## Frazer Lake; A Run of Concern? WHY DOES IT NOT APPLY?

(35) "stock of concern" means a stock of salmon for which there is a yield, management, or conservation concern;

5 AAC 39.222. POLICY FOR THE MANAGEMENT OF SUSTAINABLE SALMON FISHERIES. (a) The Board of Fisheries (board) and Department of Fish and Game (de-partment) recognize that

(c) Management of salmon fisheries by the state should be based on the following principles and criteria:

(1) wild salmon stocks and the salmon's habitats should be maintained at levels of resource productivity that assure sustained yields as follows:

(A) salmon spawning, rearing, and migratory habitats should be protected as follows:

(iv) all essential salmon habitat in marine, estuarine, and freshwater ecosystems and access of salmon to these habitats should be protected; essential habitats include spawning and incubation areas, freshwater rearing areas, estuarine and nearshore rearing areas, offshore rearing areas, and migratory pathways;

(B) salmon stocks should be protected within spawning, incubating, rearing, and migratory habitats;

(C) degraded salmon productivity resulting from habitat loss should be assessed, considered, and controlled by affected user groups, regulatory agencies, and boards when making conservation and allocation decisions,

(D) effects and interactions of introduced or enhanced salmon stocks on wild salmon stocks should be assessed; wild salmon stocks and fisheries on those stocks should be protected from adverse impacts from artificial propagation and enhancement efforts;

What are the effects on the migratory pathways of enhanced Spiridon stocks and potintial fertilization of karluk on natraul king salmon runs to Karluk and Ayakulik river and Olga Bay systems?

(2) salmon fisheries shall be managed to allow escapements within ranges necessary to conserve and sustain potential salmon production and maintain normal ecosystem functioning as follows:

(D) salmon escapement should be managed in a manner to maintain genetic and phenotypic characteristics of the stock by assuring appropriate geographic and temporal distribution of spawners as well as consideration of size range, sex ratio, and other population attributes:

## 18 Years of abnormal jack percentages!



Fraze	Lake Socke	ve Salmon	Escaneme	ent .	
Year	Jacks	Adults	Total run	% Jacks	Females
1986	293	26,236	26,529	1.1%	
1987	8,322	32,222	40,544	20.5%	13,11 <b>8</b> 16,111
1988	22,052	224,652	246,704	8.9%	112,326
1989	9,960	350,413	360,373	2.7%	175,206
1990	10,612	216,348	226,960	4.6%	108,174
1991	16,562	173,796	190,331	8.7%	86.898
1992	24,243	161,582	185,825	13.0%	80,791
1993	16,967	161.424	178,391	9.5%	80,712
1994	16,601	189,470	206,071	8.0%	94,735
1995	41,321	155,041	196,362	21.0%	77,520
996	76,246	122,449	198,695	38.3%	61,224
997	26,768	178,496	205,264	13.0%	
998	38,366	195,389	233,755	16.4%	89,248
999	68,320	148,245	216,565	31.5%	97,664
000	24,529	133,515	158,044	15.5%	74,122
100	1.969	152,380	154,349	1.2%	66,757
002	21,507	63,410	85,317	25.6%	76,190
903	141.449	69,230	201.679	70.1%	31,705
004	8,366	112,298	120.664		30,114
005	624	136,324	136,948	6.9%	56,149
006	33,650	55.266	89,516	0.4%	68,162
007	70.462	49.764	120,186	37.5%	27,933
300	11,376	93,987	105,363	58.6%	24,852
009				10.7%	46,993
010					
011	•				
					- •
909 910 911 912	4,636 <b>49,546</b> <b>57,177</b> 2,7 <b>8</b> 9	97,209 48,134 77,468 146,095	101,845 94,680 134,642	4.5% 52.3% 42.4%	48,604 22,567 38,732

**Jack Sockeye Salmon** are not economically viable fish!

676,732

total jack salmon counted as escapement from 1995 - 2011

**26.49%** 

percent of the total escapement from 1995-2011 has been jack salmon



## High Impact Emerging Commercial Fisheries or Expanding Fisheries

5 AAC 39.210. MANAGEMENT PLAN FOR HIGH IMPACT EMERGING FISHERIES. (a) To guide management of high impact emerging commercial fisheries, a plan is needed that ensures resource conservation, minimizes impacts on existing users, and provides orderly development of new fishery resources.

- (b) The department may regulate a commercial fishery as a high impact emerging commercial fishery if the commissioner determines that **any** of the following conditions apply to a species or species group in an area or region:
  - (1) harvesting effort has recently increased beyond a low sporadic level;
  - (3) the level of harvest might be approaching a level that might not be sustainable on a local or regional level;
  - (e) The department shall develop an interim management plan for each high impact emerging commercial fishery. An interim management plan shall contain at least the following information:
  - (4) an evaluation of potential impacts on existing users;
    - (6) an evaluation of the conservation impacts of the preferred management approach on nontarget species and on non-target individuals of the same species; Wild King Salmon from Karluk or A

## Or?

(11) "**expanding fishery**" means a salmon fishery in which effective harvesting effort has recently increased significantly beyond historical levels and where the increase has not resulted from natural fluctuations in salmon abundance;

**5 AAC 39.222. POLICY FOR THE MANAGEMENT OF SUSTAINABLE SALMON FISHERIES**. (a) The Board of Fisheries (board) and Department of Fish and Game recognize that

(2) in formulating fishery management plans designed to achieve maximum or optimum salmon production, the board and department must consider factors including environmental change, habitat loss or degradation, data uncertainty, limited funding for research and management programs, existing harvest patterns, and new fisheries or expanding fisheries;

Table 5. Catches of salmon by purse seines grouped by vessel length 1970 season

Number				Average Catch	
of /essels	Keel Length	Pink Salmon	Total All Species	Pink Salmon	Total All Species
3	11-15	4,142	10,889	1,380	3,629
21	16-20	103,792	135,254	4,942	6.440
18	21-25	337,145	360.036	18,730	20.002
96	26-30	2,603,455	2,826,429	27,119	29.441
132	31-35	4,425,255	5,097,377	33,524	38.616
48	36-40	1,625,395	1,892,952	33.862	39,436
18	41-45	638,288	759,460	35,460	42,192
_13	46-50	591,449	775,922	45,496	59,686
349		10,389,921	11,858,319		

for all vessels
Pink All
Salmon Species
29.595 33 977

(copy paste from ADF&G annual report 1970)

Does fish and game keep track of the advancements in fishing technology and changes in policy and those impacts on existing harvest patterns or potential impacts on existing users?

examples: longer seines 250 fathoms size of fleet incease over time