ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES NEWS RELEASE



Doug Vincent-Lang, Commissioner Sam Rabung, Director



Contact:

James Jackson, Area Biologist Geoff Spalinger, Asst. Area Biologist Todd Anderson, Asst. Area Biologist Brad Fuerst, Fisheries Biologist Kodiak Area Office 351 Research Court Kodiak, AK 99615

Phone: (907) 486-1830 Fax: (907) 486-1847 Date Issued: November 14, 2019 Time: 2:30 p.m.

2019 KODIAK COMMERCIAL SALMON SEASON SUMMARY

The following is a brief overview of the 2019 Kodiak Management Area (KMA; Figure 1) commercial salmon season.

The commercial fishing effort in 2019 was above average compared to recent years. Of the 593 eligible commercial salmon permits, 327 (55%) made commercial landings. By gear type, a total of 176 purse seine, 3 beach seine, and 148 set gillnet permit holders made deliveries in 2019. Participation rates for purse seine were above the previous 10-year average, while participation rates for beach seine and set gillnet permits were both average (Table 1).

Table 1.– Commercial salmon fishery 2019 limited entry permit activity and 10-yr. averages, by gear type, in the KMA, 2019.

	2019 Permits			2009-2018 Average Permits		
Gear Type	Available	Fished	% of permits fished	Available	Fished	% of permits fished
Purse Seine	375	176	47%	375	167	44%
Beach Seine	30	3	10%	31	3	10%
Set Gillnet	188	148	79%	188	148	79%
Total	593	327	55%	593	318	54%



Figure 1.-Map of the commercial salmon fishing districts in the KMA.

The 2019 commercial harvest (not including personal use or ADF&G Test Fishery) in the KMA was 7,371 Chinook salmon, 2,176,572 sockeye salmon, 393,812 coho salmon, 32,973,151 pink salmon, and 547,178 chum salmon. The total KMA harvest (including KRAA cost recovery) of 36,098,084 salmon was above the 2019 forecast as well as the previous 10-year average of approximately 21,247,014 salmon (Table 2).

Table 2.–2019 commercial salmon harvest for KMA compared to the previous 10-year average and the 2019 harvest forecast.

	Chinook	Sockeye	Coho	Pink	Chum	Total
2019 Harvest	7,371	2,176,572	393,812	32,973,151	547,178	36,098,084
2009-2018 Avg.	12,398	2,295,323	310,014	17,825,242	804,038	21,247,014
2019 Forecast	8,000	2,336,000	318,000	27,000,000	935,000	30,597,000

Note: harvest numbers do not include harvest from the ADF&G test fisheries or personal use but includes cost recovery.

The estimated exvessel value of the 2019 fishery (not including hatchery cost recovery) was approximately \$45.8 million. This was well above the 10-year average exvessel value of \$38.0 million (Table 3).

Purse seine fishermen accounted for the majority of the total harvest (in number of fish) and their earnings averaged \$227,552 per fished permit. Set gillnet earnings averaged \$38,725 per permit fished while beach seine earnings were \$1,461 per permit fished.

	Total	Total	Aver	age Exvessel Valu	e ^c
Year	Catch ^a	Value ^b	Purse Seine	Gillnet	Beach Seine
2009	28,338,446	\$33,698,297	\$174,566	\$44,918	с
2010	10,291,590	\$24,269,085	\$130,009	\$25,728	с
2011	18,228,922	\$44,247,720	\$225,633	\$31,155	\$13,750
2012	19,032,409	\$44,988,487	\$219,164	\$52,084	\$16,367
2013	30,145,552	\$59,391,598	\$304,526	\$55,673	\$24,487
2014	13,995,803	\$42,806,102	\$183,451	\$61,504	\$23,796
2015	34,353,663	\$34,381,769	\$163,566	\$29,953	с
2016	5,031,781	\$14,509,665	\$66,243	\$25,972	\$7,111
2017	29,978,602	\$54,750,472	\$277,675	\$65,957	\$19,216
2018	8,618,297	\$27,263,475	\$147,748	\$35,118	с
2019	34,361,257	\$45,823,478	\$227,552	\$38,725	\$1,461
Recent 10-year A	verage ^e				
2009-2018	19,801,507	\$38,030,667	\$189,258	\$42,806	\$17,887

Table 3.-Estimated commercial salmon harvest and value, by gear type, in the KMA, 2009 - 2019.

^a Number of fish: Does not include hatchery cost recovery, test fisheries, or personal use harvests.

^b Exvessel values based on inseason price estimates and do not include postseason adjustments.

^c Confidential data.

2019 Commercial Harvest Summary

Chinook Salmon

There are no directed Chinook salmon commercial fisheries in the KMA but incidental commercial harvest occurs during targeted sockeye and pink salmon fisheries. The Karluk and Ayakulik river systems both support small populations of Chinook salmon. By regulation, non-retention of Chinook salmon was implemented for the seine fleet areawide from June 1 through July 5. Due to poor Chinook salmon runs to Ayakulik, non-retention of Chinook salmon was extended for the seine fleet from July 6 until the end of the season along the Westside of Kodiak from the latitude of Cape Kuliuk to the latitude of Low Cape. The 2019 commercial harvest of Chinook salmon in the KMA totaled 7,371 fish which was below the previous 10-year average (12,398 fish) and below the 2019 forecast (8,000 fish; Table 2).

Sockeye Salmon

The 2019 commercial harvest of sockeye salmon totaled 2,176,572 fish. The harvest was below the recent 10-year average (2,295,323 fish) and the preseason forecast (2,336,000 fish; Table 2).

Early-season management for much of the Westside of Kodiak Island is driven by Karluk early-run sockeye salmon. Minimal fishing time was allowed along much of the Westside of Kodiak until the management focus turned to pink salmon (July 6). The lower value of the Karluk early-run sockeye

salmon escapement goal (150,000 fish) was not achieved until July 3. A total of 281,888 sockeye salmon were harvested in early-season Westside areas based on Karluk early-run sockeye salmon. Westside sockeye salmon numbers include an estimated contribution of 26,657 sockeye salmon from the enhanced Spiridon Lake sockeye salmon run.

Late-season management for much of the Westside of Kodiak is driven by the Kodiak Island pink salmon fishery and the Karluk late-run sockeye salmon run. The majority of the pink salmon runs to the Westside of Kodiak Island were very strong, and liberal fishing time was allowed in July and August. The Karluk late-run sockeye salmon run was average; however, a large amount of sockeye salmon built up in Karluk Lagoon in late August and enabled the majority of the Westside to be open continuously from August 16 through the end of the season. A total of 780,196 sockeye salmon were commercially harvested in late-season Westside areas opened based on local pink and chum salmon as well as Karluk late-run sockeye salmon. Westside sockeye salmon numbers include an estimated contribution of 19,001 sockeye salmon from the enhanced Spiridon Lake sockeye salmon run.

The Ayakulik early-run sockeye salmon run was weak, allowing only one fishing period in the Outer Ayakulik and Halibut Bay sections of the Southwest Kodiak District during early-run sockeye salmon management. A total of 74,928 sockeye salmon were harvested in areas managed based on Ayakulik early-run sockeye salmon. The strength of the Ayakulik late-run sockeye salmon was strong and approximately 291,230 sockeye salmon were harvested in the Outer Ayakulik and Halibut Bay sections of the Southwest Kodiak District. A total of 366,158 sockeye salmon were harvested from Westside sections opened based on the Ayakulik run, which was above the 2019 forecast of 101,000 fish.

Upper Station early-run sockeye salmon escapement was weak, and the traditional fishing areas of the Alitak District (i.e. seine and set gillnet sections) were closed for much of June. The Frazer Lake sockeye salmon run was adequate allowing for commercial salmon openings in the nontraditional (gillnet only) Dog Salmon Flats Section of the Alitak District. Near the end of June, Upper Station early-run escapement improved, and fisheries were allowed in the traditional fishing areas for much of July targeting Frazer sockeye salmon. The Alitak District early-run sockeye salmon harvest was approximately 226,165 fish, above the projected harvest of 175,400 fish. A large amount of jacks (1-ocean male sockeye salmon) returned to the Frazer River system in 2019 (44,978 jacks). In order to achieve an adequate sex ratio, the department targeted the upper end of the Frazer Lake sockeye salmon escapement goal of 170,000 fish. Upper Station late-run sockeye salmon run was weak, and very little fishing time was permitted. The total harvest of the Alitak District late-run sockeye salmon was approximately 103,952 fish, which was below the forecasted harvest of 150,500 fish.

Cape Igvak Salmon Management Plan: This regulatory management plan (5 AAC 18.360) allocates up to 15% of the total Chignik-bound sockeye salmon harvest to KMA fishermen in the Cape Igvak Section. Based on regulations, ninety percent (90%) of all sockeye salmon caught prior to July 25 in the Cape Igvak Section are considered to be Chignik-bound.

Both Chignik sockeye salmon runs were weak, and the allocative and biological criteria were never met to allow fishing in the Cape Igvak Section. No sockeye salmon were harvested in the Cape Igvak Section through July 25, which was below the preseason forecast of approximately 118,000.

North Shelikof Strait Sockeye Salmon Management Plan: From July 6 to July 25, this regulatory management plan (5 AAC 18.363) places harvest limits on areas along the northern Shelikof Strait to limit interception of sockeye salmon that are considered Cook Inlet-bound. During the period that this management plan is in effect, KMA fisheries are managed based on local pink and chum salmon runs. If it appears that the sockeye salmon harvest will meet or exceed limits set by the management plan, then fisheries are to be restricted to inshore "Shoreward Zones" only, and offshore "Seaward Zones" are closed (Figure 2).

A department biologist was present on the grounds to determine the sockeye salmon catch and to facilitate orderly and short-notice closures if the harvest limits are met. A Seaward Zone closure was implemented in the North Shelikof Unit at 8:00 p.m. July 20 when it was estimated that the cumulative sockeye salmon harvest had approached the 15,000 fish limit. The total July 6 to July 25 harvest in the North Shelikof Unit was 55,926 sockeye salmon, which included both the Shoreward and Seaward Zone harvests. A Seaward Zone closure did not take place in the Southwest Afognak Section; however the harvest cap of 50,000 was exceeded in the last few hours of the last day of the fishery. A total of 51,743 sockeye salmon were harvested in the Southwest Afognak Section between July 6 and July 25.



Figure 2.-Map of the North Shelikof Management Area.

Terminal and Special Harvest Areas: Some fisheries occur in areas where salmon enhancement projects create surplus production.

There was below-average effort and harvest in the Foul Bay Special Harvest Area (SHA), with only 1,091 sockeye salmon harvested.

In the Spiridon Bay SHA (Telrod Cove) and the Spiridon Bay Section, only 41,010 sockeye salmon were harvested. This includes cost recovery fish harvested by Kodiak Regional Aquaculture Association. The harvest in the Spiridon Bay SHA and the Spiridon Bay Section represents only a portion of the total harvest of Spiridon enhancement fish; the remainder is harvested in traditional pink and chum fisheries along the Westside of Kodiak. It is estimated that approximately 45,658 Spiridon enhancement fish were harvested outside of Telrod Cove and the Spiridon Bay Section, bringing the total Spiridon enhancement sockeye salmon harvest to 86,668 fish, which was well below the forecast of 206,000 fish.

The Kitoi Bay Hatchery harvest was 12,306 sockeye salmon, which was below the forecast of 26,000 fish. This includes the commercial harvest of both enhanced and wild salmon from the Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay, and Izhut Bay sections.

Coho Salmon

The commercial coho salmon harvest of approximately 393,812 fish was above the forecast (318,000 fish) and above the previous 10-year average (310,014 fish; Table 2). The majority of the coho salmon were harvested in the Westside Kodiak fishery.

Pink Salmon

The 2019 pink salmon harvest of 32,973,151 fish was above the forecast (27,000,000 fish) and well above the previous 10-year average harvest of 17,825,242 fish (Table 2). The wild stock pink salmon harvest was approximately 28,074,870 pink salmon (20,400,000 forecast). The majority of the pink salmon were harvested on the Westside and Eastside Kodiak districts. Westside pink salmon fisheries (Raspberry Cape to Ayakulik) accounted for approximately 13,232,953 pink salmon. The Eastside pink salmon fishery accounted for approximately 5,806,474 pink salmon. The Mainland District harvest of 2,624,547 fish was the largest Mainland District pink salmon harvest ever recorded.

The Kitoi Bay Hatchery pink salmon run was weaker than expected with approximately 4,898,291 pink salmon harvested in sections near the hatchery (6,600,000 forecast). Kitoi-bound pink salmon were likely harvested along the west and east sides of Kodiak and Afognak islands. Likewise, additional wild stock salmon were likely harvested in areas associated with Kitoi Bay Hatchery. However, the department does not have a stock separation program for pink salmon and is unable to differentiate stocks.

Chum Salmon

Most of the KMA wild chum salmon are harvested during the directed pink and chum salmon fisheries in July. Chum salmon runs were strong in the Mainland District and on the Westside of Kodiak. Due to the strong pink salmon runs and the extended openings, chum salmon harvest on both the Mainland and Westside were above average. However, chum salmon runs on both the Eastside of Kodiak and Alitak were weak, and closures were necessary to achieve escapement. The 2019 KMA chum salmon harvest of 547,178 fish was well below the 2019 forecast (935,000 fish). Additionally, the Kitoi Bay Hatchery chum salmon harvest of 17,329 chum salmon was well below the forecast of 261,000 fish, and is one of the weakest Kitoi hatchery chum salmon runs on record.

2019 Escapement Summary

Fish counting weirs were operated on 8 systems in 2019, including the Karluk, Ayakulik, Upper Station, Dog Salmon, Litnik, Buskin, Saltery, and Pasagshak systems. Four observers also flew 30 aerial surveys, and several observers conducted foot and skiff survey escapement estimates.

Chinook Salmon

The total Chinook salmon escapement (5,378) was below the previous 10-year average (Table 4). Escapement goals for Chinook salmon have been developed for the Karluk and Ayakulik rivers, and escapements are estimated using fish counting weirs (Table 5).

The Chinook salmon escapement through the Karluk River weir (3,898 fish; Table 5) was within the biological escapement goal (BEG) range of 3,000 to 6,000 fish. Chinook salmon escapement through the Ayakulik River weir (1,948 fish; Table 5) was below the BEG range of 4,800 to 8,400 fish.

Sockeye Salmon

Sockeye salmon runs in many systems in the KMA were average to below average. The major sockeye salmon systems of the KMA all met their established escapement goals although, one small system (Malina Lake) did not achieve its escapement goal. The entire KMA estimated sockeye salmon escapement of (1,287,032 fish: Table 4) was below the previous 10-year average of 1,332,458 fish (Table 4).

Coho Salmon

Although the KMA has substantial coho salmon runs, the only established coho salmon escapement goals occur in the Northeast Kodiak and Eastside Kodiak districts for the following systems: American (400 fish), Olds (1,000 fish), Buskin (4,700 to 9,600 fish), and the Pasagshak rivers (1,200 fish). At the time of this report, the final estimated escapement numbers have not been calculated.

<u>Pink Salmon</u>

The KMA pink salmon escapement of 5,593,088 fish was above the previous 10-year average of 4,452,431 fish (Table 4). Pink salmon escapement goals have been established as aggregate goals for the entire Kodiak Archipelago and the Mainland District. The escapement for the Kodiak Archipelago (4,688,688 fish) was near the upper end of the escapement goal range of 2.0 to 5.0 million fish (Table 5). However, due to abnormal summer drought conditions, an unknown amount of the early pink salmon escapement on the Eastside of Kodiak and Afognak islands was lost due to pre-spawn mortality and commercial salmon closures were necessary for escapement.

The Mainland District pink salmon escapement of 904,400 fish was above average and within the established escapement goal range (250,000 to 1,000,000 fish; Table 5). However, due to budget cuts, the majority of the Mainland District was not flown in August, and the 2019 Mainland District pink salmon escapement should be considered a minimal estimate. The Mainland District north of Dakavak Bay was closed most of August due to little to no August pink salmon escapement information.

Chum Salmon

The overall KMA chum salmon escapement of 410,773 fish was above the previous 10-year average (375,444 fish; Table 4). Chum salmon runs were particularly strong in the Mainland and Northwest

Kodiak districts. However, chum salmon runs in the Alitak and Northeast Kodiak Districts were weak and commercial salmon closures were necessary for escapement. A peak indexed escapement goal based on 17 streams on the Island of Kodiak has been established; the 2019 peak indexed escapement of 96,700 fish was below the goal of 101,000 fish.

Table 4. Total salmon escapements in the KMA for all species in 2019, compared to average escapement from 2009 to 2018.

Species	2019 KMA Escapement ^a	2009–2018 Average KMA Escapement
Chinook	5,863	6,012
Sockeye	1,287,032	1,332,458
Coho	67,832	95,766
Pink	5,593,088	4,452,431
Chum	410,773	375,444

^a 2019 escapement estimates are the sum of all weir, aerial survey, and foot survey estimates. These are minimum estimates, and are incomplete due to limited dates of weir operation and poor survey conditions. This includes escapement from all streams surveyed including many non-index streams that are not measured against established escapement goals.

Species	Stream	Escapeme	nt Goal	2019 Peak Escapement
District/System (stock)	Number	Lower	Upper	
Chinook				
Karluk	255-101	3,000	6,000	3,898
Ayakulik	256-201	4,800	8,400	1,948
	Total	7,800	14,400	5,840
Sockeye				
Malina	251-105	1,000	10,000	100
Afognak	252-342	20,000	50,000	26,267
Karluk	255-101			
Early run		150,000	250,000	186,510
Late run		200,000	450,000	321,039
Ayakulik	256-201			
Early run		140,000	280,000	162,430
Late run		60,000	120,000	117,209
Upper Station	257-304			
Early run		43,000	93,000	49,517
Late run		120,000	265,000	165,140
Frazer Lake	257-403	75,000	170,000	169,62
Buskin/Lake Louise	259-211	5,000	8,000	12,297
Pasagshak	259-411	3,000		4,537
Saltery	259-415	15,000	35,000	20,783
		832,000	1,731,000	
Pink Mainland District		250,000	1,000,000	904,400
Kodiak Archipelago		2,000,000	5,000,000	4,688,688
	Total	2,250,000	6,000,000	5,593,088
Chum	Kodiak ^b Archipelago	101,000		96,700
	Total	101,000		96,700

Table 5. Salmon peak escapements and escapement goals by species in the KMA, 2019.

^a 2019 escapement estimates are the sum of all weir, aerial survey, and foot survey estimates. These may be minimum estimates only, and are incomplete due to limited dates of weir operation, and poor survey conditions. ^b The Kodiak Archipelago peak index escapement goal is based on 17 Kodiak Archipelago streams and does not represent

actual the KMA chum salmon escapement.