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RC35

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Please note: dates relative to NKB, consider the harvest of overall for the South K-Bch, section vs. the NKB section, consider implementing an end date for "no hour restriction" to hours that will be regulated by the current Kenai section to be about the middle of July, before the building and peak of the Kenai sockeye run.

Proposal 181

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**Genetic stock identification of Upper Cook Inlet  
sockeye salmon harvest, 2005–2008**

by

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Table 6.—Predetermined priors based on the best available information for the first strata within each Upper Cook Inlet (UCI) district, subdistrict, section, subsection, and test fishery.

Gillnet fishery	Date	Reporting Group							
		Crescent	West	JCL	SusYen	Fish	KTNE	Kenai	Kasilof
Central District drift	June 27 - July 7, 2005	0.08	0.05	0.05	0.05	0.01	0.01	0.17	0.59
KRSHA drift	July 24 - 29, 2006	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.89
KRSHA drift/set	July 11 - July 23, 2006	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.89
KRSHA set	July 24 - 29, 2006	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.89
Kasilof Section set	June 20 - July 9, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.14	0.80
Kenai Section set	July 11 - 12, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.47	0.47
Cohoe/Ninilchik Subsection set	July 4 - July 11, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.14	0.80
Cohoe/Ninilchik Subsection set	July 4 - August 7, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.73	0.21
South K. Beach Subsection set	July 4 - July 14, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.14	0.80
South K. Beach Subsection set	July 4 - August 7, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.73	0.21
North K. Beach Subsection set	July 11 - 14, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.47	0.47
North K. Beach Subsection set	July 11 - August 4, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.73	0.21
Salamatof Subsection set	July 11 - August 4, 2005	0.01	0.01	0.01	0.01	0.01	0.01	0.73	0.21
Kalgin Island Subdistrict set	June 23 - August 17, 2006	0.04	0.03	0.04	0.04	0.01	0.01	0.49	0.34
Western Subdistrict set	June 19 - July 10, 2006	0.58	0.29	0.05	0.05	0.01	0.01	0.01	0.01
Eastern Subdistrict set	August 7 - September 14, 2006	0.01	0.10	0.10	0.10	0.01	0.10	0.49	0.10
General Subdistrict set	July 3 - August 25, 2008	0.01	0.07	0.01	0.77	0.07	0.06	0.01	0.01
UCI offshore test fishery	July 1 - 9, 2006	0.04	0.03	0.05	0.05	0.01	0.02	0.28	0.52

Note: Strata composed of the Kasilof River Special Harvest Area (KRSHA) are included. All priors for subsequent strata (including subsequent strata within the same year and all strata in following years) are based upon the posterior distribution (i.e., stock composition estimates) of preceding strata from the same district, subdistrict, section, subsection, or test fishery. See *Methods* for details. Priors for a given stratum may not sum to 1 due to rounding error.

Table 15.—Stock composition estimates, standard deviation (SD), 90% credibility interval (CI), sample size ( $n$ ), and effective sample size ( $n_{eff}$ ) for mixtures of sockeye salmon harvested in the Kenai and Kasilof Section set gillnet fisheries (Central District, East Side Subdistrict) analyzed by subsection in 2005, 2006, 2007, and 2008.

			Reporting Group							
			Crescent	West	JCL	SusYen	Fish	KTNE	Kenai	Kasilof
Cohoe\Ninilchik 2005										
Start Date	07/04	Proportion	0.00	0.00	0.00	0.01	0.00	0.00	0.50	0.49
End Date	08/07	SD	0.00	0.01	0.00	0.01	0.00	0.00	0.04	0.04
n	300	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43
$n_{eff}$	296	Upper 90% CI	0.00	0.01	0.00	0.03	0.00	0.00	0.56	0.55
South K. Beach 2005										
Start Date	07/04	Proportion	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.55
End Date	08/07	SD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
n	1006	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.51
$n_{eff}$	1002	Upper 90% CI	0.00	0.00	0.01	0.00	0.00	0.00	0.48	0.58
North K. Beach 2005										
Start Date	07/11	Proportion	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.32
End Date	08/04	SD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
n	1000	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.28
$n_{eff}$	987	Upper 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.35
Salamatof 2005										
Start Date	07/11	Proportion	0.00	0.00	0.02	0.00	0.00	0.01	0.87	0.10
End Date	08/04	SD	0.00	0.00	0.01	0.01	0.00	0.01	0.03	0.02
n	300	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.07
$n_{eff}$	298	Upper 90% CI	0.00	0.00	0.03	0.01	0.00	0.02	0.91	0.15
Cohoe\Ninilchik 2006 <sup>a</sup>										
Start Date	06/26	Proportion	0.00	0.02	0.00	0.01	0.00	0.00	0.16	0.81
End Date	08/07	SD	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.01
n	1503	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.78
$n_{eff}$	1497	Upper 90% CI	0.00	0.04	0.00	0.03	0.00	0.01	0.18	0.83
South K. Beach 2006										
Start Date	06/26	Proportion	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.83
End Date	08/07	SD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
n	837	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.81
$n_{eff}$	886	Upper 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.86
North K. Beach 2006										
Start Date	07/10	Proportion	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.67
End Date	08/07	SD	0.00	0.01	0.00	0.01	0.00	0.00	0.04	0.04
n	277	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.60
$n_{eff}$	275	Upper 90% CI	0.00	0.02	0.00	0.02	0.00	0.00	0.39	0.73
Salamatof 2006										
Start Date	07/10	Proportion	0.00	0.00	0.00	0.00	0.00	0.01	0.76	0.23
End Date	08/07	SD	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
n	922	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.20
$n_{eff}$	917	Upper 90% CI	0.01	0.00	0.00	0.01	0.00	0.01	0.79	0.26

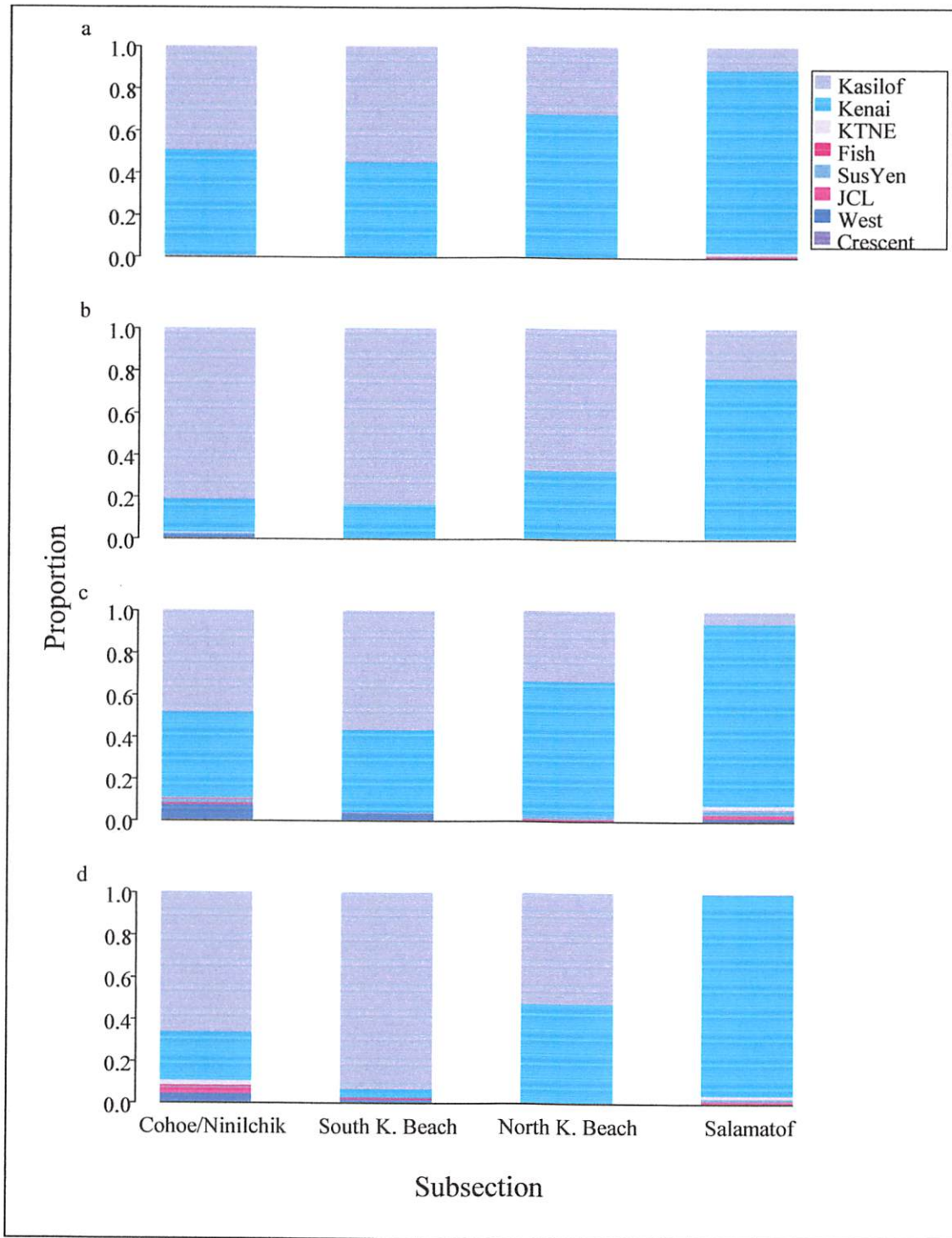
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			Reporting Group							
			Crescent	West	JCL	SusYen	Fish	KTNE	Kenai	Kasilof
<b>Cohoe\Ninilchik 2007</b>										
Start Date	06/25	Proportion	0.00	0.07	0.01	0.02	0.00	0.00	0.41	0.48
End Date	08/09	SD	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.02
n	1386	Lower 90% CI	0.00	0.06	0.00	0.00	0.00	0.00	0.38	0.45
n <sub>eff</sub>	1324	Upper 90% CI	0.01	0.09	0.02	0.03	0.01	0.01	0.44	0.51
<b>South K. Beach 2007</b>										
Start Date	06/25	Proportion	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.56
End Date	08/09	SD	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.03
n	514	Lower 90% CI	0.00	0.02	0.00	0.00	0.00	0.00	0.35	0.51
n <sub>eff</sub>	491	Upper 90% CI	0.00	0.06	0.00	0.00	0.01	0.01	0.45	0.61
<b>North K. Beach 2007</b>										
Start Date	07/09	Proportion	0.00	0.00	0.01	0.02	0.00	0.00	0.64	0.33
End Date	08/09	SD	0.00	0.01	0.01	0.01	0.00	0.00	0.04	0.04
n	268	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.26
n <sub>eff</sub>	261	Upper 90% CI	0.00	0.01	0.02	0.04	0.00	0.00	0.71	0.40
<b>Salamatof 2007</b>										
Start Date	07/09	Proportion	0.00	0.02	0.03	0.03	0.00	0.02	0.84	0.05
End Date	08/09	SD	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01
n	1319	Lower 90% CI	0.00	0.01	0.02	0.02	0.00	0.02	0.82	0.03
n <sub>eff</sub>	1280	Upper 90% CI	0.00	0.03	0.04	0.05	0.01	0.03	0.86	0.07
<b>Cohoe\Ninilchik 2008</b>										
Start Date	06/26	Proportion	0.00	0.04	0.03	0.01	0.01	0.02	0.23	0.66
End Date	07/24	SD	0.00	0.01	0.01	0.01	0.00	0.01	0.02	0.02
n	1028	Lower 90% CI	0.00	0.03	0.02	0.00	0.00	0.01	0.20	0.62
n <sub>eff</sub>	1028	Upper 90% CI	0.01	0.06	0.04	0.02	0.01	0.03	0.27	0.69
<b>South K. Beach 2008</b>										
Start Date	06/26	Proportion	0.00	0.02	0.01	0.00	0.00	0.00	0.04	0.93
End Date	07/24	SD	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
n	572	Lower 90% CI	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.90
n <sub>eff</sub>	572	Upper 90% CI	0.00	0.03	0.02	0.00	0.00	0.00	0.06	0.95
<b>North K. Beach 2008</b>										
Start Date	07/10	Proportion	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.52
End Date	07/24	SD	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04
n	225	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.45
n <sub>eff</sub>	225	Upper 90% CI	0.00	0.00	0.01	0.00	0.00	0.00	0.55	0.59
<b>Salamatof 2008</b>										
Start Date	07/10	Proportion	0.00	0.00	0.02	0.01	0.00	0.01	0.96	0.00
End Date	07/24	SD	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00
n	575	Lower 90% CI	0.00	0.00	0.00	0.00	0.00	0.01	0.94	0.00
n <sub>eff</sub>	575	Upper 90% CI	0.00	0.01	0.03	0.03	0.00	0.02	0.97	0.01

Note: Effective sample size ( $n_{eff}$ ) is number of samples successfully screened from each stratum after excluding individuals with <80% scorable markers (see text). Proportions for a given mixture may not sum to 1 due to rounding error.

<sup>a</sup> Case where 3 chains did not converge – reported estimates based on 3 chains.



*Note:* There are 2 subdistricts for each section and they are displayed from south to north.

Figure 10.—Stock composition estimates for the Kasilof and Kenai Section set gillnet fisheries (Central District, East Side Subdistrict) divided into subsection from a) 2005, b) 2006, c) 2007, and d) 2008.