

Pre-Season Run Size Forecasts for Fraser River Sockeye Salmon in 2012



Fisheries and Oceans
Canada

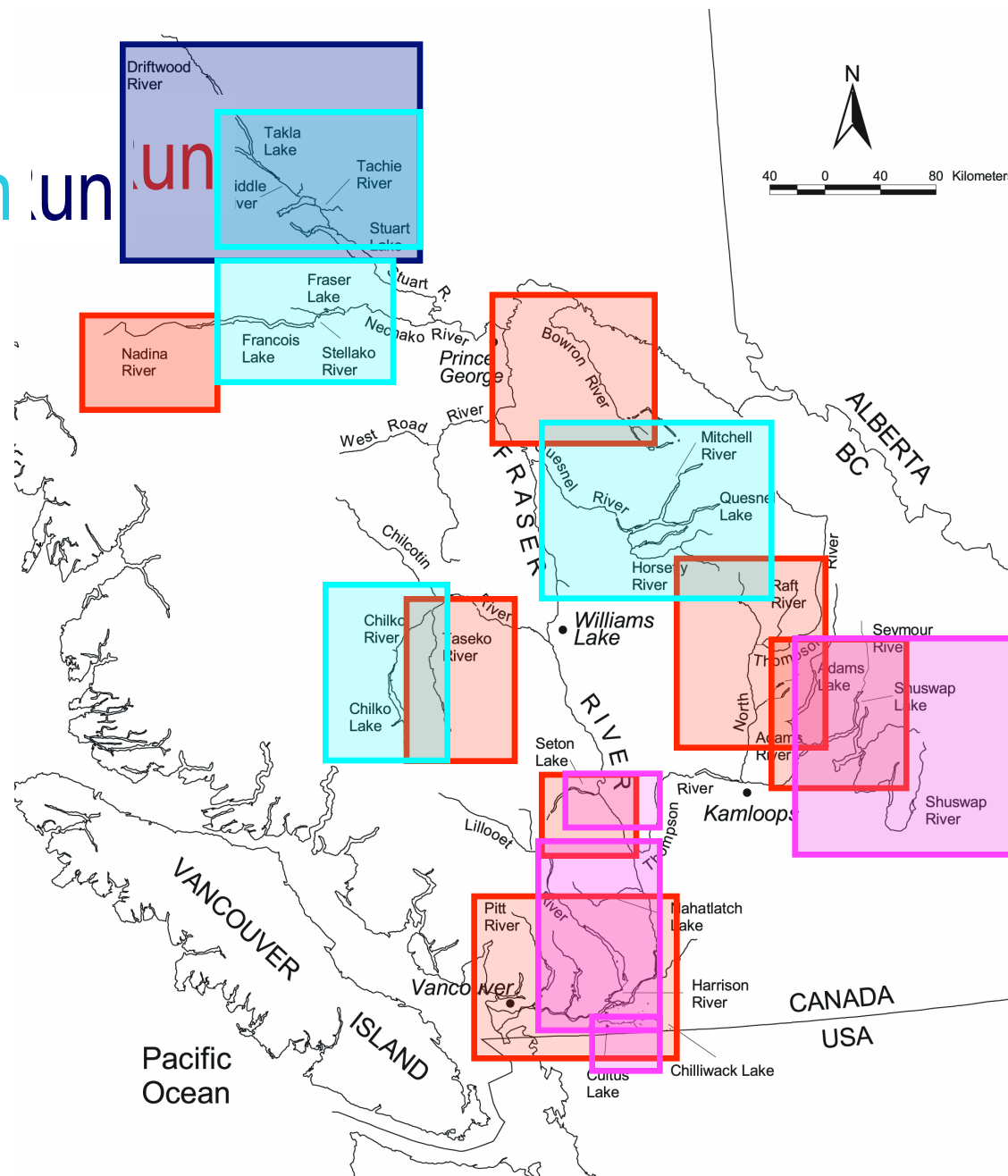
Pêches et Océans
Canada

Prepared by: S. Grant

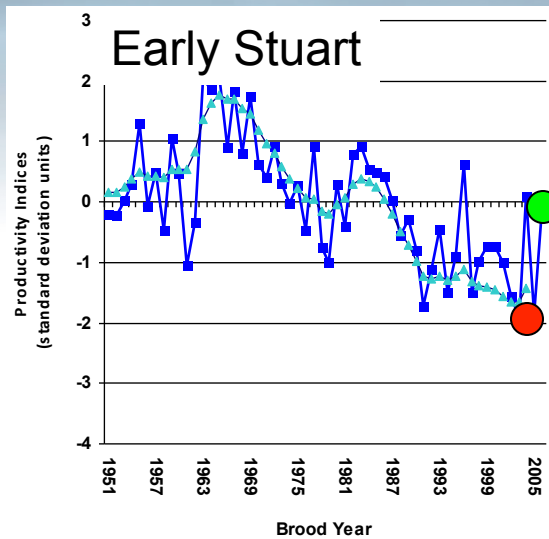
**present to: FN JTF
by: A. Huang
27-Feb-2012**

Summer Run

Late Run

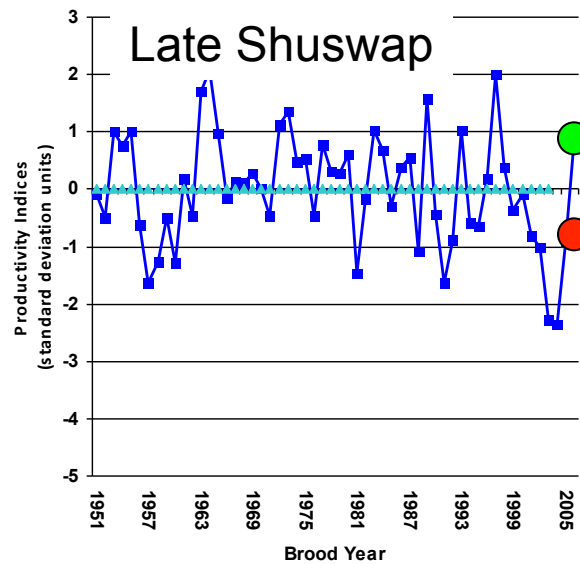
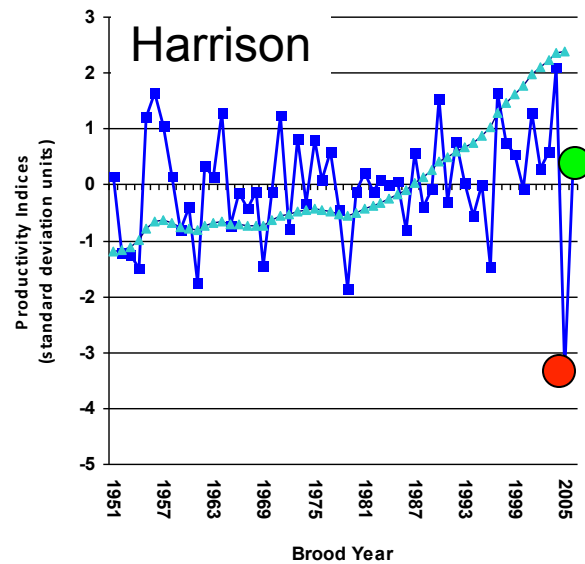


Survival



**2006 Brood Year
(2010 returns)**

**2005 Brood Year
(2009 returns)**



Forecast Table Map

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Run timing group	Forecast Model ^b	BY (08)	BY (07)	Prod.	Prod.	Ret	Mean Run Size		Probability that Return will be at/or Below Specified Run Size ^a				
Stocks		(EFS)	(EFS)	(-8yr)	(-4yr)	2012	all cycles ^c	2012 cycle ^d	10%	25%	50%	75%	90%
Early Stuart	Ricker (Ei)	14,400	2,400	2.5	2.1		311,000	120,000	39,000	61,000	99,000	161,000	270,000
Early Summer							510,000	517,000	109,000	195,000	359,000	665,000	1,214,000
(total excluding miscellaneous)							510,000	517,000	62,000	103,000	194,000	362,000	638,000
Bowron	κF	300	1,100	2.8	2.3		39,000	27,000	1,000	1,000	2,000	4,000	6,000
Fennell	Power	200	6,800	4.0	3.2		25,000	34,000	5,000	7,000	12,000	20,000	32,000
Gates	κF	1,800	1,100	4.5	3.1		53,000	135,000	4,000	6,000	12,000	21,000	36,000
Nadina	MRJ	10,200	1,000	3.0	3.5		80,000	137,000	17,000	33,000	70,000	147,000	289,000
Pitt	κF	5,400	19,900	0.3	0.1		72,000	81,000	11,000	18,000	35,000	65,000	110,000
Raft	Ricker (PDO)	3,600	8,100	2.7	2.0		32,000	57,000	22,000	34,000	55,000	88,000	135,000
Scotch	arkin	100	4,800	6.7	3.5		78,000	12,000	100	200	300	700	1,400
Seymour	Ricker-cyc	300	5,900	5.4	3.6		131,000	34,000	2,000	4,000	8,000	16,000	29,000
Misc ^e	RS (Sc/Se)	500	3,800				NA	NA	1,000	3,000	6,000	10,000	17,000
Misc ^f	RS (Ra/Fe)	200	1,000				NA	NA	1,000	2,000	3,000	6,000	13,000
Misc ^g	RS (Ra/Fe)	1,000	9,900				NA	NA	8,000	14,000	24,000	49,000	99,000
Misc ^h	RS (Esum)	19,700	1,100				NA	NA	36,000	70,000	127,000	230,000	431,000
Misc ⁱ	RS (Esum)	150	2,000				NA	NA	1,000	3,000	5,000	8,000	16,000
Summer							3,730,000	2,501,000	529,000	828,000	1,420,000	2,449,000	4,160,000
Chilko ^j	κF (juv)	11.8 M	25.2 M	0.02	0.02		1,350,000	1,790,000	229,000	342,000	562,000	868,000	1,274,000
Late Stuart	Power	57,900	4,100	2.6	2.1		560,000	187,000	92,000	166,000	338,000	730,000	1,550,000
Quesnel	R1C	2,500	33,800	1.0	1.0		1,358,000	57,000	17,000	33,000	67,000	137,000	261,000
Stellako	R2C	73,800	19,600	1.5	0.7		462,000	467,000	191,000	287,000	453,000	714,000	1,075,000
Late							3,020,000	711,000	66,000	119,000	241,000	488,000	990,000
(total excluding miscellaneous)							3,020,000	711,000	62,000	112,000	228,000	465,000	950,000
Cultus ^j	κF (juv)	145,300	341,000	0.02	0.02		39,000	21,000	1,000	1,000	3,000	7,000	15,000
Harrison ^k	κF	4,400	100,600	6.3	3.4		60,000	19,000	20,000	39,000	83,000	184,000	401,000
Late Shuswap	Ricker-cyc	80	32,300	2.4	0.7		2,152,000	29,000	1,000	3,000	8,000	19,000	46,000
Portage	arkin	60	800	3.5	2.2		40,000	16,000	500	1,000	2,000	4,000	9,000
Weaver	RS4yr	600	15,800	8.8	3.9		363,000	345,000	12,000	23,000	47,000	96,000	181,000
Birkenhead	κF	6,800	54,300	1.6	0.9		366,000	281,000	27,000	45,000	85,000	155,000	298,000
Misc. non-Shuswap ^l		900	2,600				NA	NA	4,000	7,000	13,000	23,000	40,000
TOTAL SOCKEYE SALMON							-	-	743,000	1,203,000	2,119,000	3,763,000	6,634,000
(TOTAL excluding miscellaneous)							(7,571,000)	(3,849,000)	(692,000)	(1,104,000)	(1,941,000)	(3,437,000)	(6,018,000)

2012 Forecast Summary

	2012 cycle avg.	Prob'y that return will be at/or below specified run size				
		p10	p25	p50	p75	p90
Early Stuart	120,000	40,000	61,000	99,000	161,000	270,000
Early Summer	517,000	110,000	199,000	361,000	667,000	1,211,000
Summer	2,501,000	529,000	828,000	1,420,000	2,449,000	4,160,000
Late	711,000	65,000	119,000	242,000	489,000	990,000
tl sockeye		744,000	1,207,000	2,122,000	3,766,000	6,631,000