	315	10,657
Fort Greely	1	1	0	13	0	0	0	13
Fort Wainwright	20	15	0	243	18	0	3	264
Fort Yukon	1	1	0	17	0	0	0	17
Gakona	2	2	0	77	0	0	5	82
Galena	4	4	0	70	0	0	0	70
Glennallen	7	6	0	110	0	0	1	111
Haines	2	2	0	17	0	0	0	17
Healy	50	41	0	753	14	0	20	788
Holy Cross	2	2	0	25	0	0	0	25
Hoonah	2	1	0	14	0	0	2	16
Huslia	2	2	0	50	0	0	0	50
Iliamna	1	0	0	10	0	0	1	11
Juneau	41	36	2	767	4	0	22	795
Kaktovik	1	0	0	10	0	0	1	11
Ketchikan	12	9	0	131	15	0	2	148
Kiana	3	2	0	60	0	0	1	61
King Salmon	1	1	0	6	0	0	1	7
Kipnuk	1	0	0	10	0	0	1	11
Kodiak (city)	17	9	0	127	3	0	5	134
Kotlik	1	0	0	10	0	0	1	11
Kotzebue	24	11	0	326	4	3	8	341
Kwigillingok	1	0	0	10	0	0	1	11
Marshall	1	1	0	0	0	0	0	0

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Community	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
McGrath	4	3	0	55	1	0	1	57
Minto	1	0	0	10	0	0	1	11
Mountain Village	2	2	0	27	0	0	0	27
Naknek	1	1	0	8	2	0	1	11
Napakiak	3	2	0	17	0	0	1	18
Nenana	21	16	0	264	5	0	23	292
Nikolski	1	1	0	22	0	0	0	22
Noatak	2	0	0	21	1	0	1	23
Nome	20	19	0	272	0	0	3	275
Noorvik	4	1	0	31	1	0	2	34
North Pole	202	161	0	2,733	40	4	73	2,850
Nuiqsut	3	1	0	21	1	0	1	23
Nulato	1	1	0	9	0	0	0	9
Old Harbor	1	0	0	10	0	0	1	11
Petersburg	2	1	0	21	0	0	1	22
Pilot Point	1	0	0	10	0	0	1	11
Pilot Station	2	0	0	21	1	0	1	23
Point Hope	2	1	0	19	0	0	1	20
Port Alsworth	1	1	0	0	0	0	0	0
Port Lions	1	1	0	28	0	0	7	35
St Paul Island	3	3	0	78	0	0	0	78
Salcha	6	4	0	92	1	0	6	99
Scammon Bay	1	1	0	15	0	0	2	17
Shishmaref	2	1	0	25	0	0	1	26
Sitka	8	6	0	94	1	0	1	96
Skagway	2	2	0	66	0	0	0	66
Skwentna	1	0	0	10	0	0	1	11
Tanana	1	0	0	10	0	0	1	11
Tatitlek	1	1	0	16	0	0	0	16
Togiak	1	1	0	3	0	0	1	4
Tok	5	4	0	34	2	0	3	39
Toksook Bay	1	1	2	23	0	0	0	25
Two Rivers	4	4	0	22	0	0	0	22
Unalakleet	4	3	0	76	0	0	1	77
Unalaska	7	4	0	92	1	0	2	95
Valdez	27	23	0	462	1	0	3	467
Wainwright	1	0	0	10	0	0	1	11
White Mountain	1	1	0	8	0	0	0	8
Whittier	5	4	0	68	0	0	7	75
Wrangell	3	3	0	0	0	0	0	0
Subtotal, other Alaska	1,394	1,066	4	21,611	241	32	703	22,592

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Community	Permits		Estimated salmon harvest					
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
Unknown Communities	796	300	0	9,214	263	26	515	10,018
Total	35,989	27,866	50	506,047	9,370	1,859	26,796	544,121

Source ADF&G Division of Sport Fish

Note Includes Kasilof River setnet fishery, Kasilof River dip net fishery, Kenai River dip net fishery, Fish Creek (Knik Arm) dip net fishery and unknown fishery.

Table 11-15.—Estimated personal use salmon harvests, Kasilof River setnet fishery, 1982–2014.

Year ^a	Permits		Estimated salmon harvest					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1982	649	NA	372	7,543	24	NA	17	7,956
1983	684	NA	307	8,846	NA	NA	NA	9,153
1984	698	NA	165	12,926	NA	NA	NA	13,091
1985	692	NA	203	10,746	NA	NA	NA	10,949
1986	NA	NA	168	9,609	NA	NA	NA	9,777
1987	NA	NA	184	9,375	NA	NA	NA	9,559
1988	NA	NA	118	9,803	NA	NA	NA	9,921
1989	NA	NA	186	9,928	NA	NA	NA	10,114
1990	NA	NA	133	7,123	NA	NA	NA	7,256
1991 ^b	NA	NA	34	8,380	NA	NA	NA	8,414
1992	--	--	--	--	--	--	--	--
1993	NA	NA	47	7,942	NA	NA	NA	7,989
1994	--	--	--	--	--	--	--	--
1995	--	--	--	--	--	--	--	--
1996 ^c	NA	NA	46	9,506	0	1	8	9,561
1997	NA	NA	65	17,997	1	3	102	18,168
1998	NA	NA	126	15,975	0	12	15	16,128
1999	NA	NA	442	12,832	25	10	10	13,319
2000	NA	NA	514	14,774	9	10	17	15,324
2001	NA	NA	174	17,201	6	7	11	17,399
2002	NA	NA	192	17,980	12	13	30	18,227
2003	NA	NA	400	15,706	107	4	9	16,226
2004	NA	NA	163	25,417	58	0	6	25,644
2005	NA	NA	87	26,609	326	1	16	27,039
2006	NA	NA	287	28,867	420	6	11	29,591
2007	NA	NA	343	14,943	68	0	2	15,356
2008	NA	NA	151	23,432	65	23	35	23,706
2009	NA	NA	127	26,646	165	11	14	26,963
2010	NA	NA	136	21,924	23	1	23	22,107
2011	NA	NA	167	26,780	47	3	23	27,020
2012	NA	NA	103	15,638	161	15	53	15,970

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Year ^a	Permits		Estimated salmon harvest					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
2013	NA	NA	46	14,439	129	5	3	14,622
2014	NA	NA	50	22,567	30	18	105	22,770
5-year average (2009–2013)	NA	NA	116	21,085	105	7	23	21,336
10-year average (2004–2013)	NA	NA	161	22,470	146	7	19	22,802
Historical average (1996–2013) ^d	NA	NA	198	19,259	90	7	22	19,576

Source: Ruesch and Fox (1996) for 1982–1995; Division of Sport Fish for 1996–2014.

a The fishery was closed 1992, 1994, and 1995.

b This fishery was administered separately from the subsistence setnet fisheries that operated in 1991 (Ruesch and Fox 1992).

c Current regulations in place since 1996. Permits since 1996 issued for 4 Upper Cook Inlet personal use salmon fisheries.

d Historical average based on years since 1996 when current regulations were adopted.

Table 11-16.—Estimated personal use salmon harvests, Kasilof River dip net fishery, 1981–2014.

Year ^b	Permits		Estimated salmon harvest ^d					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1981	NA	NA	NA	10,300	NA	NA	NA	10,300
1982	NA	NA	NA	1,800	NA	NA	NA	1,800
1983	NA	NA	NA	11,124	NA	NA	NA	11,124
1984	NA	NA	NA	12,771	NA	NA	NA	12,771
1985	NA	NA	NA	16,284	NA	NA	NA	16,284
1986	NA	NA	NA	38,674	NA	NA	NA	38,674
1987	NA	NA	NA	18,454	NA	NA	NA	18,454
1988	NA	NA	NA	3,547	NA	NA	NA	3,547
1989	--	--	--	--	--	--	--	--
1990	--	--	--	--	--	--	--	--
1991 ^{cd}	7,065	5,480	10	907	2	0	3	922
1992	9,500	4,104	24	1,230	24	0	3	1,281
1993	--	--	--	--	--	--	--	--
1994 ^e	10,127	4,823	54	6,414	137	14	59	6,678
1995	NA	NA	NA	4,160	NA	NA	NA	4,160
1996 ^f	NA	NA	50	11,197	334	17	103	11,701
1997	NA	NA	35	9,737	90	19	19	9,900
1998	NA	NA	134	45,161	731	74	610	46,710
1999	NA	NA	127	37,176	286	52	264	37,905
2000	NA	NA	134	23,877	1,004	34	841	25,890
2001	NA	NA	138	37,612	766	23	307	38,846

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Year ^b	Permits		Estimated salmon harvest ^a					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
2002	NA	NA	106	46,769	1197	139	1862	50,073
2003	NA	NA	57	43,870	592	30	286	44,835
2004	NA	NA	44	48,315	668	90	396	49,513
2005	NA	NA	16	43,151	538	102	658	44,465
2006	NA	NA	55	56,144	1,057	105	992	58,353
2007	NA	NA	35	43,293	487	136	383	44,334
2008	NA	NA	46	54,051	509	143	787	55,536
2009	NA	NA	34	73,035	1,441	173	1,274	75,957
2010	NA	NA	31	70,774	1,768	279	974	73,826
2011	NA	NA	24	49,766	977	144	652	51,563
2012	NA	NA	16	73,419	1170	147	896	75,648
2013	NA	NA	18	85,528	1,666	339	683	88,234
2014	NA	NA	0	88,513	2,606	342	2,769	94,230
5-year average (2009–2013)	NA	NA	25	70,504	1,404	216	896	73,046
10-year average (2004–2013)	NA	NA	32	59,748	1,028	166	770	61,743
Historical average (1996–2013) ^e	NA	NA	61	47,382	849	114	666	49,072

Source: Nelson et al. (1999) for 1981–1990 and 1993–1995; Brannian and Fox (1996) for 1991, 1992, and 1994; Division of Sport Fish for 1996–2014.

- a. Personal use harvests are estimated based on the annual sport harvest survey conducted by the Division of Sport Fish prior to 1996, and are estimated based on permit returns since 1996. Only sockeye salmon harvests reported, 1981–1990.
- b. Fishery closed 1989–1990, and 1993. Classified as a subsistence fishery in 1991 and 1992.
- c. In 1991, 1992, and 1994, a single permit issued for all Upper Cook Inlet subsistence fisheries except Tyonek (central dip net, central setnet, northern setnet) (Brannian and Fox 1996). Permit return rate for 1992 was approximately 43.2% (Ruesch and Fox 1993).
- d. Harvests for 1991 and 1992, and subsistence harvests for 1994, are reported, not estimated.
- e. In 1994 both a subsistence and a personal use dip net fishery took place in the Kasilof River (Nelson 1999). Sockeye harvests included 3,679 salmon in the personal use fishery and 2,735 salmon in the subsistence fishery. Harvest data for other species in the personal use fishery are not available.
- f. Current regulations have been in place since 1996. Permits have been required since 1996 and are issued for 4 Upper Cook Inlet personal use fisheries.
- g. Historical average based on years since 1996 when current regulations were adopted.

NA = Data not available.

Table 11-17.—Estimated personal use salmon harvests, Kenai River dip net fishery, 1981–2014.

Year ^b	Permits		Estimated salmon harvest ^d					Total
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1981	—	—	—	—	—	—	—	—
1982 ^c	NA	NA	NA	NA	NA	NA	NA	0
1983	NA	NA	NA	7,562	NA	NA	NA	7,562
1984	—	—	—	—	—	—	—	—
1985	—	—	—	—	—	—	—	—
1986	—	—	—	—	—	—	—	—
1987	NA	NA	NA	24,086	NA	NA	NA	24,086
1988	NA	NA	NA	16,880	NA	NA	NA	16,880
1989	NA	NA	NA	48,976	NA	NA	NA	48,976
1990	—	—	—	—	—	—	—	—
1991 ^{de}	7,065	5,480	44	10,468	146	2	17	10,677
1992 ^f	9,500	4,104	158	28,429	1,475	74	598	30,734
1993	NA	NA	NA	33,467	NA	NA	NA	33,467
1994	10,127	4,823	187	13,897	2,535	114	1,263	17,996
1995	NA	NA	NA	14,352	NA	NA	NA	14,352
1996 ^g	NA	NA	295	102,821	1,932	175	2,404	107,627
1997	NA	NA	364	114,619	559	58	619	116,219
1998	NA	NA	254	103,847	1,011	85	1,032	106,229
1999	NA	NA	488	149,504	1,009	102	1,666	152,769
2000	NA	NA	410	98,262	1,449	193	1,457	101,771
2001	NA	NA	638	150,766	1,555	155	1,326	154,440
2002	NA	NA	606	180,028	1,721	551	5,662	188,568
2003	NA	NA	1,016	223,580	1,332	249	1,647	227,824
2004	NA	NA	792	262,831	2,661	387	2,103	268,774
2005	NA	NA	997	295,496	2,512	321	1,806	301,132
2006	NA	NA	1,034	127,630	2,235	551	11,127	142,577
2007	NA	NA	1,509	291,270	2,111	472	1,939	297,301
2008	NA	NA	1,362	234,109	2,609	504	10,631	249,215
2009	NA	NA	1,189	339,993	2,401	285	5,482	349,350
2010	NA	NA	865	389,552	2,870	508	3,655	397,450
2011	NA	NA	1,243	537,765	4,745	915	3,914	548,582
2012	NA	NA	40	526,992	4,008	425	3,770	535,235
2013	NA	NA	11	347,222	3,169	701	3,625	354,728
2014	NA	NA	0	379,823	4,710	1,194	19,140	404,867
5-year average (2009–2013)	NA	NA	670	428,305	3,439	567	4,089	437,069
10-year average (2004–2013)	NA	NA	904	335,286	2,932	507	4,805	344,434
Historical average (1996–2013) ^h	NA	NA	729	248,683	2,216	369	3,548	255,544

Source: Nelson et al. (1999) for 1981–1990 and 1993–1995; Brannian and Fox (1996) for 1991, 1992, and 1994; Division of Sport Fish for 1996–2014.

a. Personal use harvests are estimated based on the annual sport harvest survey conducted by the Division of Sport Fish prior to 1996, and are estimated based on permit returns since 1996. Only sockeye salmon harvests reported, 1981–1990.

b. Fishery closed 1981, 1984–1986, and 1990. Classified as a subsistence fishery in 1991, a portion of 1992 and 1994.

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- c. The 1982 harvest is reported as "unknown" but "insignificant" (Nelson 1999; Brannian and Fox 1996).
- d. Subsistence harvests for 1991, 1992, and 1994 are reported, not estimated.
- e. 1991, 1992, and 1994 permits: single permit issued for all Upper Cook Inlet subsistence fisheries except Tyonek.
- f. Harvests for 1992 include 16,240 sockeye salmon in the subsistence fishery and 12,189 sockeye in the personal use fishery. Harvests for other species are for the subsistence fishery only. Personal use harvests are not available for the other species.
- g. Current regulations have been in place since 1996. Permits have been required since 1996 and are issued for 4 Upper Cook Inlet personal use fisheries.
- h. Historical average based on years since 1996 when current regulations were adopted.
- NA = Data not available.

Table 11-18.—Estimated personal use salmon harvests, Fish Creek dip net fishery, 1987–2014.

Year ^b	Permits		Estimated salmon harvest ^a					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1987	NA	NA	0	2,200	0	0	2,200	4,400
1988	NA	NA	0	3,000	0	0	3,000	6,000
1989	NA	NA	0	5,000	0	0	5,000	10,000
1990	NA	NA	0	6,500	0	0	6,500	13,000
1991	NA	NA	0	14,369	0	549	567	15,485
1992	NA	NA	0	19,002	0	607	678	20,287
1993	NA	NA	0	37,224	973	503	2,068	40,768
1994	NA	NA	0	16,012	1,336	248	632	18,228
1995	NA	NA	0	9,102	2,640	99	290	12,131
1996	NA	NA	37	17,260	2,414	153	331	20,195
1997	NA	NA	0	3,277	63	4	53	3,397
1998	NA	NA	1	4,036	649	29	80	4,795
1999	NA	NA	0	1,083	17	0	12	1,112
2000	NA	NA	0	6,925	958	29	83	7,995
2001	NA	NA	0	436	18	1	2	457
2002	—	—	—	—	—	—	—	—
2003	—	—	—	—	—	—	—	—
2004	—	—	—	—	—	—	—	—
2005	—	—	—	—	—	—	—	—
2006	—	—	—	—	—	—	—	—
2007	—	—	—	—	—	—	—	—
2008	—	—	—	—	—	—	—	—
2009	NA	NA	10	9,898	53	33	66	10,060
2010	NA	NA	12	23,705	3,576	290	1,721	29,304
2011	NA	NA	2	5,236	905	72	155	6,370
2012	--	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	--	--
2014	NA	NA	0	5,829	1,895	227	4,218	12,169
Historical average (1996–2013)	NA	NA	7	7,984	961	68	278	9,298

Source Brannian and Fox (1996) for 1987–1994; Howe et al. (1996) for 1995; Division of Sport Fish for 1996–2011 and 2014.

a. Estimates derived from statewide sport harvest survey prior to 1996. Permits required since 1996.

b. Fishery closed 2002 through 2008, 2012, and 2013.

Table 11-19.—Estimated personal use salmon harvests, unknown fishery, 1996–2014

Year	Permits		Estimated salmon harvest					Total
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	
1996	NA	NA	24	4,761	131	4	127	5,047
1997	NA	NA	0	3,310	64	4	51	3,429
1998	NA	NA	34	7,562	294	20	196	8,106
1999	NA	NA	51	7,994	76	4	126	8,251
2000	NA	NA	44	5,429	218	24	84	5,799
2001	NA	NA	188	12,673	292	90	175	13,418
2002	NA	NA	166	14,846	341	54	916	16,323
2003	NA	NA	238	15,675	219	88	140	16,360
2004	NA	NA	99	13,527	366	25	210	14,227
2005	NA	NA	32	4,520	39	4	40	4,635
2006	NA	NA	29	3,406	47	84	304	3,870
2007	NA	NA	37	6,729	61	6	28	6,861
2008	NA	NA	41	6,890	66	58	412	7,467
2009	NA	NA	25	7,968	144	57	133	8,327
2010	NA	NA	15	8,300	168	12	109	8,604
2011	NA	NA	17	10,695	80	35	135	10,962
2012	NA	NA	8	13,548	173	40	135	13,904
2013	NA	NA	9	7,126	155	8	113	7,411
2014	NA	NA	0	9,315	129	78	563	10,085
5-year average (2009–2013)	NA	NA	15	9,527	144	30	125	9,842
10-year average (2004–2013)	NA	NA	31	8,271	130	33	162	8,627
Historical average (1996–2013)	NA	NA	59	8,609	163	34	191	9,056

Source ADF&G Division of Sport Fish.

Table 11-20.—Beluga River senior personal use dip net fishery summary, 2008–2014.

Year	Permits		Reported salmon harvest					Total
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	
2008	20	20	0	31	35	0	0	66
2009	11	11	0	140	78	0	7	225
2010	14	14	0	47	1	5	0	53
2011	13	12	0	137	17	5	0	159
2012	7	7	0	9	7	0	0	16
2013	8	8	0	30	55	1	2	88
2014	10	10	0	32	12	1	1	46
Historical average (2008– 2013)	12	12	0	66	32	2	2	101

Source ADF&G Division of Sport Fish.

Table 11-21.—Personal use/subsistence salmon harvests, Kachemak Bay setnet fishery (excluding the Port Graham/Nanwalek subsistence fishery and the Seldovia subsistence fishery), Lower Cook Inlet, 1969–2014.

Year	Households or permits		Reported salmon harvest					
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1969	47	44	0	9	752	0	38	799
1970	78	73	0	12	1,179	13	143	1,347
1971	112	95	2	16	1,549	7	44	1,618
1972	135	105	1	11	975	69	48	1,104
1973	143	128	0	18	1,304	40	84	1,446
1974	148	118	0	16	376	77	43	512
1975	292	276	4	47	1,960	61	632	2,704
1976	242	221	16	46	1,962	56	1,513	3,593
1977	197	179	12	46	2,216	119	639	3,032
1978	311	264	4	35	2,482	34	595	3,150
1979	437	401	6	37	2,118	41	2,251	4,453
1980	533	494	43	32	3,491	25	1,021	4,612
1981	403	383	15	73	4,370	68	718	5,244
1982	395	372	41	49	7,398	154	956	8,598
1983	344	328	5	17	2,701	44	305	3,072
1984	368	346	3	25	3,639	105	804	4,576
1985	328	302	5	49	3,317	34	138	3,543
1986	349	310	7	68	3,831	56	3,132	7,094
1987	363	339	5	50	3,979	61	279	4,374
1988	439	417	14	73	5,007	75	1,445	6,614
1989	477	453	41	156	7,219	53	883	8,352
1990	578	543	12	200	8,323	69	1,846	10,450
1991	472	459	8	47	4,931	23	366	5,375
1992	365	350	5	63	2,277	21	643	3,009
1993	326	317	6	44	1,992	18	463	2,523
1994	286	284	66	80	4,097	18	1,178	5,439
1995	235	232	118	108	2,916	7	343	3,492
1996	299	293	302	102	3,347	24	1,022	4,797
1997	276	264	384	191	1,817	12	257	2,661
1998	227	214	135	20	1,461	5	167	1,788
1999	146	141	276	119	1,803	3	168	2,369
2000	213	206	104	28	2,064	4	304	2,504
2001	154	148	86	27	1,579	16	150	1,858
2002	122	113	61	33	1,521	12	251	1,878
2003	104	96	17	57	1,071	9	170	1,324
2004	91	83	7	56	1,554	16	172	1,805
2005	108	96	8	57	833	13	296	1,207
2006	89	82	15	41	1,295	5	221	1,577
2007	141	133	10	113	1,431	34	641	2,229
2008	146	142	2	92	1,844	14	687	2,639
2009	145	142	9	273	646	4	101	1,033
2010	128	122	14	149	875	17	251	1,306
2011	119	112	15	223	806	5	145	1,194

-continued-

Table 11-21.–Page 2 of 2.

Year	Households or permits		Reported salmon harvest					Total
	Total	Returned	Chinook	Sockeye	Coho	Chum	Pink	
2012	98	95	5	137	1,471	6	275	1,894
2013	123	118	9	122	1,732	3	135	2,001
2014	160	154	13	310	2,273	178	20	2,794
5-year average (2009–2013)	123	118	10	181	1,106	7	181	1,486
10-year average (2004–2013)	119	113	9	126	1,249	12	292	1,689
Historical average (1969–2013)	247	232	42	73	2,522	34	577	3,249

Source: Hallowell et al. (2015).

Table 11-22.–Estimated personal use salmon harvests, China Poot dip net fishery, 1980–1995.

Year	Fishers	Estimated salmon harvest					Total
		Chinook	Sockeye	Coho	Chum	Pink	
1980	NA	0	1,000	0	0	0	1,000
1981 ^a	—	—	—	—	—	—	—
1982	NA	0	1,320	0	0	0	1,320
1983	1,956	0	5,910	0	0	0	5,910
1984	1,237	0	1,794	0	0	0	1,794
1985	398	0	794	0	0	12	806
1986	993	0	1,815	0	0	673	2,488
1987	1,016	0	1,231	0	0	0	1,231
1988	1,361	0	1,910	0	127	36	2,073
1989	1,428	0	5,416	0	0	239	5,655
1990	1,537	0	5,835	0	178	68	6,081
1991	395	0	1,528	0	0	33	1,561
1992	810	0	3,468	0	76	183	3,727
1993	1,036	0	4,260	0	0	45	4,305
1994	1,372	0	5,715	0	0	34	5,749
1995 ^b	2,261	0	8,605	0	0	77	8,682
Historical average (1980–1995)	1,215	0	3,373	0	25	93	3,492

Source: Fall and Stanek (1990), for 1980 to 1989, based on annual reports of the sport fish harvest survey. 1990 through 1995: annual sport fish angler survey report. Harvest data as reported in annual sport fish angler survey reports differ from data reported in Nelson (1995:222), which reports "sport and personal use harvests combined."

a. Fishery was closed in 1981.

b. Harvest data not collected after 1995.

NA = Data not available.

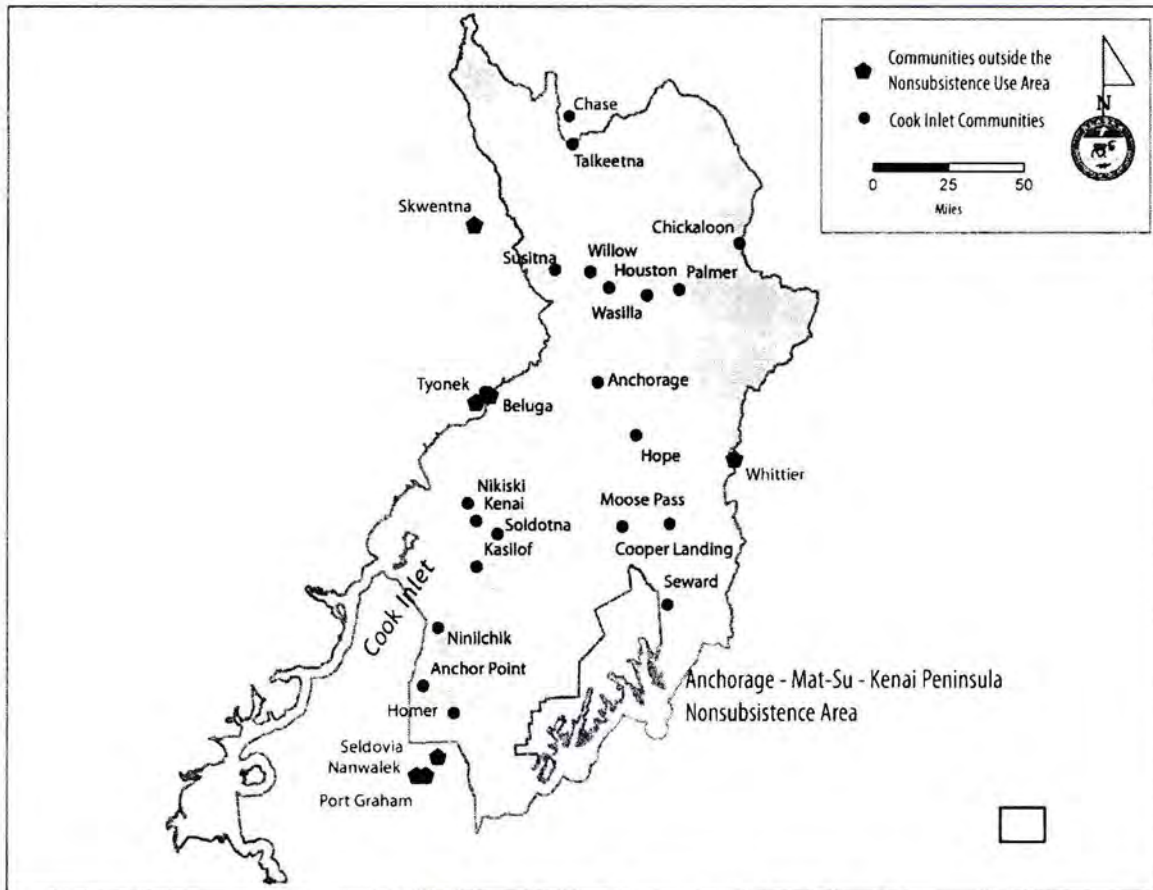


Figure 11-1.—Anchorage–Matsu–Kenai Nonsubsistence Area map.

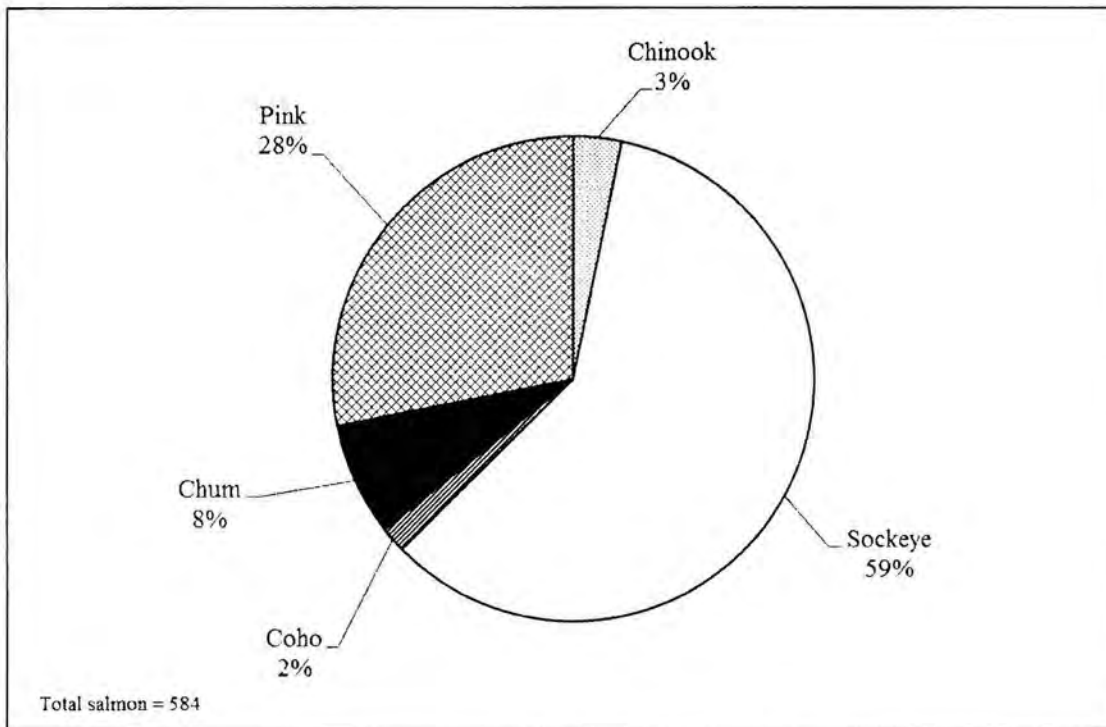


Figure 11-2.—Subsistence salmon harvests in the Port Graham and Koyuktolik subdistricts, 2014.

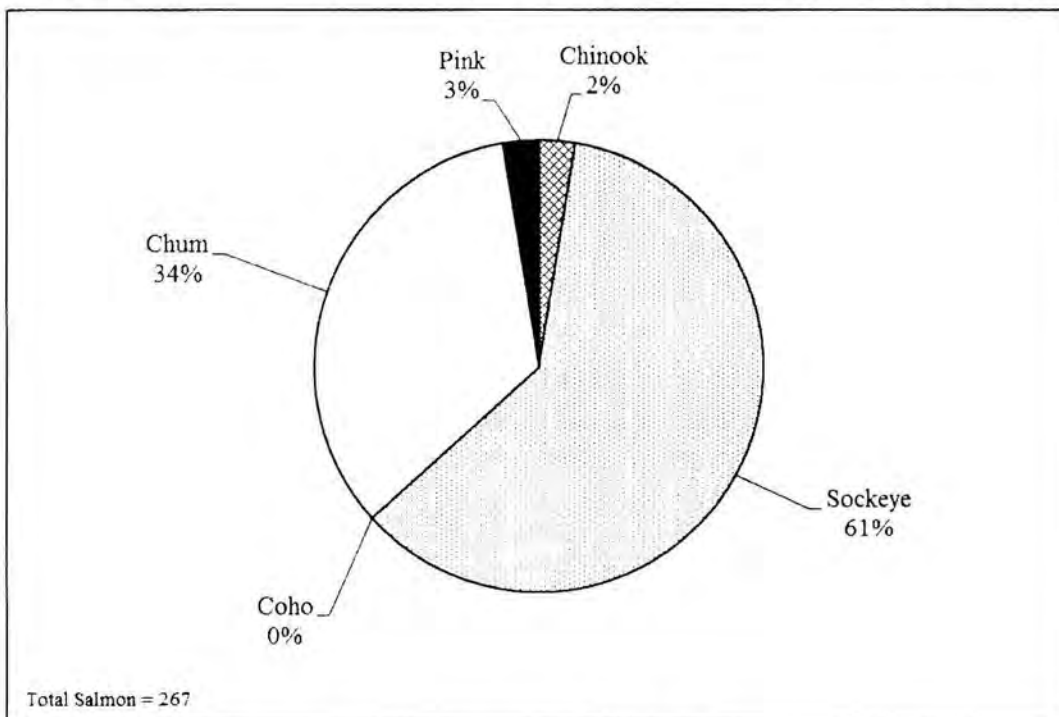


Figure 11-3.—Subsistence salmon harvests in Seldovia, 2014.

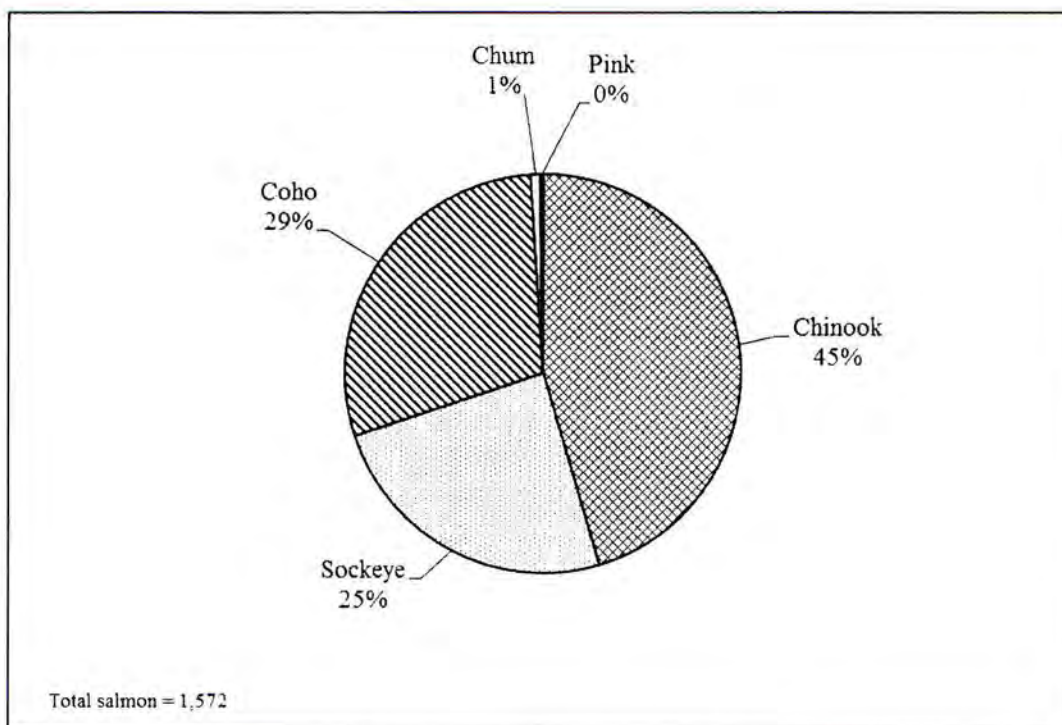


Figure 11-4.—Subsistence salmon harvests in the Tyonek Subdistrict, 2014.

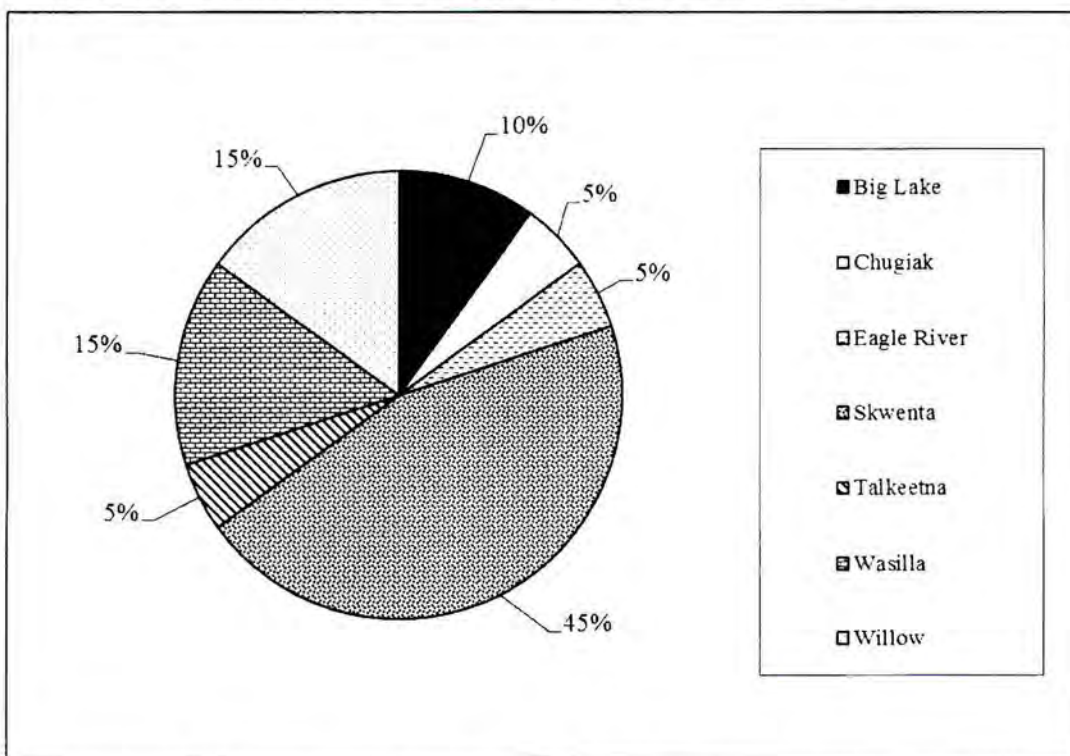


Figure 11-5.—Permits issued, by place of residence, for the Upper Yentna River fishery, 2014.

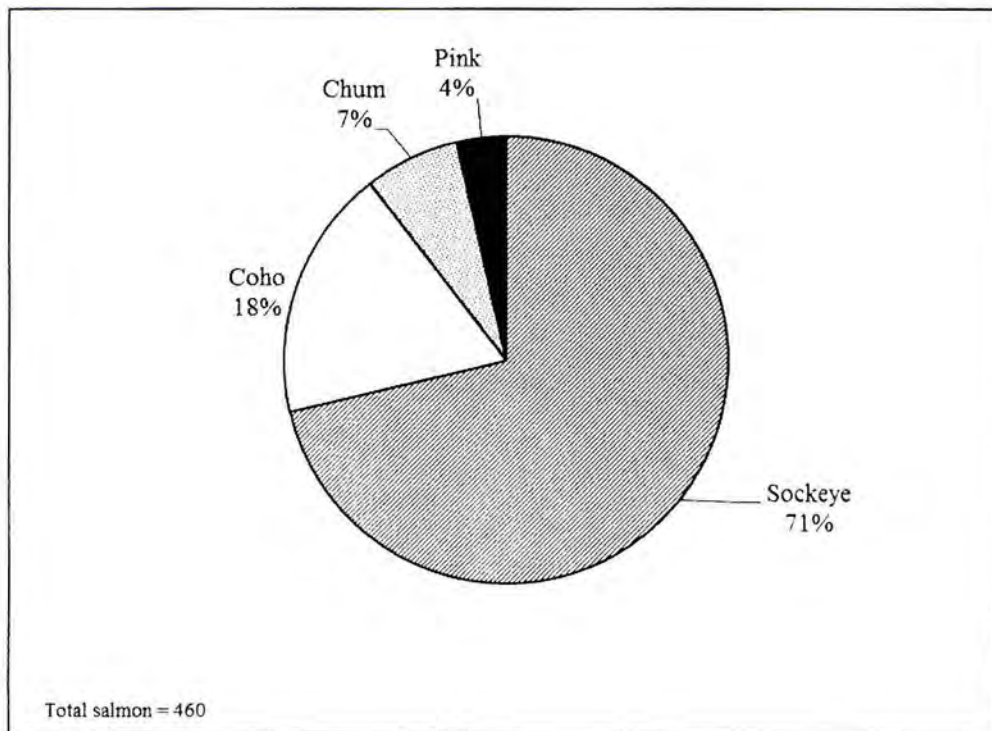


Figure 11-6.--Subsistence salmon harvests in the Upper Yentna River, 2014.