



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

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Fish and Game**

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TO: Nick Sagalkin, Regional Supervisor  
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SUBJECT: Preliminary  
2017 Salmon  
Forecasts

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Regional research, management, and biometric staff have developed and reviewed the 2017 run forecasts for pink and sockeye salmon stocks in Region IV. This is a relatively early release for Region IV forecasts, and numbers should be considered preliminary until inclusion in the annual statewide document to be released in early 2017.

Total run forecasts are shown in tables 1 and 2 as point estimates and ranges. The ranges are 80% prediction intervals, meaning that we have 80% confidence that the actual 2017 run will fall within this range. Estimated escapements are subtracted from the total run forecasts to yield estimated 2017 harvests; these harvest estimates are shown as point estimates for pink and sockeye salmon. Pink salmon (as well as Spiridon sockeye salmon) harvests are also reported as 80% ranges.

Confidence in each forecast varies based on data relationships in the underlying models. Full methods and discussion will be included in the statewide document.

Table 1.—Point estimate and ranges of preliminary 2017 Region IV sockeye salmon forecasts.

Stock	Escapement goal (thousands)	2017 run	Point estimate (thousands)	Range (thousands)
Spiridon	NA	Forecast	288	239–337
		Escapement	0	
		Harvest estimate	288	
Ayakulik	SEG (early and late runs combined): 200–400	Forecast	451	193–709
		Escapement	300	
		Harvest estimate	151	
Early-run Karluk	BEG: 110–250	Early-run forecast	294	200–387
		Early-run escapement	180	
		Early-run harvest estimate	114	
Late-run Karluk	BEG: 170–380	Late-run forecast	814	618–1,011
		Late-run escapement	275	
		Late-run harvest estimate	539	
Total Karluk		Total Karluk run forecast	1,108	818–1,399
		Total Karluk escapement	455	
		Total Karluk harvest estimate	653	
Early-run Upper Station	BEG: 43–93	Early-run forecast	125	69–182
		Early-run escapement <sup>a</sup>	65	
		Early-run harvest estimate	60	
Late-run Upper Station	BEG: 120–265	Late-run forecast	215	101–328
		Late-run escapement	186	
		Late-run harvest estimate	29	
Frazer Lake	BEG: 75–170	Forecast	237	113–361
		Escapement <sup>b</sup>	137	
		Harvest estimate	100	
Total Alitak District		Total Alitak run forecast	577	283–870
		Total Alitak escapement	388	
		Total Alitak harvest estimate	189	

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Stock	Escapement goal (thousands)	2017 run	Point estimate (thousands)	Range (thousands)
Early-run Chignik	BEG: 350–450	Early-run forecast	1,266	319–2,213
		Early-run escapement	400	
		Early-run harvest estimate	866	
Late-run Chignik	SEG: 200–400	Late-run forecast	938	456–1,420
		Late-run escapement <sup>c</sup>	338	
		Late-run harvest estimate	600	
Total Chignik		Total Chignik run forecast	2,204	775–3,634
		Total Chignik escapement	738	
		Total Chignik harvest estimate	1,466	
Nelson River	BEG: 97–219	Forecast	585	303–868
		Escapement	158	
		Harvest estimate	427	
Late-run Bear Lake	BEG: 117–195	Late-run forecast	450	233–667
		Late-run escapement	156	
		Late-run harvest estimate	294	

<sup>a</sup> Alaska Board of Fisheries instituted an optimal escapement goal (OEG) of 25,000 fish in 1999, this was amended to 30,000 fish from 2014-2016.

<sup>b</sup> The Frazer Lake point estimate of  $S_{MSY}$  (escapement) is increased by an additional 20,000 fish, which is the 20-year median of the number of fish that pass through Dog Salmon weir but do not ascend the Frazer Lake fish pass.

<sup>c</sup> An inriver run goal of 75,000 sockeye salmon is added to the lower bound of the Chignik late-run SEG for management objectives.

Table 2.—Point estimate and ranges of preliminary 2017 Region IV pink salmon forecasts.

Stock	Escapement goal (millions)	2017 run	Point estimate (millions)	Range (millions)
Kodiak Management Area	SEG (Mainland and Kodiak Archipelago combined): 2.25–6.0 Odd Year	Wild stock total run forecast	23.4	13.3–33.6
		Wild stock escapement	5.0	
		Wild stock harvest estimate	18.4	8.3–28.6
		Kitoi Bay hatchery harvest	9.7	7.2–12.2
		Total KMA harvest estimate	28.1	15.4–40.8
South Alaska Peninsula	SEG: 1.75–4.0	Total run forecast	15.6	11.4–19.8
		Escapement	4.0	
		Harvest estimate	11.6	9.7–15.8

**Cc:** Templin, Munro, Wadle, Murphy, Jackson, Anderson, Foster, Finkle, Schrof, Wattum, Wilburn, Spalinger, Fox, Nichols, Johnson, Barnard, Ruhl, Lipka, Stumpf, Loewen, Tracy, KRAA, CRAA, Kodiak AC