Table 1.

CHIGNIK RIVER SYSTEM
SOCKEYE ESCAPEMENT GOALS
BLACK LAKE (EARLY) AND CHIGNIK LAKE (LATE) RUNS

The numbers in the escapement tables listed below were derived from averages over several years of escapements of various timing and magnitude. It should be noted that daily escapement levels will <u>fluctuate considerably</u> throughout the run. THE TABLES LISTED SERVE ONLY AS A GUIDE FOR ACHIEVING THE TOTAL ESCAPEMENT FOR EACH RUN. In-season variations from the figures listed may be due to variations in actual run timing and/or strength of the run.

		EARLY	RUN	- 400,00	00 Minimum
		June	12		40,000
			14	50	- 65,000
1987 Chignik AMR p. 142			16	75	- 100,000
			18	125	- 150,000
		: 1	20	175	- 200,000
	1		22	225	- 250,000
			25	275	- 325,000
			30	350	- 400,000

LATE RUN - 250,000 Minimum

WHEN EARLY	ESCAPEMENT IS ACHIEVED	WHEN EARLY RUN ESCAPEMENT IS NOT ACHIEVED
July 6	- -	40,000
8	-	45 - 50,000
10	40,000	55 - 65,000
12	50 - 60,000	70 - 75,000
14	65 - 75,000	75 - 80,000
16	80 - 90,000	80 - 90,000
19	100 - 115,000	100 - 115,000
21	125 - 135,000	125 - 135,000
23	145 - 160,000	150 - 160,000
26	170 - 180,000	170 - 180,000
29	185 - 195,000	190 - 195,000
31	195 - 200,000	195 - 200,000

Sockeye returning to the Chignik Lakes system are comprised of two stocks, one returning to Black Lake (early run), and the other to Chignik Lake (late run). Sockeye escapement goals for Black Lake and Chignik Lake stocks are 400,000 and 250,000 fish. Commercial fishing time for sockeye salmon has been regulated based on achieving threshold escapement levels for each run by specific dates. Monitoring escapement with respect to achieving these thresholds is complicated by an overlap of the timing of early and late runs, i.e., the transition period. This period generally occurs during the latter part of June through mid-July.

5. The escapement levels into the Black Lake system must be kept yearly at an optimum level in order to suppress the Black Lake stickleback population by competing red salmon young during lake residency. Lake studies has shown that any reduction of escapement goals creates an increase of stickleback population, which have filled the biological niche of the red salmon young during the many years of under escapement into the Black Lake system. The complete suppression of the competing stickleback population should be a major step in returning the early system to the capabilities of past high production.

1965 Chignik Area Annual Report, p.43

In 1990, the threshold escapement level was 400,000 for Black Lake due in part to he need of tsuppressing competing lake resident species.

Submitted by Raechel Allen/Support Proposal 282