



State of ALASKA

Board of Fisheries Work Session

State of the Kings, RC9

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Outline

- King salmon production and escapements statewide
- Freshwater production and marine survival
- Size of king salmon
- Return per spawner and escapement goal concept



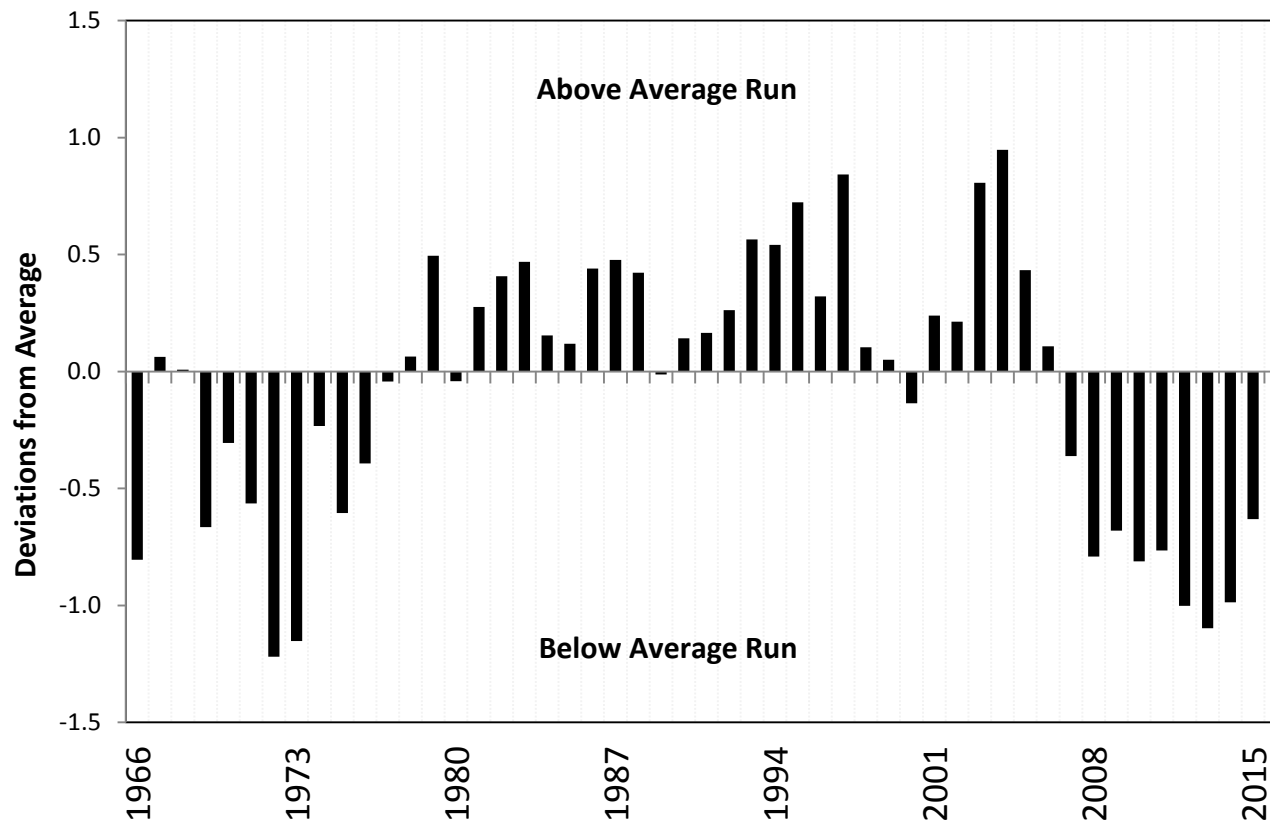
King Salmon Are Vital To Users

King salmon are critically important to subsistence, sport, and commercial users and recent downturns in production have created social and economic hardships throughout the state



King Salmon Production in Alaska

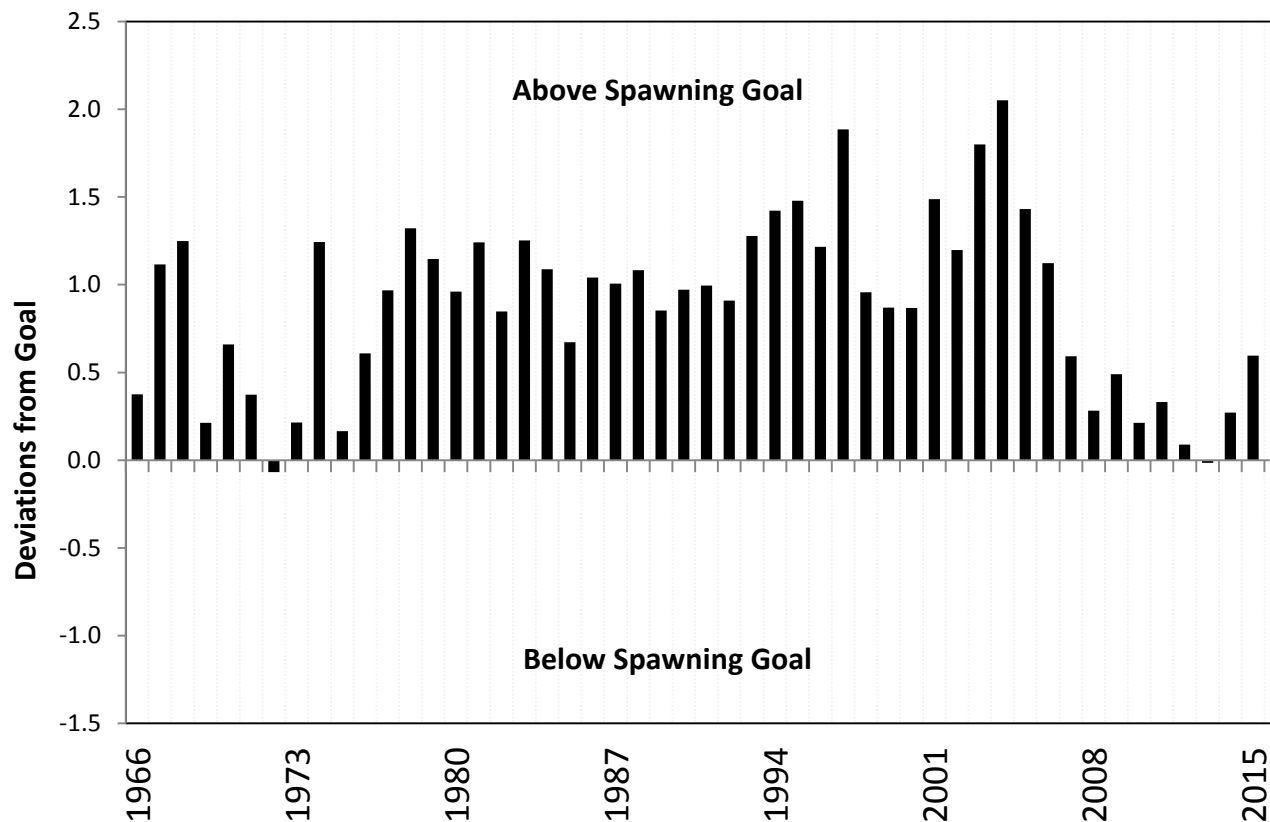
Since 2007 king salmon stocks in Alaska have been experiencing a period of poor production



Production of king salmon across 21 stocks in Alaska 4

King Salmon Escapement Relative to Goal

Even so, managers have done a good job of attaining spawning escapement goals



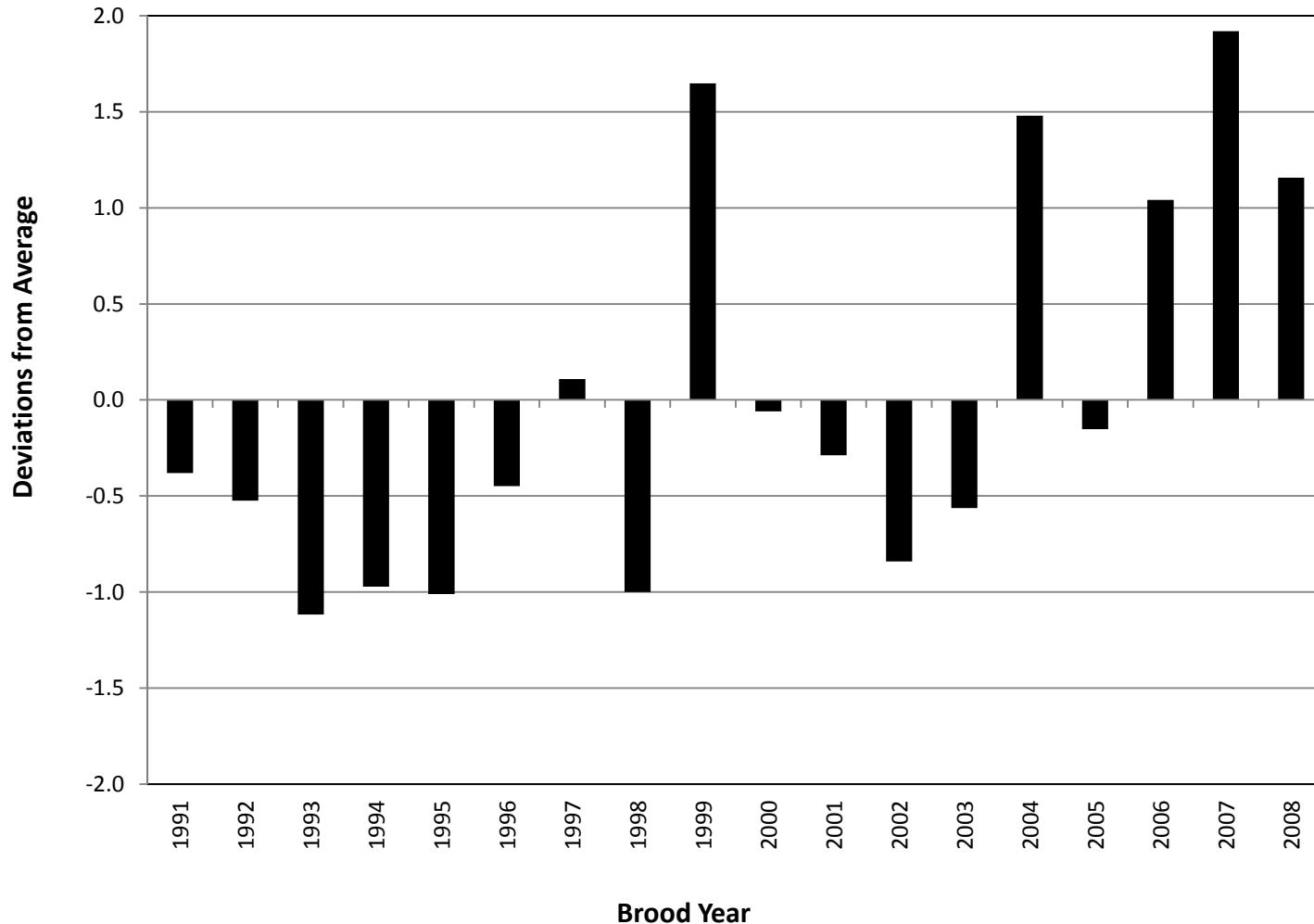
Escapements of king salmon across 21 stocks in Alaska

Two Main Ingredients in the Recipe for King Salmon Production

- Freshwater production (smolt abundance)
- Marine survival (smolt to adult survival)

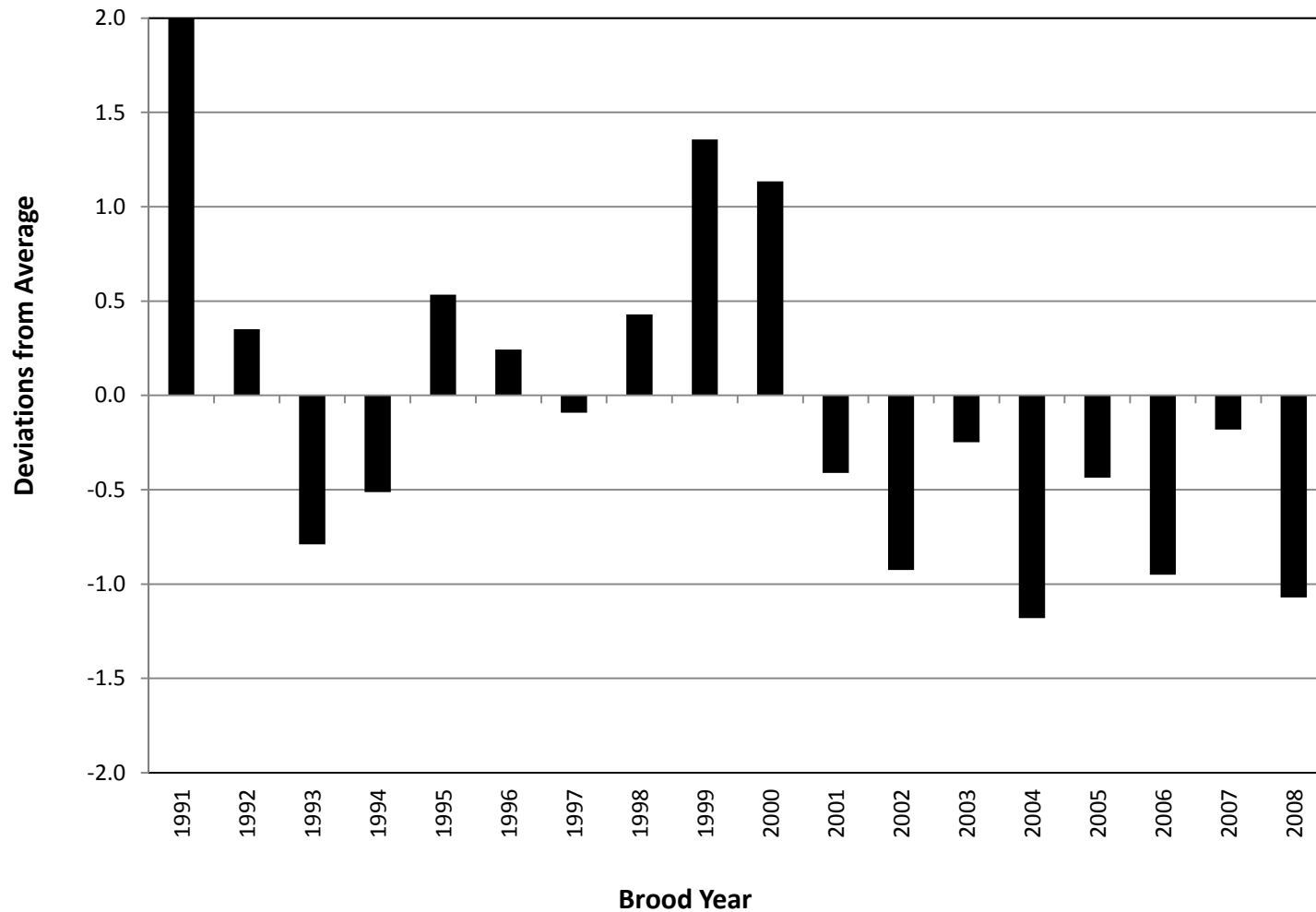


King Salmon Freshwater Production



In 4 Southeast Alaska Stocks

King Salmon Marine Survival



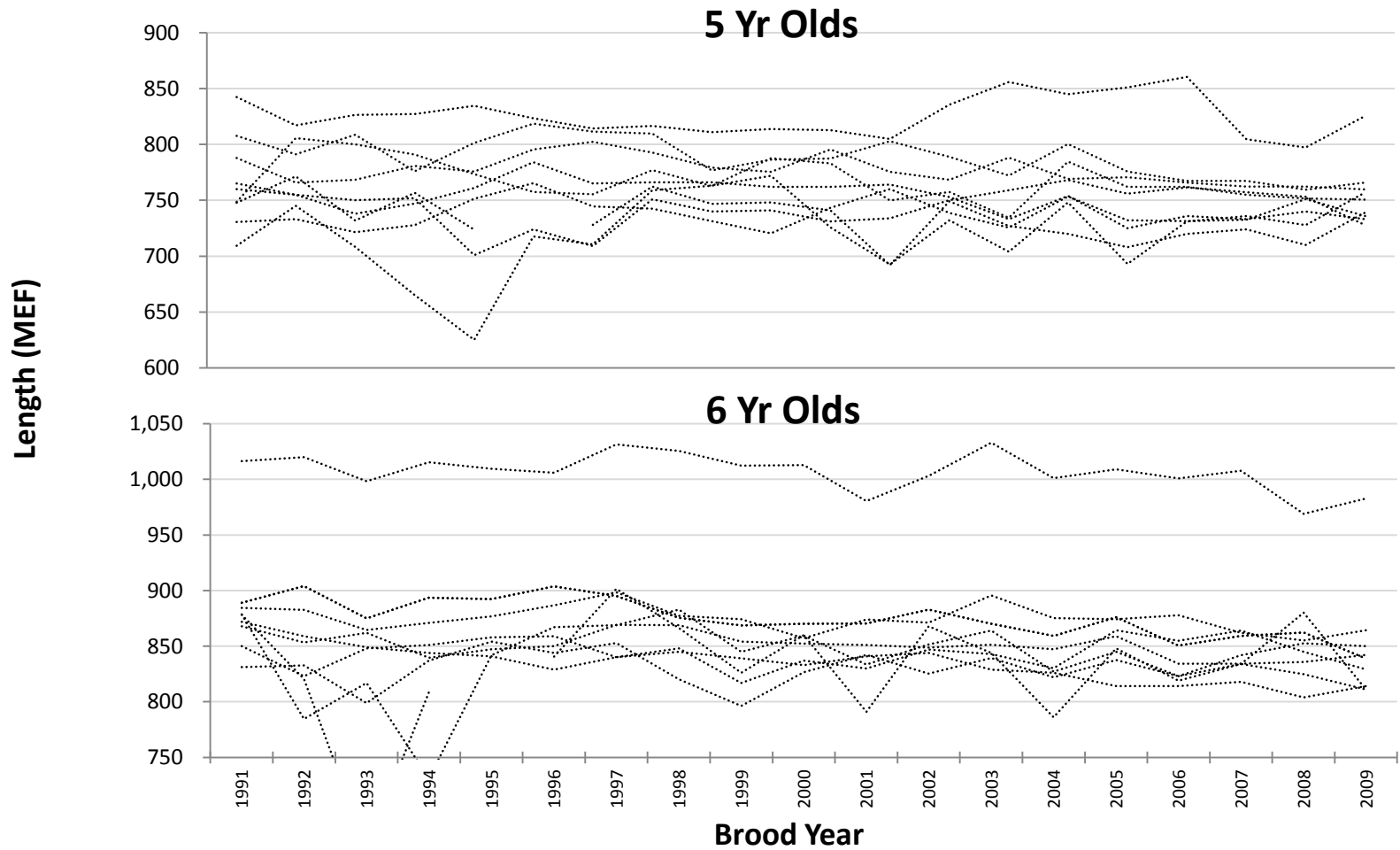
In 4 Southeast Alaska Stocks

Size of King Salmon

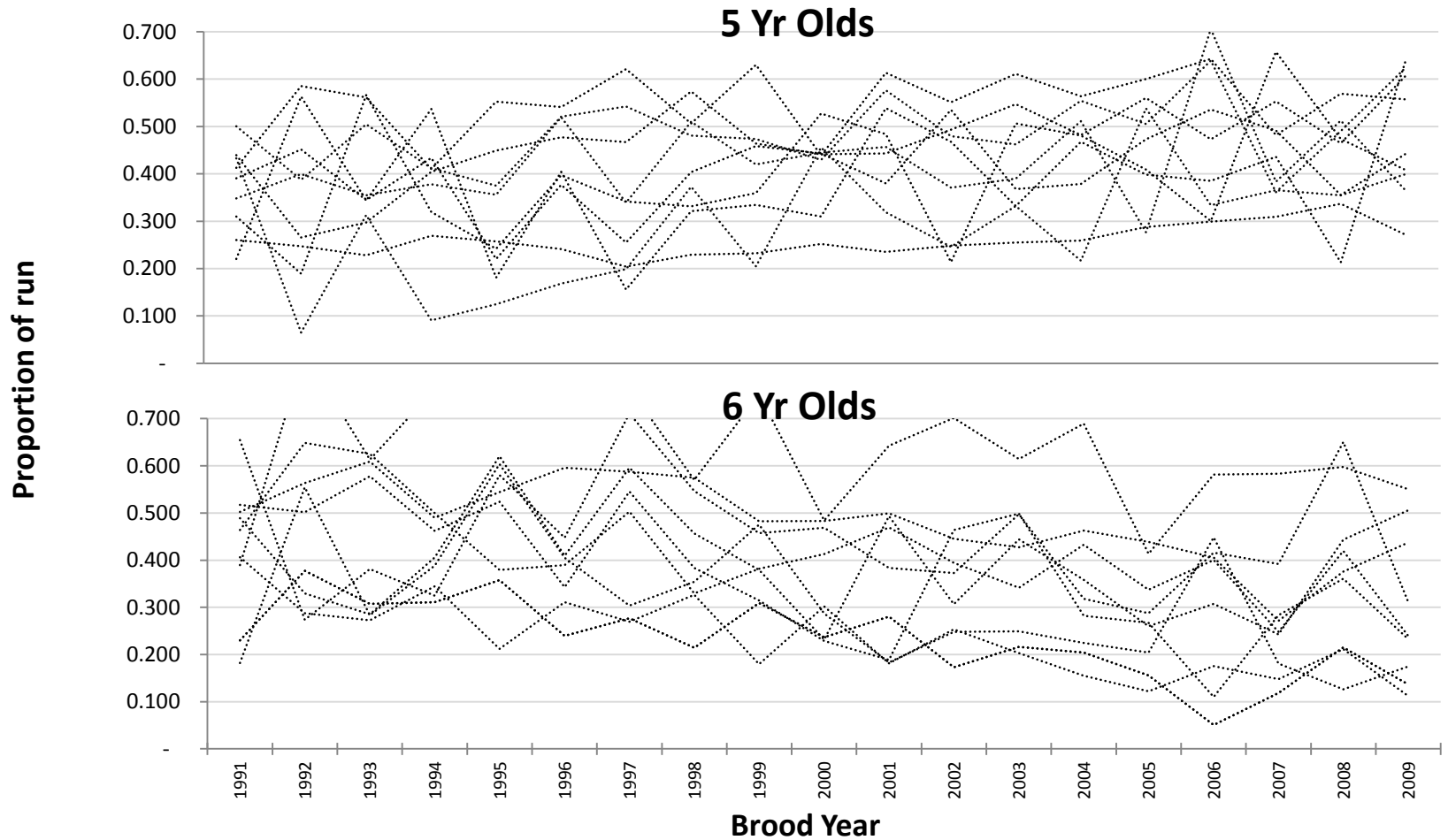
- Size at age
- Maturation rate



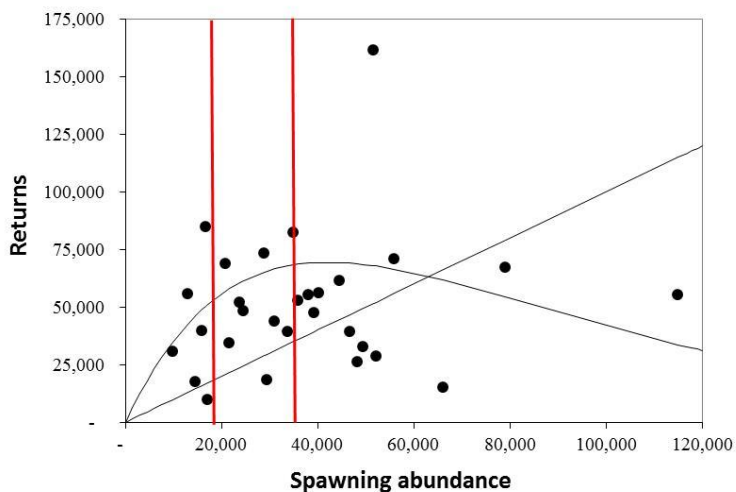
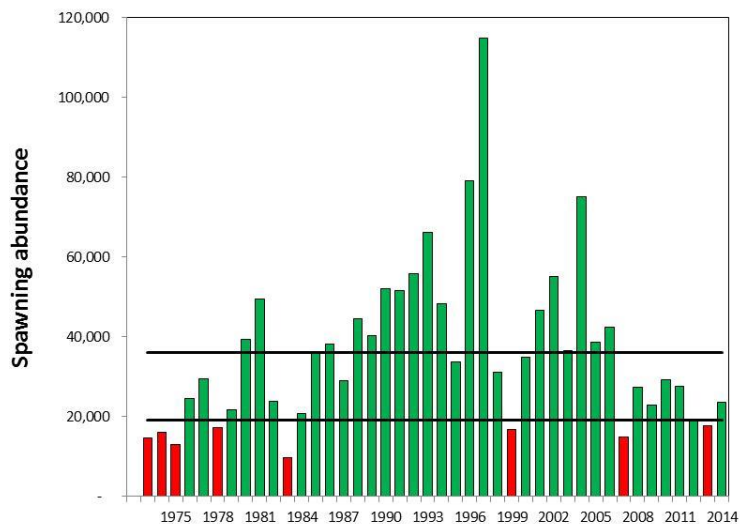
Size at Age Across Alaska



Proportions at Age Across Alaska



Return per Spawner and the Escapement Goal Concept



Year	Spawners	Returns	R/S	Averages			Comment
				Spawners	Returns	R/S	
1983	9,794	30,800	3.1				Below goal
1975	12,920	55,557	4.3				Below goal
1973	14,564	17,539	1.2	14,534	39,626	2.7	Below goal
1974	16,015	39,475	2.5				Below goal
1999	16,786	84,703	5.0				Below goal
1978	17,123	9,685	0.6				Below goal
1984	20,780	68,574	3.3				Within goal
1979	21,617	34,531	1.6				Within goal
1982	23,848	52,134	2.2				Within goal
1976	24,582	48,134	2.0				Within goal
1987	28,935	73,432	2.5	25,000	50,000	2.0	Within goal
1977	29,497	18,191	0.6				Within goal
1998	31,039	43,785	1.4				Within goal
1995	33,805	39,208	1.2				Within goal
2000	34,997	82,253	2.4				Within goal
1985	35,916	52,865	1.5				Within goal
1986	38,111	55,270	1.5				Above goal
1980	39,239	47,650	1.2				Above goal
1989	40,329	56,014	1.4				Above goal
1988	44,524	61,296	1.4				Above goal
2001	46,644	39,049	0.8				Above goal
1994	48,368	25,938	0.5				Above goal
1981	49,559	32,795	0.7	50,000	50,000	1.0	Above goal
1991	51,645	161,294	3.1				Above goal
1990	52,142	28,697	0.6				Above goal
1992	55,889	71,010	1.3				Above goal
1993	66,125	15,193	0.2				Above goal
1996	79,019	66,971	0.8				Above goal
1997	114,938	55,050	0.5				Above goal



Questions?