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**Overview of the Bristol Bay Salmon Fishery 2004-2006,  
a Report to the Alaska Board of Fisheries**

by

**Tim Sands**

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November 2006

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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<b>Weights and measures (metric)</b>		<b>General</b>		<b>Measures (fisheries)</b>	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mid-eye-to-fork	MEF
gram	g	all commonly accepted		mid-eye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs., AM, PM, etc.	standard length	SL
kilogram	kg			total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D., R.N., etc.		
meter	m	at	@	<b>Mathematics, statistics</b>	
milliliter	mL	compass directions:		<i>all standard mathematical</i>	
millimeter	mm	east	E	<i>signs, symbols and</i>	
		north	N	<i>abbreviations</i>	
		south	S	alternate hypothesis	H <sub>A</sub>
		west	W	base of natural logarithm	<i>e</i>
		copyright	©	catch per unit effort	CPUE
		corporate suffixes:		coefficient of variation	CV
		Company	Co.	common test statistics	(F, t, $\chi^2$ , etc.)
		Corporation	Corp.	confidence interval	CI
		Incorporated	Inc.	correlation coefficient	
		Limited	Ltd.	(multiple)	R
		District of Columbia	D.C.	correlation coefficient	
		et alii (and others)	et al.	(simple)	r
		et cetera (and so forth)	etc.	covariance	cov
		exempli gratia	e.g.	degree (angular)	°
		(for example)		degrees of freedom	df
		Federal Information	FIC	expected value	<i>E</i>
		Code		greater than	>
		id est (that is)	i.e.	greater than or equal to	≥
		latitude or longitude	lat. or long.	harvest per unit effort	HPUE
		monetary symbols		less than	<
		(U.S.)	\$, ¢	less than or equal to	≤
		months (tables and		logarithm (natural)	ln
		figures): first three		logarithm (base 10)	log
		letters	Jan, ..., Dec	logarithm (specify base)	log <sub>2</sub> , etc.
		registered trademark	®	minute (angular)	'
		trademark	™	not significant	NS
		United States		null hypothesis	H <sub>0</sub>
		(adjective)	U.S.	percent	%
		United States of		probability	P
		America (noun)	USA	probability of a type I error	
		U.S.C.	United States	(rejection of the null	
			Code	hypothesis when true)	α
				probability of a type II error	
				(acceptance of the null	
				hypothesis when false)	β
				second (angular)	"
				standard deviation	SD
				standard error	SE
				variance	
				population	Var
				sample	var

### Weights and measures (English)

cubic feet per second	ft <sup>3</sup> /s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

### Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

### Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity	pH
(negative log of)	
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

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**OVERVIEW OF THE BRISTOL BAY SALMON FISHERY 2004-2006,  
A REPORT TO THE ALASKA BOARD OF FISHERIES**

by

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## ABSTRACT

The Bristol Bay salmon fishery has produced above average harvest for the last 3 years. The ex-vessel value for the last 3 years has been above the 10 year average, but below the 20 year average. The price per pound for sockeye salmon *Oncorhynchus nerka* has been below the 10 and 20 year averages for the last 3 years. Escapement goals for all river systems were met or exceeded in all years for all rivers with the exception of the Igushik and Kvichak Rivers in 2004. The Kvichak River continues to be a stock of concern although it has achieved the minimum escapement goal the last 2 years.

Key words: Alaska Board of Fisheries, Naknek, Kvichak, Ugashik, Egegik, Nushagak, Togiak, sockeye salmon, *Oncorhynchus nerka*, Chinook, *O. tshawytscha*, chum, *O. keta*, pink, *O. gorbuscha*, coho, *O. kisutch*, stock of concern, commercial fishing, Bristol Bay, Alaska.

## INTRODUCTION

The Bristol Bay Area includes all coastal waters and inland waters east of a line from Cape Newenham to Cape Menshikof (Figure 1) and is the largest sockeye salmon (*Oncorhynchus nerka*) producing region in the world. The area also produces substantial returns of other salmon species as well as herring.

Bristol Bay is divided into five fishing districts: Togiak, Nushagak, Naknek/Kvichak, Egegik, and Ugashik. Associated with these districts are nine major rivers: Togiak, Igushik, Wood, Nushagak, Kvichak, Alagnak, Naknek, Egegik, and Ugashik rivers. Several districts are divided into sections that provide more management flexibility in controlling exploitation of individual salmon stocks when more than one river system contributes to the district's salmon return. The districts and sections are confined to areas near the river mouths in order to minimize interceptions of salmon destined for other areas. In addition there are special harvest areas in the Ugashik and Egegik Districts and the Naknek and Wood Rivers. These special harvest areas may further minimize the potential interception of salmon stocks bound for other systems. Commercial fishing is opened by emergency order (EO) in all districts but the Togiak District, which has a regular weekly fishing schedule.

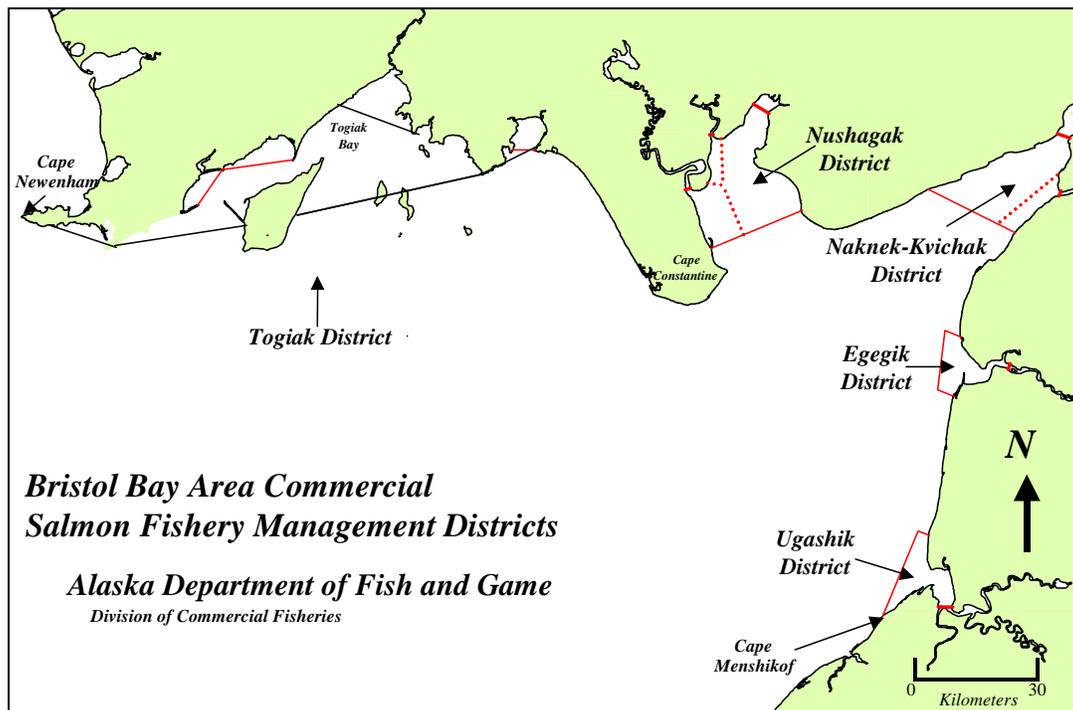


Figure 1.—Bristol Bay area commercial fisheries salmon management districts.

In the last 20 years (1986–2005), Bristol Bay commercial salmon harvests have averaged 23.7 million sockeye; 69,900 Chinook *O. tshawytscha*; 918,000 chum *O. keta*; 262,000 pink *O. gorbuscha*, (during even years) and 103,000 coho *O. kisutch* salmon. The value of the Bristol Bay commercial salmon fishery has averaged \$118 million over the last 20 years but because of smaller runs and lower prices the recent 5-year average is \$56 million.

Subsistence salmon harvests for the past 20 years have averaged approximately 150,000 fish; 118,000 of which have been sockeye. Sport fisheries target Chinook and coho but pink, chum, and sockeye salmon are also harvested.

The management objective for all districts in Bristol Bay is to achieve escapement goals for salmon species while providing opportunities to harvest fish that are surplus to escapement needs.

The Bristol Bay salmon fishery has several regulations that are unique. One of these regulations is the district registration requirement. All vessels and permits must be registered to fish in only one district prior to fishing. If a permit holder wants to fish in a different district, they must file for that district at the King Salmon or Dillingham Alaska Department of Fish and Game (ADF&G) office and cannot fish for 48 hours. These registration and reregistration requirements are the topic of numerous proposals. Some of the proposals seek complete removal of the registration and reregistration requirements but some of the proposals seek to waive the transfer period for multiple permit fishing operations as a way to reward permit holders for fleet consolidation. In 2003, the Alaska Board of Fisheries (BOF) allowed for two permit holders to fish 200 fathoms of gear (the regular limit is 150 fathoms) from one vessel if both permit holders were on the vessel except in special harvest areas. In 2006, ADF&G estimated that 138 vessels opted for this arrangement for at least part of the season. This is an estimate as there are no specific registration requirements to fish a dual permit vessel. Recent legislation allowing a permit holder to own and fish two permits has prompted permit holders to ask the BOF for consideration by adopting new regulations for dual permit holders. Another longstanding Bristol Bay regulation is the 32 foot limit for vessels. Currently all commercial drift vessels must be 32 feet or less, and as in the past, there are numerous proposals to increase vessel length.

## 2004–2006 COMMERCIAL SALMON FISHERY

The last 3 years in the Bristol Bay Salmon fishery can best be described as improving. There has been a slight rebound in price from the lows of 2001 and 2002, and the Kvichak River has achieved its escapement goal in 2 of the last 3 years. The sockeye salmon harvest for 2004–2006 has been above the 20-year average. The Nushagak District in particular has had record and near-record runs for the last 3 years. The price per pound increased in 2004 and 2005 and dropped slightly in 2006 (Table 1).

**Table 1.**—Important factors summarized for the last 3 years and averages.

Year	\$/lb	Sockeye Catch	Value	Registered Drift Permits
2004	.46	26,261,802	\$79,118,461	1,426
2005	.60	24,502,729	\$98,174,286	1,526
2006	.55	28,725,700	\$90,977,961	1,570
Average	.54	26,496,744	\$85,381,000	1,520
20 year Average	.86	23,701,226	\$117,824,000	1,748
10 year Average	.66	18,827,826	\$74,149,000	1,673

The biggest issue in Bristol Bay over the last 3 years has been the status of the Kvichak River stocks. The sockeye salmon escapements for the last 3 years in the Kvichak River were 5,500,000 in 2004, 2,320,000 in 2005 and 3,068,000 in 2006. The lower end of the Biological Escapement Goal (BEG) range is 2,000,000 sockeye in off-cycle years (2005 and 2006), and 6,000,000 in the peak year (2004). Although the Kvichak River has achieved its escapement goal in 2 of the last 3 years, a majority of the fishing time in the eastside districts has been in special harvest areas.

In the Naknek-Kvichak District, nearly all the fishing in the past 3 years has occurred in the Naknek River Special Harvest Area (NRSHA). The allocation plan for the district is now applied to the NRSHA, so managers no longer alternate gear types each period. This change has dramatically decreased the fishing time for set gillnet permit holders and is one of the major issues for this board cycle.

In addition to forcing the fishing effort into the NRSHA, poor returns to the Kvichak River have also caused the implementation and utilization of a special harvest area in the Egegik District. The Egegik River Special Harvest Area (ERSHA) was developed with the idea that it would allow additional Kvichak and Ugashik bound sockeye salmon to reach their respective districts. The ERSHA decreases the 60 square mile district by a third and the deep water fishing area by half.

In the Egegik District, the activation of the ERSHA, and a corresponding reduction of approximately 1/3 of the district, congests the fishing fleet. The fleet is generally able to catch all the fish in the restricted open area and a line fishery quickly develops. Fishing in this confined area challenges ADF&G's ability to achieve quality escapement from all parts of the run while harvesting sockeye salmon surplus to escapement needs. This was made evident when a 4-hour period in June 2005 resulted in a harvest of over 900,000 sockeye, and again in 2006 when a single tide resulted in an estimated escapement of near 600,000. The Ugashik District boundaries have also been reduced until June 29, in 2005 and 2006.

In many cases, when a fishery is drawn into a special harvest area, permit holders choose to leave that district and fish in a less congested area. In 2005 and 2006, this resulted in over 650 permits registered to fish in the Nushagak District. The usual effort for the Nushagak is closer to 350 permits. The ability of the drift gillnet fleet to move from district to district to follow the fish or avoid the aggressive line battles that occur in special harvest areas also could have allocation implications in years with below average runs.

In the last 4 years, there has been a significant difference in the prescribed allocation and the actual harvest percentages. The main reason for this is that ADF&G manages for escapement first. The large runs the Nushagak District has experienced over the last 4 years have resulted in large escapements to one or more rivers in the district. When this happens, the management priority is to control escapement and the harvest percentages may vary from the allocation goals as a result. In 2006, the total run of approximately 16 million sockeye salmon came in steadily and despite nearly continuous fishing with both gear groups, the Wood River escapement exceeded 100,000 fish for 17 consecutive days. This resulted in an escapement to the Wood River of 4 million sockeye salmon. The 2006 run surpassed the previous record of 12.8 million sockeye and the 11 million harvest was half again as large as the 7.4 million previous record.

The Togiak District was protected from shifts in effort during the season by a management plan that does not allow permit holders to transfer to the Togiak District if they previously fished in

another district or, conversely, to transfer out of the Togiak District once they register there. This regulation, which is in effect until July 24, is intended to protect the permit holders who choose to fish in Togiak from an influx of effort from the other districts as their catches decrease. Since the Togiak salmon fishery is later and smaller than most other fisheries in Bristol Bay an influx of boats to the Togiak District might otherwise take a large percentage of the harvest. This has been especially true the last several years when other systems have experienced earlier than usual run timing and the Togiak run has had normal or even late run timing.

At the 2003 meeting, the BOF adopted a proposal creating a “General District” for the 2004 season. This area was outside the regular districts to the 3 nautical mile state waters limit. It was created because of the large forecast for the 2004 season and the reduced processing capacity in Bristol Bay. The idea was that fishing sooner and farther out would allow for additional harvest of fish early in the season and thus extend the processing season allowing more fish to be harvested. There were many stakeholders who were concerned about fishing in an area of unknown stock composition with the Kvichak being a stock of concern. Approximately 1.6 million sockeye were harvested in the General District over the course of approximately 12 days. Ultimately the Kvichak River fell behind the escapement goal curve and the Egegik and Naknek-Kvichak Districts were forced back into special harvest areas. The Kvichak escapement was 5.5 million, 92% of the 6 million fish goal.

The harvest of other species in Bristol Bay is secondary to the sockeye salmon harvest. Chum salmon are the second most numerous species harvested with 2.0 million harvested in 2006. The majority of the chum salmon harvest occurs in the Nushagak and Togiak Districts. There is relatively little value for the chum salmon harvest and the price lags behind other areas of the state. Chinook salmon harvest has increased over the last 3 years, as has the value of the fishery. The Nushagak District is the main Chinook producer and ADF&G has worked with stakeholders to provide advanced notice of fishing periods and more harvest opportunity. The Nushagak run is currently robust and has had sufficient runs in the last 5 years to allow directed Chinook openings. If this trend continues, the market interest may also increase.

The coho salmon harvest, over the last 3 years, has averaged 67,000 fish with the majority coming from the Nushagak District. The Nushagak River can be a large coho producer, but 2001 and 2002 were poor years with returns not strong enough to support a commercial harvest. Budget cuts in 2003 resulted in a reduction in the Nushagak sonar project, and the loss of the coho enumeration data. During the last 3 years, there has been some renewed market interest in coho salmon but without enumeration data in 2005 and 2006 ADF&G managed conservatively with a schedule of 36 hours per week. In 2004, the sonar project did operate and a large coho return warranted continuous fishing.

## **SUMMARY**

From 2004–2006, minimum escapement goals have been met for all systems with the exceptions of the Kvichak and Igushik Rivers in 2004. Proposals for this Board cycle revolve around the allocation plans, the special harvest areas, and giving value to second permits. The following three Appendix tables list the harvests and escapements for the last 3 years for each district.

## **APPENDIX A**

**Appendix A1.**—Total inshore run of salmon, in numbers of fish, Bristol Bay, 2004.

<b>District</b>	<b>Sockeye</b>	<b>Chinook</b>	<b>Chum</b>	<b>Pink</b>	<b>Coho</b>	<b>TOTAL</b>
Naknek/Kvichak Catch	4,715,070	1,360	29,972	7,749	2,142	4,756,293
Escapement-Kvichak	5,500,134	N.A.	N.A.	N.A.	N.A.	5,500,134
Naknek	1,939,374	12,878 <sup>a</sup>	N.A.	N.A.	N.A.	1,952,252
Branch	5,396,592	6,755 <sup>a</sup>	N.A.	1,000,000 <sup>a</sup>	N.A.	6,403,347
<b>Naknek/Kvichak Subtotal</b>	<b>17,551,170</b>	<b>20,993</b>	<b>29,972</b>	<b>1,007,749</b>	<b>2,142</b>	<b>18,612,026</b>
Egegik Catch	10,209,227	1,589	75,061	N.A.	2,324	10,288,201
Escapement-Egegik Tower	1,290,144	N.A.	N.A.	N.A.	N.A.	1,290,144
other <sup>b</sup>	N.A.	1,513	1,740	N.A.		3,253
<b>Egegik Subtotal</b>	<b>11,499,371</b>	<b>3,102</b>	<b>76,801</b>		<b>2,324</b>	<b>11,581,598</b>
Ugashik Catch	3,139,229	863	49,358	187	4,744	3,194,381
Escapement-Ugashik Tower	776,364	54	24	120	N.A.	776,562
other <sup>c</sup>	38,740	5,038	33,470	N.A.		77,248
<b>Ugashik Subtotal</b>	<b>3,954,333</b>	<b>5,955</b>	<b>82,852</b>	<b>307</b>	<b>4,744</b>	<b>4,048,191</b>
Nushagak Catch	6,104,048	96,534	458,902	26,150	47,706	6,733,340
Escapement- Wood Tower	1,543,342	N.A.	N.A.	N.A.	N.A.	1,543,342
Igushik	109,650	N.A.	N.A.	N.A.	N.A.	109,650
Nushagak	484,525	116,400	283,800	556,070	152,610	1,593,405
<b>Nushagak Subtotal</b>	<b>8,241,565</b>	<b>212,934</b>	<b>742,702</b>	<b>582,220</b>	<b>200,316</b>	<b>9,979,737</b>
Togiak Catch	437,234	9,310	94,025	18,293	15,463	574,325
Escapement - Togiak Tower	129,462	N.A.	N.A.	N.A.	N.A.	129,462
Togiak R. & Trib.	N.A.	12,324	79,916	N.A.	N.A.	92,240
Kulukak	N.A.	1,188	11,662	N.A.	N.A.	12,850
<b>Togiak Subtotal</b>	<b>566,696</b>	<b>22,822</b>	<b>185,603</b>	<b>18,293</b>	<b>15,463</b>	<b>808,877</b>
General District Catch	1,656,994	4,608	25,163			1,686,765
Bristol Bay Catch	26,261,802	114,264	732,481	52,379	72,379	27,233,305
Bristol Bay Escapement	17,208,327	156,150	410,612	1,556,190	152,610	19,483,889
<b>Bristol Bay Total Run</b>	<b>43,470,129</b>	<b>270,414</b>	<b>1,143,093</b>	<b>1,608,569</b>	<b>224,989</b>	<b>46,717,194</b>

*Note:* Escapement data for coho are incomplete (in most cases the data are escapement index counts). Total run data do not include sport or subsistence harvests.

<sup>a</sup> Aerial survey count.

<sup>b</sup> Includes aerial surveys of King Salmon River drainage and Shosky Creek.

<sup>c</sup> Includes aerial surveys of King and Dog Salmon rivers.

**Appendix A2.**—Total inshore run of salmon, in numbers of fish, Bristol Bay, 2005.

<b>District</b>	<b>Sockeye</b>	<b>Chinook</b>	<b>Chum</b>	<b>Pink</b>	<b>Coho</b>	<b>TOTAL</b>
Naknek/Kvichak Catch	6,728,469	1,377	204,777	31	3,314	6,937,968
Escapement-Kvichak	2,320,332	N.A.	N.A.	N.A.	N.A.	2,320,332
Naknek	2,744,622	N.A.	N.A.	N.A.	N.A.	2,744,622
Alagnak	4,219,026	5,084 <sup>a</sup>	N.A.	N.A.	N.A.	4,224,110
<b>Naknek/Kvichak Subtotal</b>	<b>16,012,449</b>	<b>6,461</b>	<b>204,777</b>	<b>31</b>	<b>3,314</b>	<b>16,227,032</b>
Egegik Catch	8,015,950	485	62,029	0	20,611	8,099,075
Escapement-Egegik Tower	1,621,584	N.A.	N.A.	696	N.A.	1,622,280
other <sup>b</sup>	150	550	1,514	N.A.	22,450	24,664
<b>Egegik Subtotal</b>	<b>9,637,684</b>	<b>1,035</b>	<b>63,543</b>	<b>696</b>	<b>43,061</b>	<b>9,746,019</b>
Ugashik Catch	2,216,635	1,815	39,513	1	8,162	2,266,126
Escapement-Ugashik Tower	779,172	42	114	192	N.A.	779,520
other <sup>c</sup>	20,440	N.A.	N.A.	N.A.	9,850	30,290
<b>Ugashik Subtotal</b>	<b>3,016,247</b>	<b>1,857</b>	<b>39,627</b>	<b>193</b>	<b>18,012</b>	<b>3,075,936</b>
Nushagak Catch	7,096,031	62,308	966,050	548	42,456	8,167,393
Escapement- Wood Tower	1,496,550	N.A.	N.A.	N.A.	N.A.	1,496,550
Igushik	365,709	N.A.	N.A.	N.A.	N.A.	365,709
Nushagak	1,096,268	181,101	469,962	0	0	1,747,331
<b>Nushagak Subtotal</b>	<b>10,054,558</b>	<b>243,409</b>	<b>1,436,012</b>	<b>548</b>	<b>42,456</b>	<b>11,776,983</b>
Togiak Catch	465,094	10,605	124,694	2,103	8	602,504
Escapement - Togiak Tower	149,178	N.A.	N.A.	N.A.	N.A.	149,178
Togiak R. & Trib.	N.A.	10,188	10,466	N.A.	N.A.	20,654
Kulukak	N.A.	894	1,580	N.A.	N.A.	2,474
<b>Togiak Subtotal</b>	<b>614,272</b>	<b>21,687</b>	<b>136,740</b>	<b>2,103</b>	<b>8</b>	<b>774,810</b>
Bristol Bay Catch	24,522,179	76,590	1,397,063	2,683	74,551	26,073,066
Bristol Bay Escapement	14,813,031	197,859	483,636	888	32,300	15,527,714
<b>Bristol Bay Total Run</b>	<b>39,335,210</b>	<b>274,449</b>	<b>1,880,699</b>	<b>3,571</b>	<b>106,851</b>	<b>41,600,780</b>

*Note:* Escapement data for coho are incomplete (in most cases the data are escapement index counts). Total run data do not include sport or subsistence harvests.

<sup>a</sup> Aerial survey count.

<sup>b</sup> Includes aerial surveys of King Salmon River drainage and Shosky Creek.

<sup>c</sup> Includes aerial surveys of King and Dog Salmon rivers.

**Appendix A3.**—Total inshore run of salmon, in numbers of fish, Bristol Bay, 2006.

<b>District</b>	<b>Sockeye</b>	<b>Chinook</b>	<b>Chum</b>	<b>Pink</b>	<b>Coho</b>	<b>TOTAL</b>
Naknek/Kvichak Catch	7,149,934	2,255	395,326	21,444	2,470	7,571,429
Escapement-Kvichak	3,068,226	N.A.	N.A.	N.A.	N.A.	3,068,226
Naknek	1,953,228	N.A.	N.A.	N.A.	N.A.	1,953,228
Alagnak	1,773,966	N.A.	N.A.	N.A.	N.A.	1,773,966
<b>Naknek/Kvichak Subtotal</b>	<b>13,945,354</b>	<b>2,255</b>	<b>395,326</b>	<b>21,444</b>	<b>2,470</b>	<b>14,366,849</b>
Egegik Catch	7,472,236	918	77,447	514	6,888	7,558,003
Escapement-Egegik Tower	1,465,158	N.A.	N.A.	N.A.	N.A.	1,465,158
<b>Egegik Subtotal</b>	<b>8,937,394</b>	<b>918</b>	<b>77,447</b>	<b>514</b>	<b>6,888</b>	<b>9,023,161</b>
Ugashik Catch	2,466,080	2,600	129,189	0	175	2,598,044
Escapement-Ugashik Tower	978,718	N.A.	N.A.	N.A.	N.A.	978,718
<b>Ugashik Subtotal</b>	<b>3,444,798</b>	<b>2,600</b>	<b>129,189</b>	<b>0</b>	<b>175</b>	<b>3,576,762</b>
Nushagak Catch	11,061,664	83,679	1,150,880	38,796	43,263	12,378,282
Escapement- Wood Tower	4,008,102	N.A.	N.A.	N.A.	N.A.	4,008,102
Igushik	305,268	N.A.	N.A.	N.A.	N.A.	305,268
Nushagak	541,217	124,683	661,003	0	0	1,326,903
<b>Nushagak Subtotal</b>	<b>15,916,251</b>	<b>208,362</b>	<b>1,811,883</b>	<b>38,796</b>	<b>43,263</b>	<b>18,018,555</b>
Togiak Catch	625,696	16,279	224,062	81,156	453	947,646
Escapement - Togiak Tower	312,126	N.A.	N.A.	N.A.	N.A.	312,126
Togiak R. & Trib.		N.A.	N.A.	N.A.	N.A.	N.A.
Kulukak		N.A.	N.A.	N.A.	N.A.	N.A.
<b>Togiak Subtotal</b>	<b>937,822</b>	<b>16,279</b>	<b>224,062</b>	<b>81,156</b>	<b>453</b>	<b>1,259,772</b>
Bristol Bay Catch	28,775,610	105,731	1,976,904	141,910	53,249	31,053,404
Bristol Bay Escapement	14,406,009	124,683	661,003			15,191,695
<b>Bristol Bay Total Run</b>	<b>43,181,619</b>	<b>230,414</b>	<b>2,637,907</b>	<b>141,910</b>	<b>53,249</b>	<b>46,245,099</b>

*Note:* 2006 data is preliminary. Escapement data for coho are incomplete (in most cases the data are escapement index counts). Total run data do not include sport or subsistence harvests.