



MEMORANDUM

TO: Nick Sagalkin
Regional Supervisor
Division of Commercial Fisheries
Westward Region

DATE: December 3, 2014

THRU: Jeff Wadle
Regional Finfish Management Supervisor
Division of Commercial Fisheries
Kodiak

FROM: James Jackson
Area Management Biologist
Division of Commercial Fisheries
Kodiak

SUBJECT: 2014 Kodiak Management Area Season Summary

cc:

Cotten	Tracy	United Salmon Association
Regnard	Polum	Kodiak Island Borough
Fox	Bergstrom	Ocean Beauty Seafoods
Bowers	Lingnau	Alaska Pacific Seafoods
Murphy	Elison	Western Alaska Seafoods
Wilburn	Salomone	Icicle Seafoods
Spalinger	Russel	True World Seafoods
Wilson	Fall	Trident Seafoods
Keyse	Kelley	Island Seafoods
Anderson	Lechner	Alaska Fresh Seafoods
Wattum	KRAA, Fairbanks	USFWS – OSM, Fried
Foster	KRAA, Aro	USFWS – Kodiak, La Rosa
Schrof	Volk	City of Kodiak
Jennings	Fair	Sand Point Advisory Committee
Fuerst	Shields	Chignik Advisory Committee
Finkle	Sands	Kodiak Advisory Committee
Linderman	Fisher	UFMA - Stephens
Miller	Dorner	
	Greer	

Kodiak Management Area 2014 Commercial Salmon Fishery Summary

The following is an overview of the 2014 Kodiak Management Area (KMA) commercial salmon season (Figure 1). The 2014 commercial salmon fishery began on June 5 and the last commercial landing occurred on October 2. Data provided in this report are preliminary and supersede any data previously published.

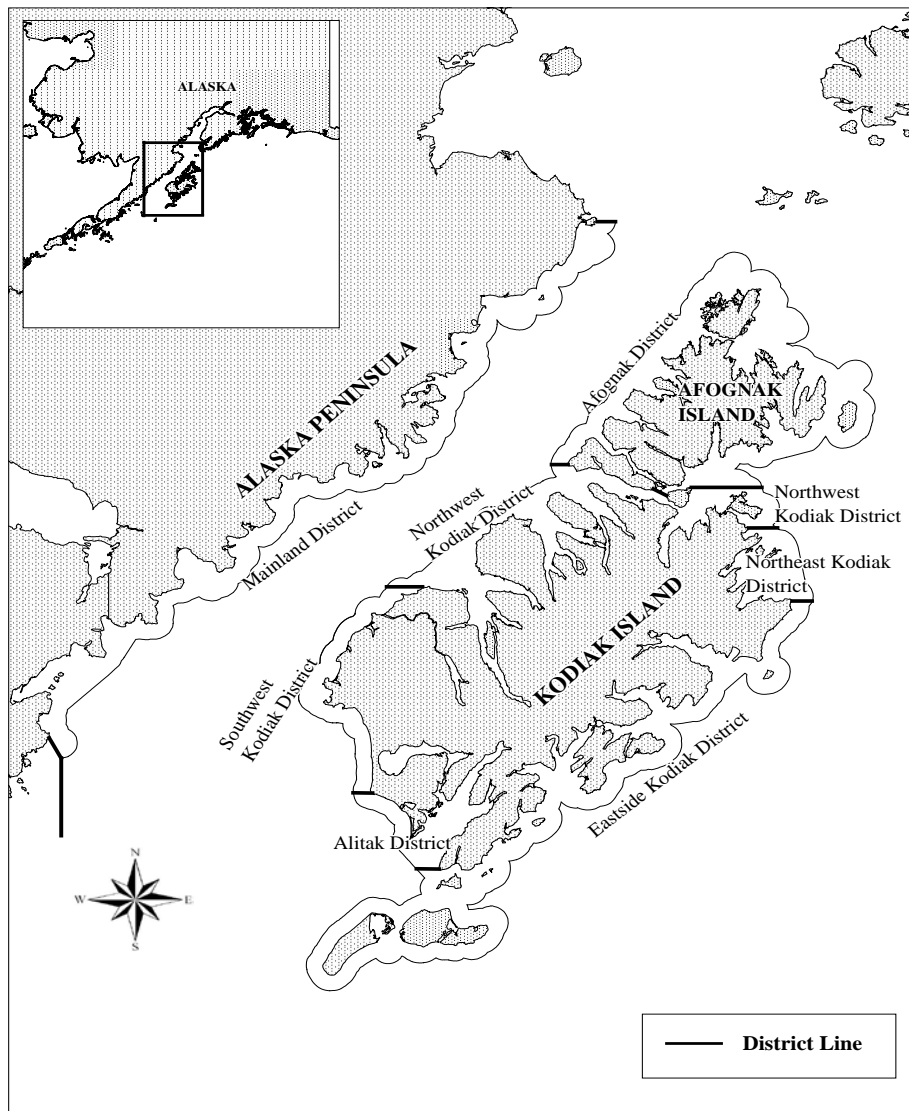


Figure 1.—Map of the commercial salmon fishing districts in the Kodiak Management Area, 2014.

Commercial fishing effort increased slightly during 2014. Of the 594 eligible commercial salmon permits, 334 (56%) made commercial landings. By gear type, a total of 186 purse seine, 3 beach seine, and 145 set gillnet permit holders fished in 2014. Participation by purse and beach seine gear was above the previous 10-year average, but participation by set gillnet gear was below the 10-year average (Table 1).

Table 1. Commercial salmon fishery 2014 limited entry permit activity and 10-yr. averages, by gear type, in the Kodiak Management Area, 2014.

Gear Type	2014 Permits			2004-2013 Average Permits		
	Available	Fished	% of permits fished	Available	Fished	% of permits fished
Purse Seine	375	186	50%	375	150	40%
Beach Seine	31	3	10%	31	2	6%
Set Gillnet	188	145	77%	188	155	83%
Total	594	334	56%	594	307	52%

The 2014 commercial harvest in the KMA was 8,380 Chinook salmon, 3,250,833 sockeye salmon, 471,491 coho salmon, 10,673,982 pink salmon, and 336,558 chum salmon. The total harvest of approximately 14.7 million salmon is below the 2014 forecast and the previous 10-year average of approximately 25 million salmon (Table 2).

Table 2.—2014 commercial salmon harvest for KMA compared to the previous 10-year average and the 2014 harvest forecast.

	Chinook	Sockeye	Coho	Pink	Chum	Total
2014 Harvest	8,380	3,250,833	471,491	10,673,982	336,558	14,741,244
2004-2013 Avg.	18,697	2,285,966	331,698	21,506,831	885,011	24,992,214
2014 Forecast	20,000	2,222,228	270,379	14,585,758	777,261	17,870,486

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 2014 fishery was approximately \$46 million, which is the second highest since 1995. This was also well above the previous 10-year average exvessel value of \$32.6 million (Table 3).

Purse seine fishermen accounted for 94.1% of the total harvest and their earnings averaged \$198,521 per fished permit. Set gillnet fishermen accounted for 5.8% of the total harvest and their earnings averaged \$62,026 per permit fished, the second highest since 1999. Beach seine fishermen harvested 0.1% of the total catch and averaged \$34,894 per permit fished (Table 3).

Table 3.—Estimated commercial salmon harvest and value, by gear type, in the Kodiak Management Area, 2004 - 2014.

Year	Total Catch ^a	Total Value	Average Exvessel Value		
			Purse Seine	Set Gillnet	Beach Seine
2004	27,247,146	\$19,260,231	\$93,942	\$37,246	\$0
2005	34,074,433	\$24,067,755	\$129,181	\$40,172	\$0
2006	34,933,019	\$23,788,440	\$150,318	\$27,740	Confidential
2007	27,923,974	\$27,224,796	\$148,355	\$41,058	\$3,484
2008	11,833,802	\$25,415,333	\$148,605	\$43,202	\$0
2009	30,627,685	\$33,713,563	\$174,661	\$47,593	Confidential
2010	11,317,189	\$24,267,934	\$130,009	\$25,720	Confidential
2011	19,939,713	\$44,247,431	\$224,349	\$31,155	\$13,572
2012	20,193,713	\$44,975,796	\$219,164	\$52,007	\$16,367

2013	31,831,989	\$59,321,331	\$304,105	\$55,672	\$24,550
2014	14,741,244	\$46,187,005	\$198,521	\$62,026	\$34,894
2003-2012					
Avg.	24,992,214	\$32,628,261	\$172,269	\$40,156	\$8,282

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

2014 Commercial Harvest Summary

Chinook Salmon

There are no directed Chinook salmon commercial fisheries in the KMA but incidental commercial harvest occurs during targeted sockeye salmon fisheries. The Ayakulik and Karluk river systems support the largest Chinook salmon populations in the KMA. Non-retention of Chinook salmon was implemented for the seine fleet area wide from June 5 through July 5. Non-retention of Chinook salmon was implemented 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. Neither Karluk nor Ayakulik Chinook salmon achieved their escapement goals. The 2014 commercial harvest of Chinook salmon in the KMA totaled 8,380 fish which was below the previous 10-year average (18,697 fish) and below the 2014 forecast (20,000 fish; Table 2).

Sockeye Salmon

The 2014 commercial harvest of sockeye salmon totaled 3,250,833 fish. The harvest was well above the recent 10-year average (2,285,966 fish) and forecast (2,222,228 fish; Table 2).

Early season management for much of the Westside and north end of Kodiak Island is driven by Karluk early-run sockeye salmon (through July 5). The Karluk early-run sockeye salmon escapement goal (110,000-250,000) was achieved. Extended fishing was allowed along the Westside of Kodiak in the Central, North Cape, Southwest Afognak, and Outer Karluk sections until the management focus turned to pink salmon (July 6). A total of 565,442 sockeye salmon were harvested in early-season (through July 15) Westside areas opened based on Karluk early-run sockeye salmon, which was above the forecasted Karluk early-run harvest of 108,000 fish.

Late season management for much of the Westside and north end of Kodiak Island is driven by the Kodiak Island pink salmon fishery (beginning July 6) and Karluk late-run sockeye salmon (after August 16). A total of 1,481,176 sockeye salmon were harvested in late-season (after July 15) Westside areas opened based on Karluk late-run sockeye salmon and during the Kodiak Island pink salmon fishery. This was well above the forecasted Karluk late-run harvest of 400,000 fish. A total of 1,078,596 sockeye salmon were harvested in Westside areas opened and closed based solely on Karluk late-run sockeye salmon (after August 16).

Westside sockeye salmon numbers include an estimated contribution of approximately 269,651 sockeye salmon from the enhanced Spiridon Lake sockeye salmon run.

The Ayakulik River was forecasted to have a surplus of sockeye salmon (288,000 fish) available for harvest. The first commercial opening occurred in the Outer Ayakulik Section on June 5. The first commercial fishing period in the Inner Ayakulik Section also occurred on June 5, and there were

several extended openings throughout the season. A total of 359,121 sockeye salmon were harvested from westside sections attributed to Ayakulik.

The early-run sockeye salmon to Upper Station was weak. The Frazer Lake sockeye salmon run came in stronger than expected, and openings and closures were executed mainly in the Dog Salmon Flats Section to allow harvest opportunity on Frazer Lake sockeye salmon while allowing passage of Upper Station sockeye salmon. The Alitak District early-run sockeye salmon harvest was 186,761 fish, above the projected harvest of 50,644 fish. The Upper Station late-run sockeye salmon run came in as expected and very few fishing periods were permitted after August 9 (management focus changes to Upper Station late-run sockeye salmon). The total harvest of the Alitak District late-run sockeye salmon was 67,756 fish, which was above the forecasted harvest of 35,061.

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 extremely 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 126,939 fish.

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 targeting local pink salmon runs and fishing periods are based on projected pink salmon run strength. 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 5:00 p.m. July 8 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 143,909 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 sockeye salmon was exceeded. Approximately 12,652 sockeye salmon were harvested on the last day of the fishery (July 24) and a total of 56,688 sockeye salmon were harvested in the Southwest Afognak Section between July 6 and July 25.

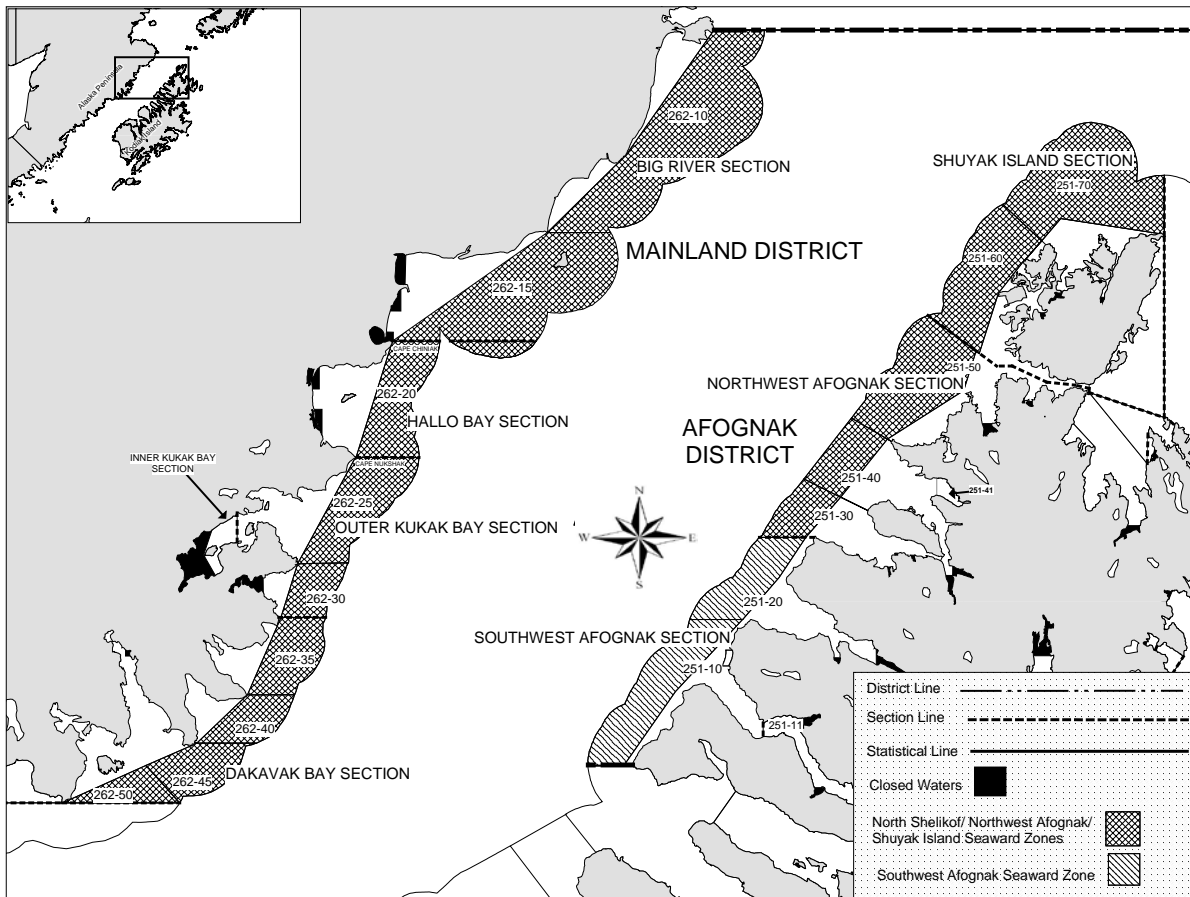


Figure 2.—Map of the North Shelikof Management Area.

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 Waterfall and Foul Bay Special Harvest Areas (SHAs) with a total of 14,633 sockeye salmon harvested from both areas.

In the Spiridon Bay SHA (Telrod Cove), 98,892 sockeye salmon were harvested. This includes a cost recovery fish harvested by Kodiak Regional Aquaculture Association. The harvest in the Spiridon Bay SHA represents only a portion of the total harvest of Spiridon enhancement fish, the remainder is harvested in traditional fisheries along the Westside of Kodiak. It is estimated that 164,487 Spiridon enhancement fish were harvested outside of Telrod Cove, bringing the total Spiridon enhancement sockeye salmon harvest to 269,651 fish.

The Kitoi Bay Hatchery harvest was an estimated 93,020 sockeye salmon, which was above the forecast of 70,900 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. Additional enhanced sockeye salmon may have been harvested in adjacent sections, but stock separation data are not available.

Coho Salmon

The commercial coho salmon harvest of 471,491 fish was above the forecast (158,690 fish) and above the previous 10 year average (331,698 fish; Table 2).

The majority of the coho salmon were caught in the Northwest Kodiak and Afognak districts. The largest amount of coho came from the areas associated with Kitoi Bay Hatchery (Inner Kitoi Bay, Outer Kitoi Bay, Duck Bay, and Izhut Bay sections). A total of 230,590 coho salmon were harvested, which was well above the forecast of 113,321 fish.

Pink Salmon

The 2014 pink salmon harvest of 10,673,982 fish was below forecast (14,585,758 million fish) and below the previous 10-year average harvest of 21,506,831 fish (Table 2).

Wild stock pink salmon harvest was well below the forecast (12.0 million fish) with only 4,897,922 pink salmon harvested in the KMA. Extensive closures were necessary for much of August and most of pink salmon were harvested on the Westside of Kodiak and around Kitoi Bay Hatchery. Westside fisheries (Southwest Afognak to Ayakulik) accounted for 2,619,571 pink salmon, the Alitak District had a harvest of 661,789 pink salmon, and the Eastside and Northeast Kodiak districts had a combined harvest of 356,210 pink salmon.

The Kitoi Bay Hatchery pink salmon run came in stronger than expected with 5,776,060 pink salmon harvested in sections near the hatchery (2,544,666 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. There was a cost recovery fishery near the hatchery with sockeye, pink, and chum salmon harvested and sold by the Kodiak Regional Aquaculture Association.

Chum Salmon

The chum salmon harvest of 336,558 fish was well below the forecast (777,261) and the smallest harvest since 1998. Extensive closures in Alitak, the Mainland, and the Eastside Kodiak Districts (due to a weak pink salmon run) were partly to blame for the below average harvest numbers. However, the Kitoi Bay Hatchery chum salmon production was also weaker than expected with only 45,582 chum salmon harvested, which is below the preseason forecast of 125,977 fish.

2014 Escapement Summary

Fish counting weirs were operated on 9 systems in 2014, including the Karluk, Ayakulik, Upper Station, Dog Salmon, Litnik, Buskin, Saltery, Pauls Bay and Pasagshak systems. Two observers also flew 28 aerial surveys, and several observers conducted foot and skiff survey escapement estimates.

Chinook Salmon

The total Chinook salmon escapement (2,011) 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 weir (1,182 fish; Table 5) was below the escapement goal range of 3,000 to 6,000 fish. Chinook salmon escapement through the Ayakulik weir 789 fish; Table 5) was the lowest ever recorded (since the weir was moved near the ocean shoreline) and below the escapement goal range of 4,000 to 8,000 fish. However, the Ayakulik weir was out due to high water for two weeks during the peak of the Chinook salmon run and the estimates during that timeframe are minimal.

Sockeye Salmon

Sockeye salmon runs to many systems in the KMA were strong (particularly Karluk and Ayakulik). Most of the major systems either met or exceeded their established escapement goals. However, the sockeye salmon runs to Uganik River, Pasagshak River, and Upper Station early-run all did not achieve the minimum escapement goal value. The entire KMA estimated sockeye salmon escapement of (1,639,940 fish; Table 4) was well above the previous 10-year average of 1,228,171 fish (Table 4).

Coho Salmon

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 (3,200 to 7,200 fish) and the Pasagshak rivers (1,200 fish; Table 5). Escapement goals were met for all these systems (Table 5).

It is expected that coho salmon enter systems in the fall after weirs have been removed and aerial and foot surveys have concluded. The estimated coho salmon escapement of 77,713 fish was below the previous 10-year average of 85,603 fish (Table 4) However, due to limited funding the department no longer flies late season coho salmon surveys, and the area wide coho salmon escapement numbers do not reflect the actual KMA coho salmon escapement.

Pink Salmon

The KMA pink salmon escapement of 2,987,932 fish was below the previous 10-year average of (4,657,828 Fish; Table 4). Pink salmon escapement goals have been established as aggregate goals for the entire Kodiak Archipelago and the Mainland District. Even with the extensive area closures, the escapement for the Kodiak Archipelago (2,733,282 fish) was below the escapement goal range of 3.0 to 6.0 million fish (Table 5). The Mainland District pink salmon escapement of 254,650 fish was within the established escapement goal range (250,000 to 750,000 fish; Table 5).

Chum Salmon

Overall chum salmon escapement (245,872 fish) was well below the previous 10-year average (383,753 fish; Table 4). Escapement goals have been established for the Kodiak Archipelago and the Mainland District. The escapement in the Kodiak Archipelago was below the escapement goal of 151,000 fish with an estimated 138,441 fish, and the Mainland District escapement of 107,431 fish was above the escapement goal of 104,000 fish (Table 5).

Table 4. Total salmon escapements in the KMA for all species in 2014, compared to average escapement from 2004 to 2013.

Species	2014 KMA Escapement ^a	2003-2012 Average KMA Escapement
Chinook	2,011	9,909
Sockeye	1,639,940	1,228,171
Coho	77,713	85,603
Pink	2,987,932	4,655,271
Chum	245,872	383,753

^a2014 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.



Table 5. Salmon peak escapements and escapement goals by species, in the Kodiak Management Area, 2014.

Species District/System (stock)	Stream Number	Escapement Goal		2014 Peak Escapement ^a
		Lower	Upper	
Chinook				
Karluk	255-101	3,000	6,000	1,182
Ayakulik	256-201	4,000	7,000	789
	Total	7,000	13,000	1,971
Sockeye				
Malina	251-105	1,000	10,000	4,900
Afognak	252-342	20,000	50,000	36,345
Little River	253-115	3,000		5,000
Uganik	253-122	24,000		14,000
Karluk	255-101			
Early run		110,000	250,000	236,144
Late run		170,000	380,000	559,422
Ayakulik	256-201			
Early run		140,000	280,000	210,040
Late run		60,000	120,000	87,671
Upper Station	257-304			
Early run		43,000	93,000	36,823
Late run		120,000	265,000	181,411
Frazer Lake	257-403	70,000	150,000	200,296
Buskin/Lake Louise	259-211	5,000	8,000	14,891
Pasagshak	259-411	3,000		1,582
Saltery	259-415	15,000	35,000	31,772
	Total	766,000		1,619,373
Coho				
Buskin	259-211	3,200	7,200	8,413
American	259-231	400		1,595
Olds (Sid Olds)	259-242	1,000		1,576
Pasagshak	259-411	1,200		4,934
	Total	5,800	7,200	16,518
Pink				
Mainland District		250,000	1,000,000	254,650
Kodiak Archipelago		3,000,000	6,000,000	2,733,282
	Total	3,250,000	7,000,000	2,987,932
Chum				
Mainland District		104,000		107,431
Kodiak Archipelago		151,000		138,489
	Total	255,000		245,920

^a 2014 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.