Smolt Migration 2004

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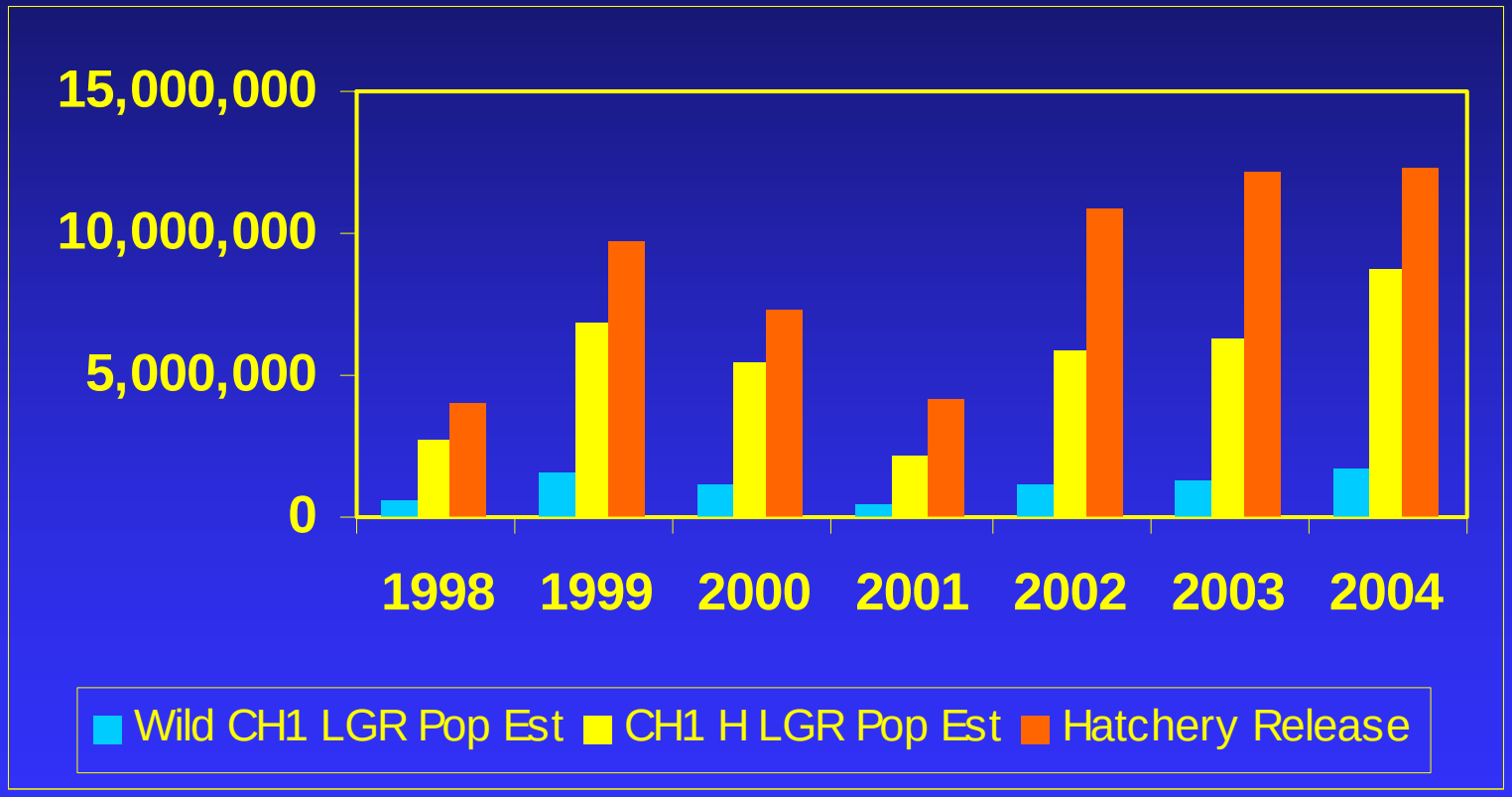
Fish Passage Center

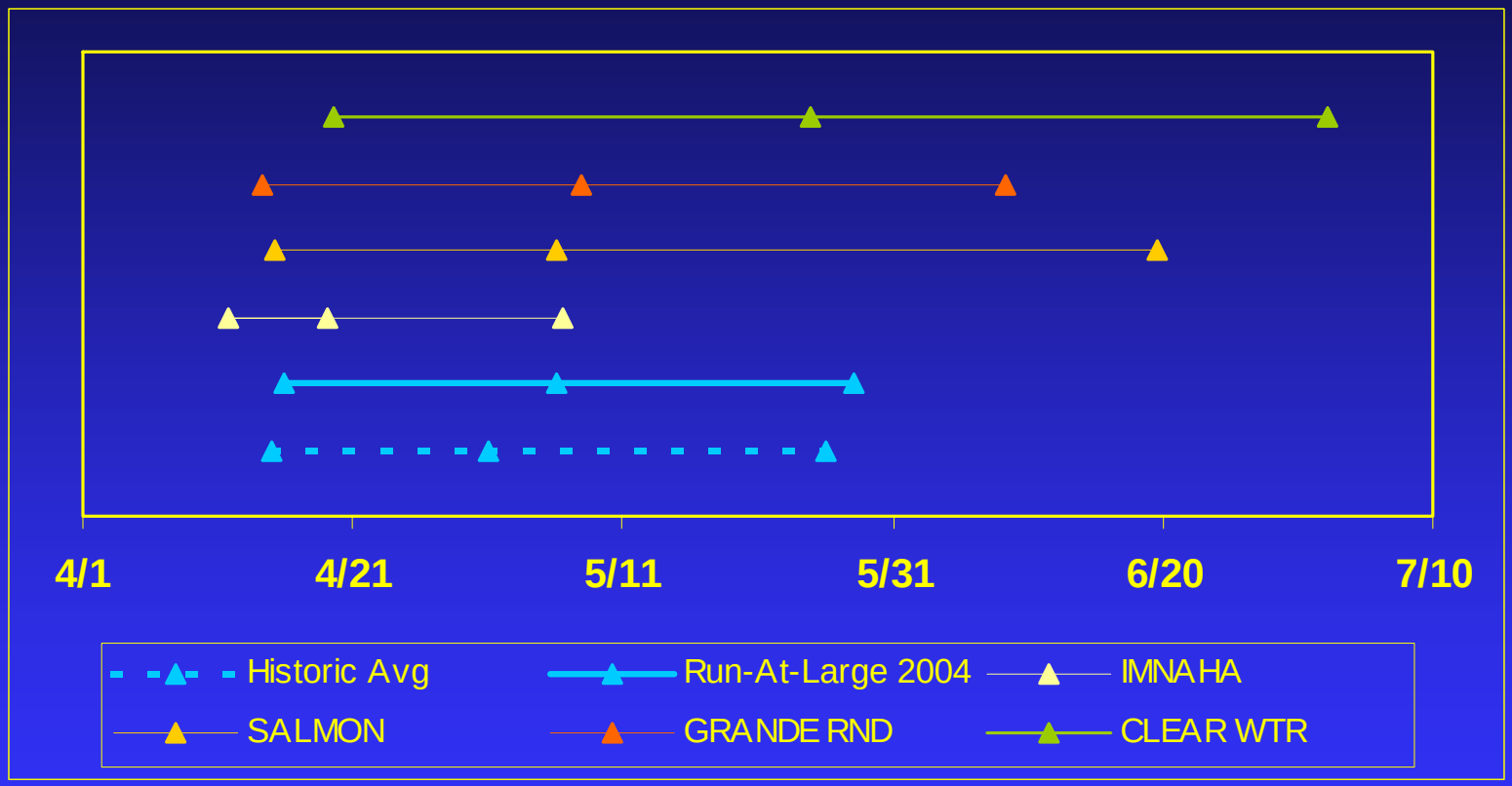
Review of 2004 Smolt Migration

- Run Size
- Timing
- Travel Time
- Survival

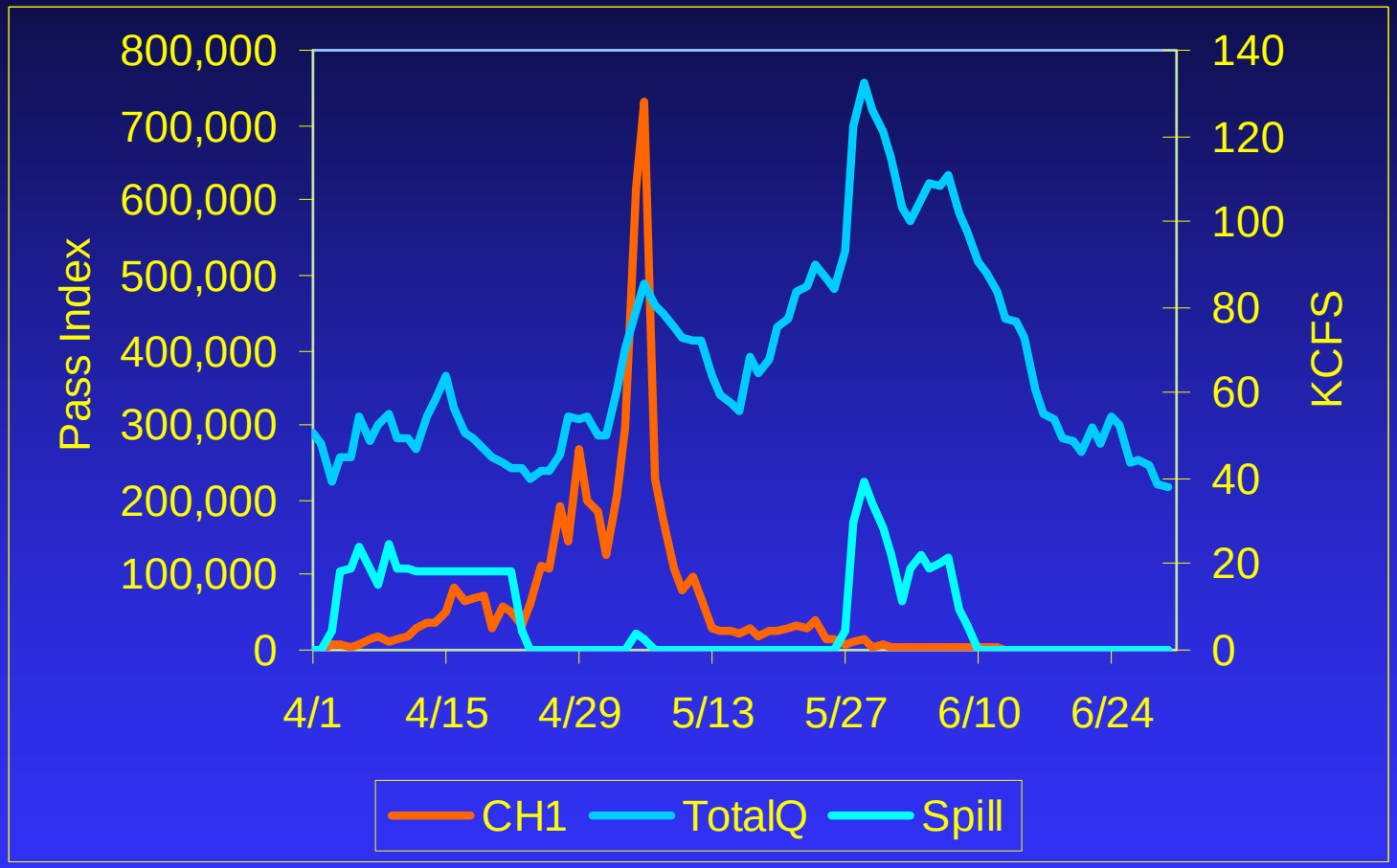
Yearling Chinook Population at Lower Granite and Hatchery Releases



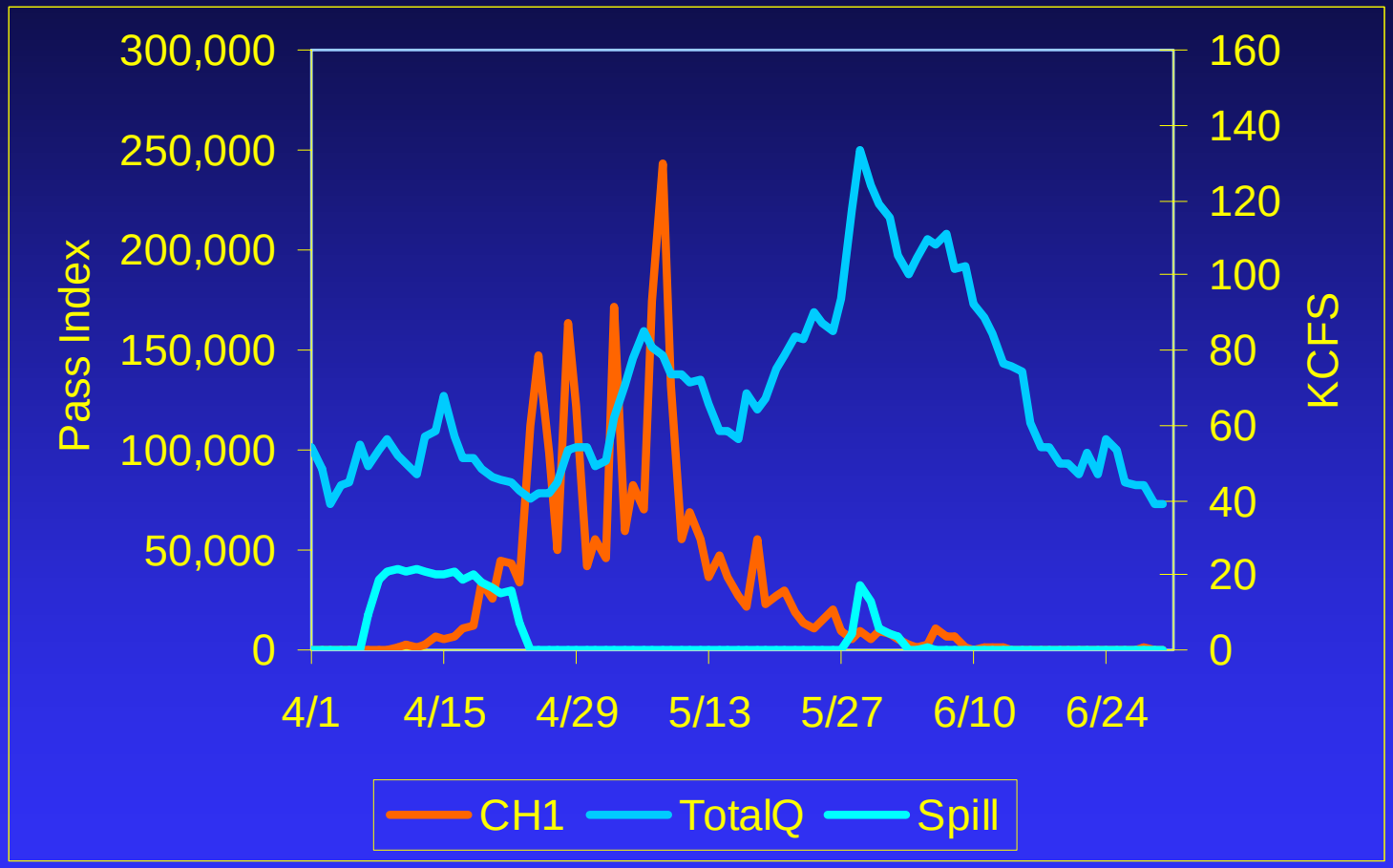
Yearling Chinook Timing at LGR



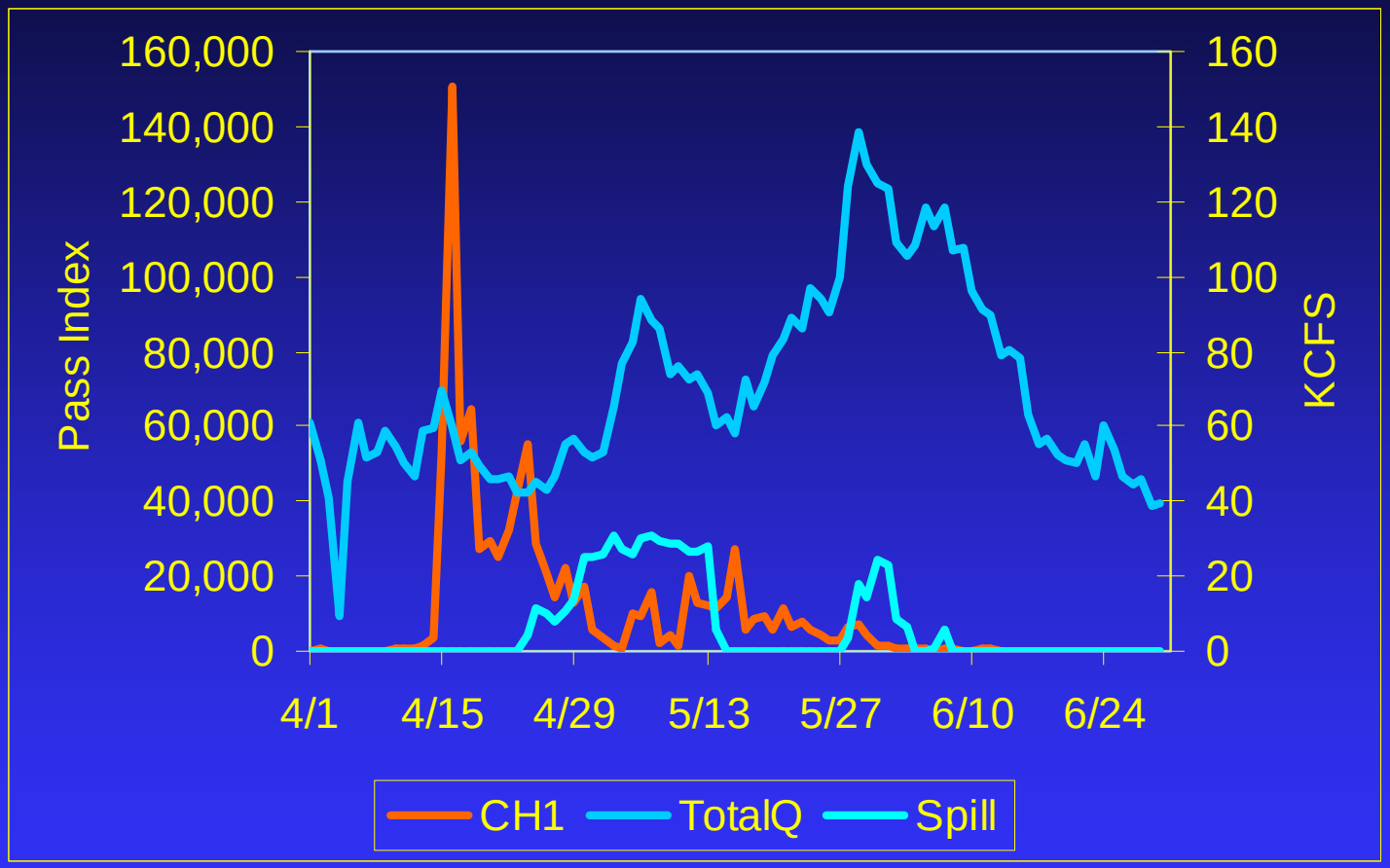
Yearling Chinook at Lower Granite 2004



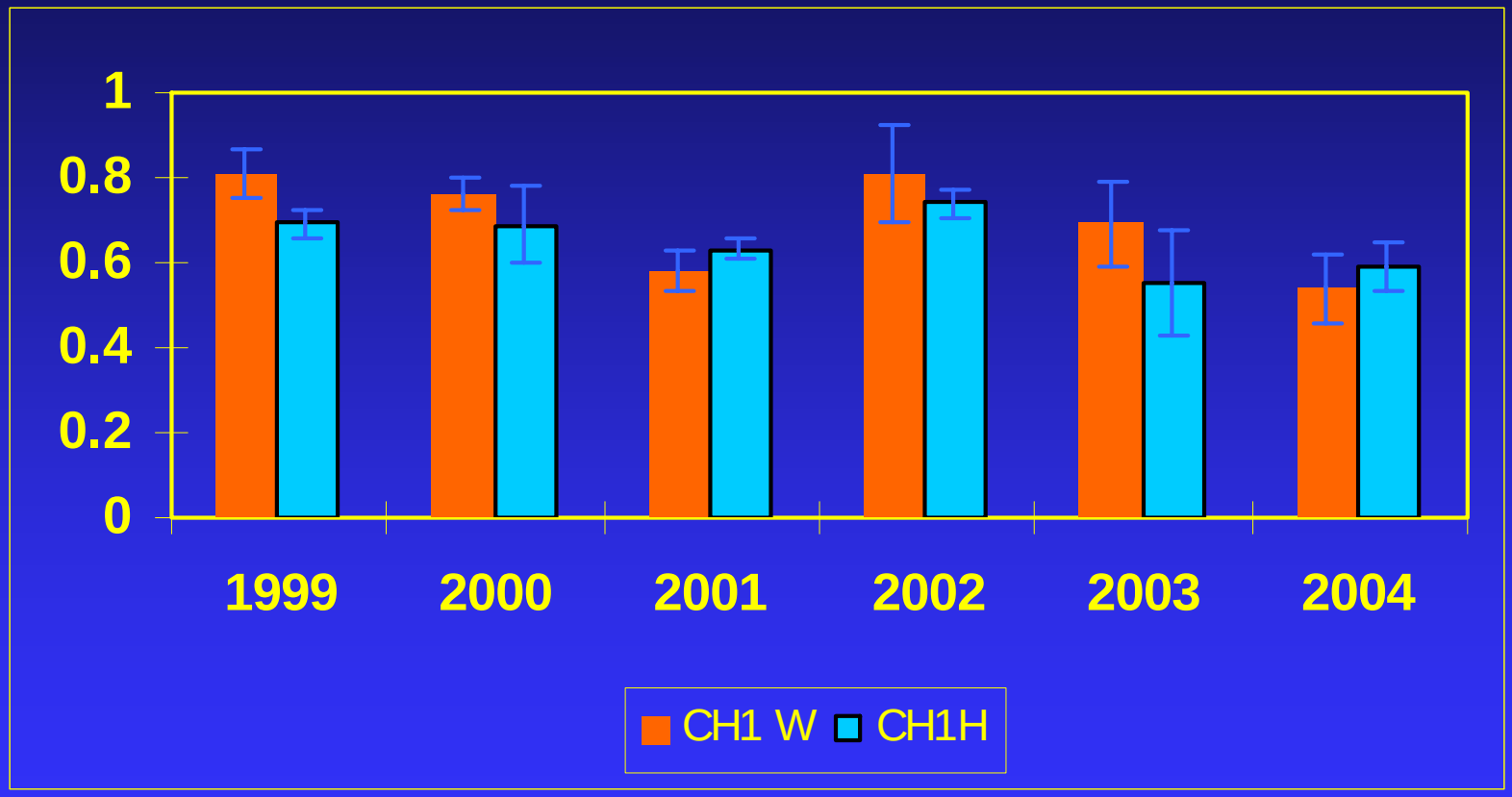
Yearling Chinook at Little Goose 2004



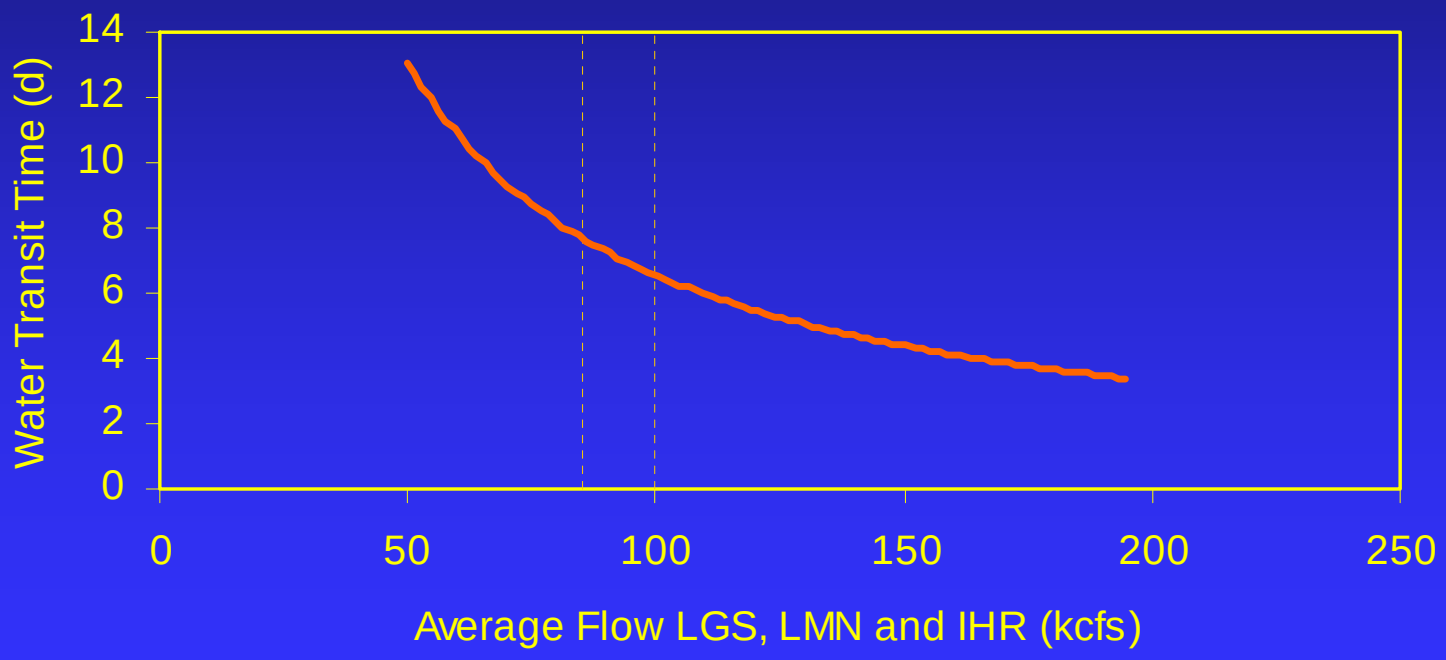
Yearling Chinook at Lower Mon. 2004



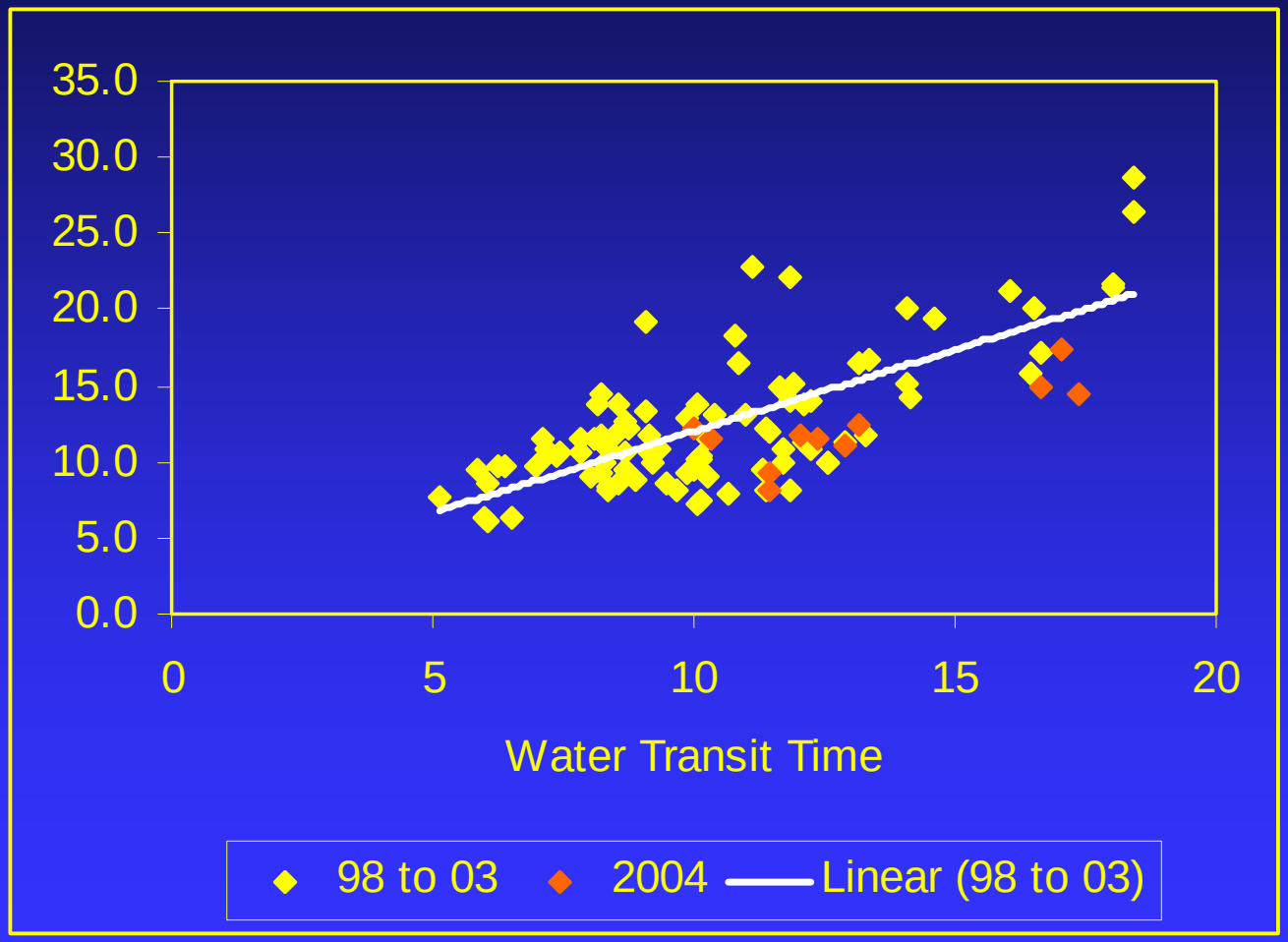
Survival of Yearling Chinook from Salmon R Trap to LMN



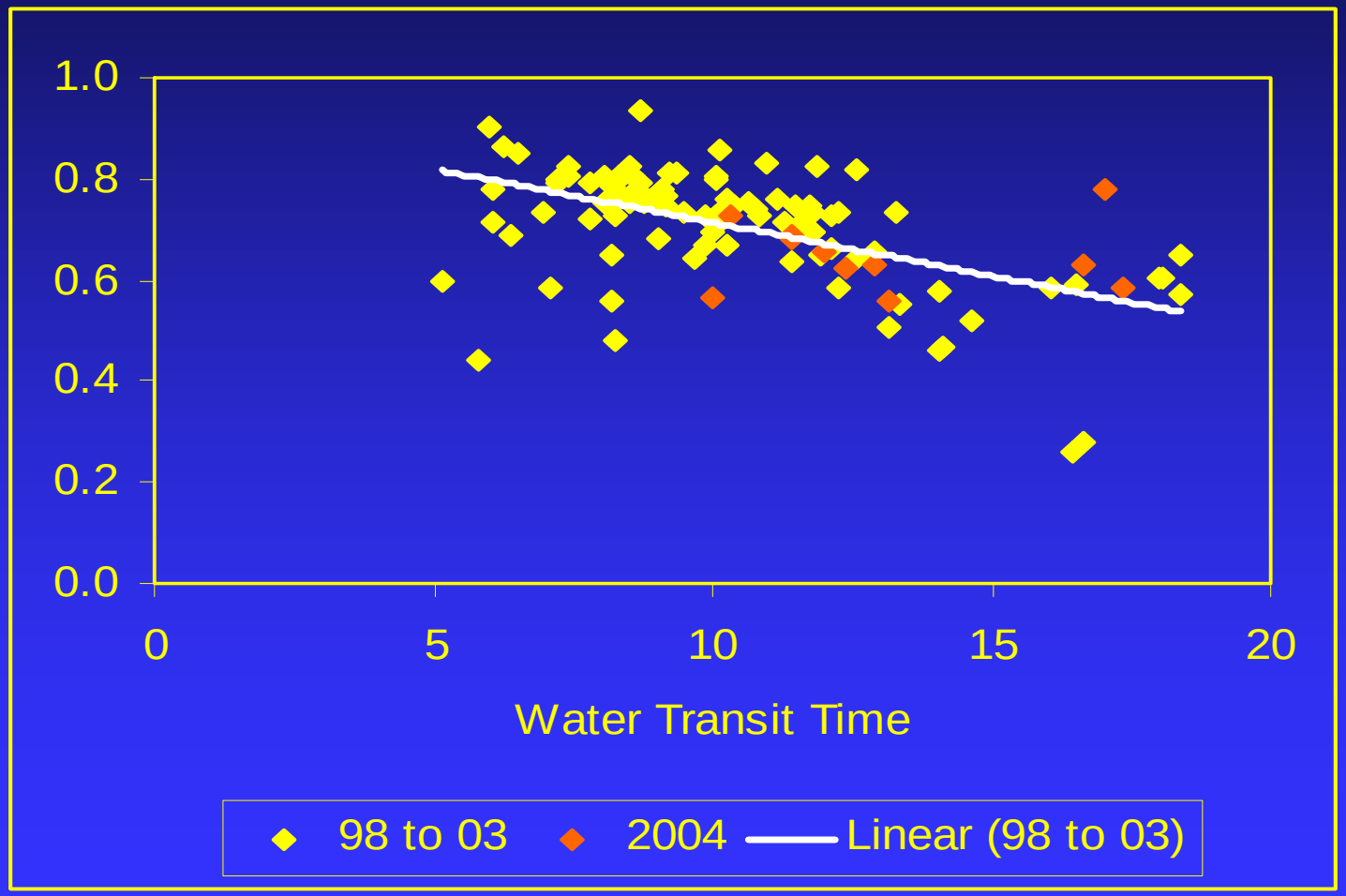
Water Transit Time Lower Granite to Tailwater Ice Harbor Dam versus average flow at LGS, LMN and IHR dams



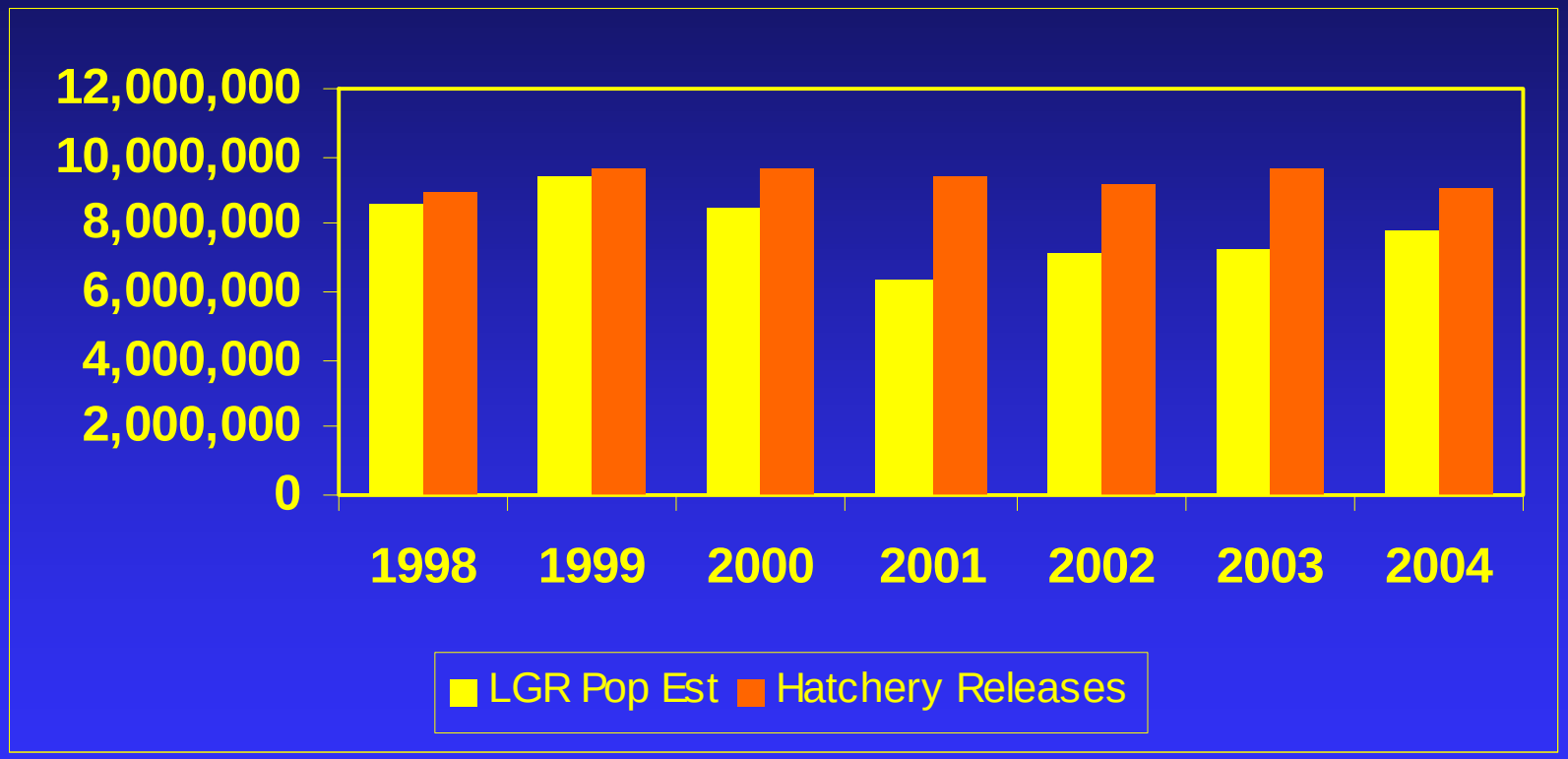
Travel Time LGR to MCN for Hatchery and Wild Yearling Chinook '98 to '03 and 2004



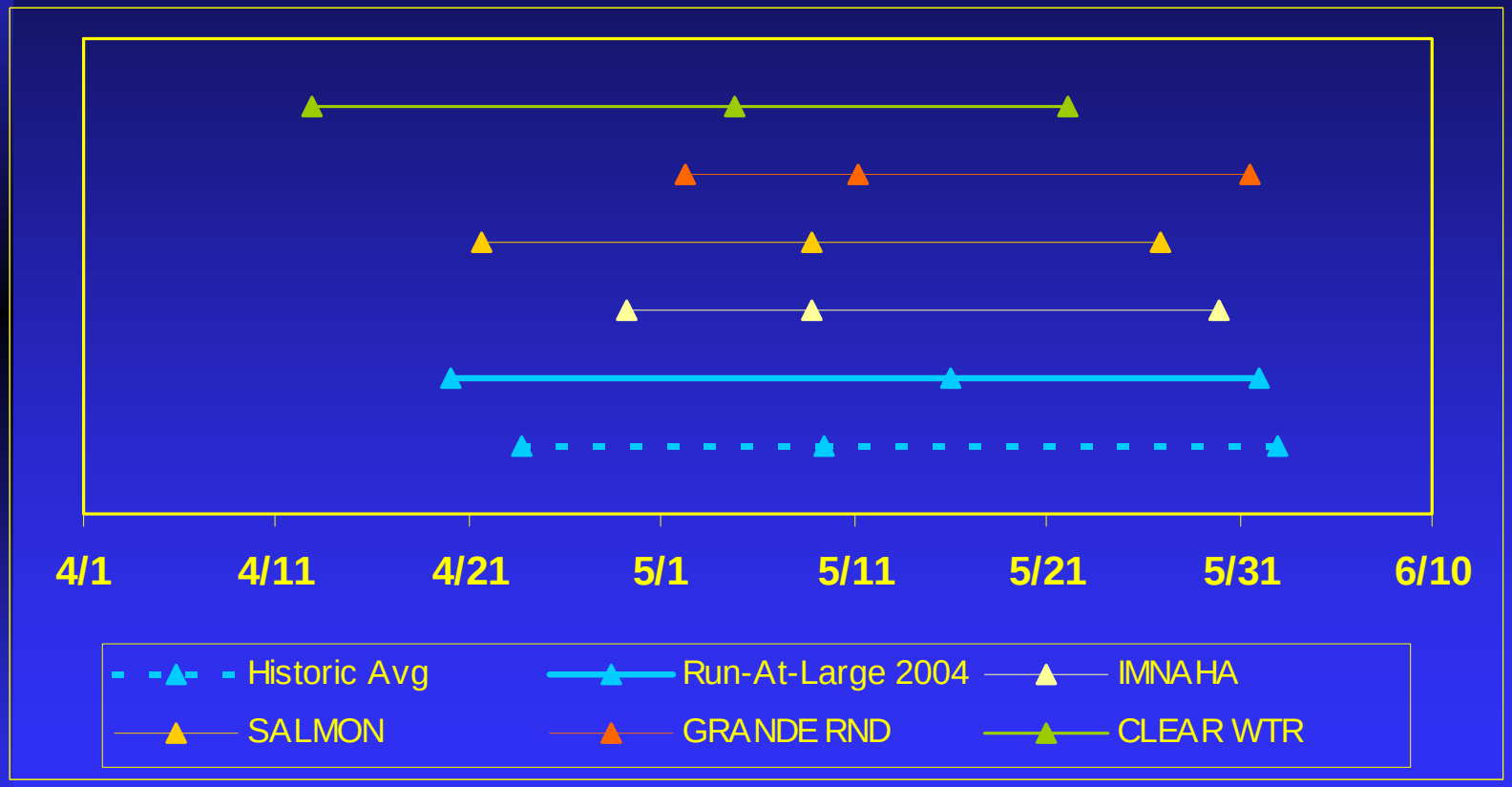
Survival LGR to MCN for Hatchery and Wild Yearling Chinook ‘98 to ’03 and 2004



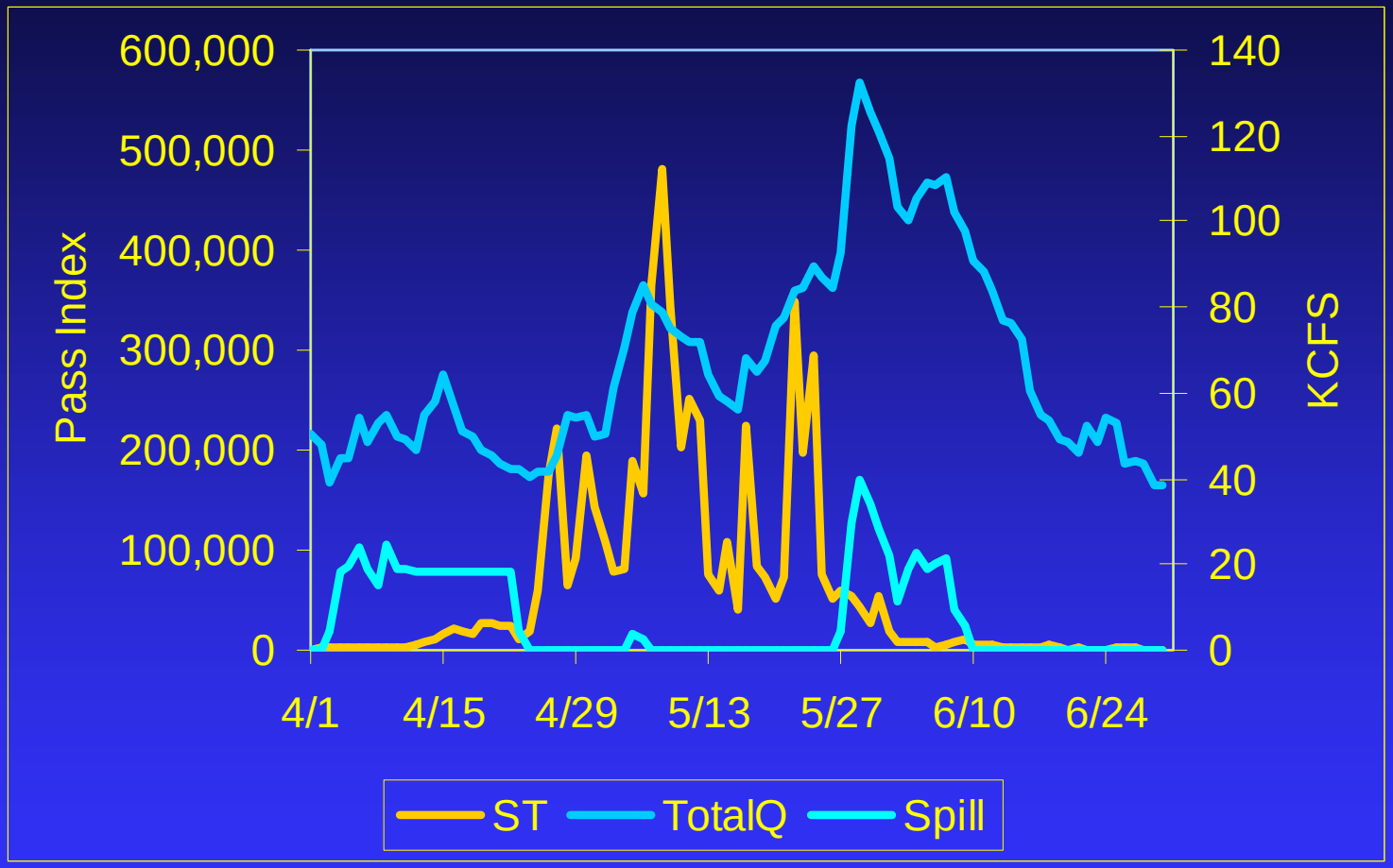
Combined H&W Steelhead Population at Lower Granite and Hatchery Releases



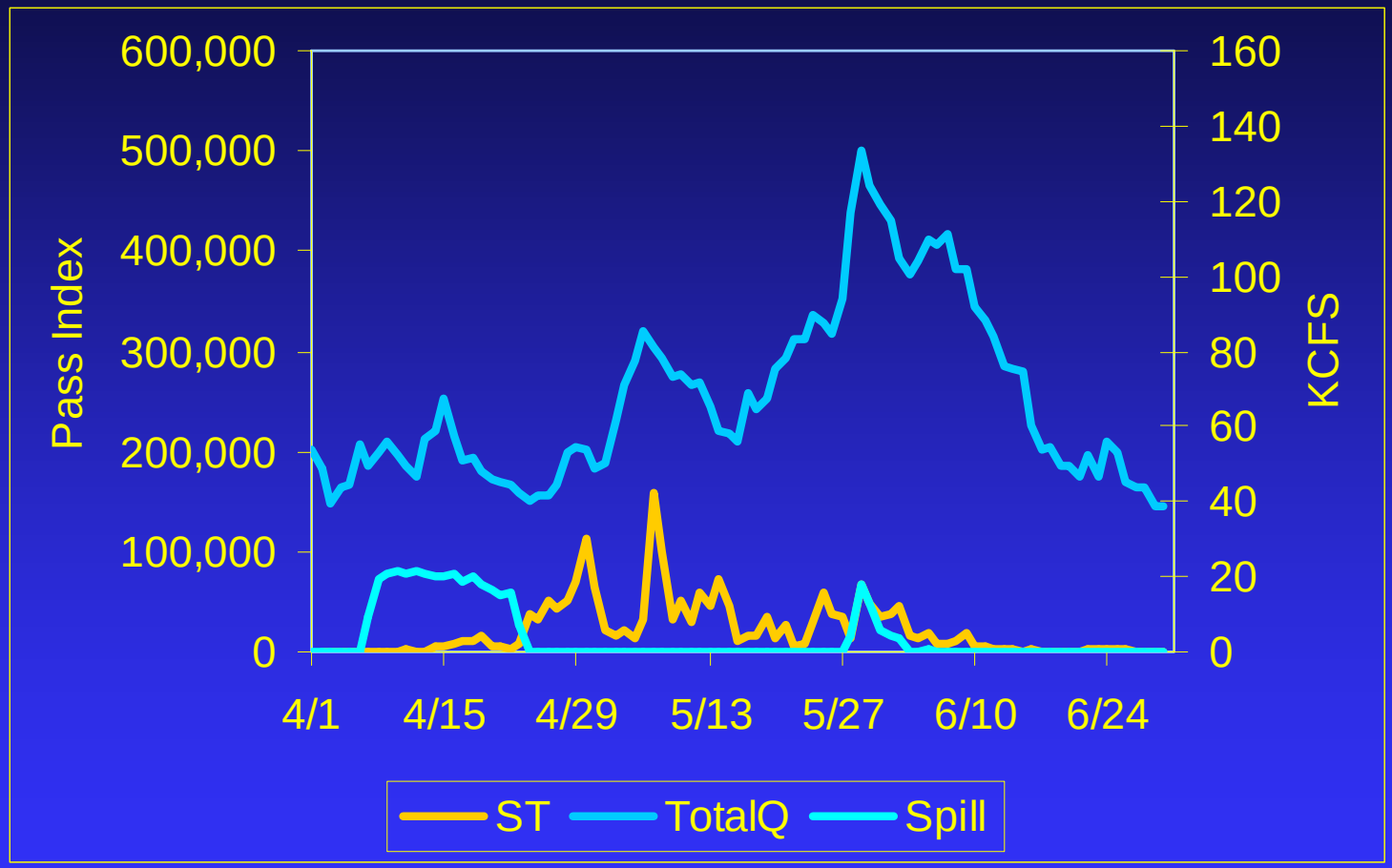
Steelhead Timing at Lower Granite



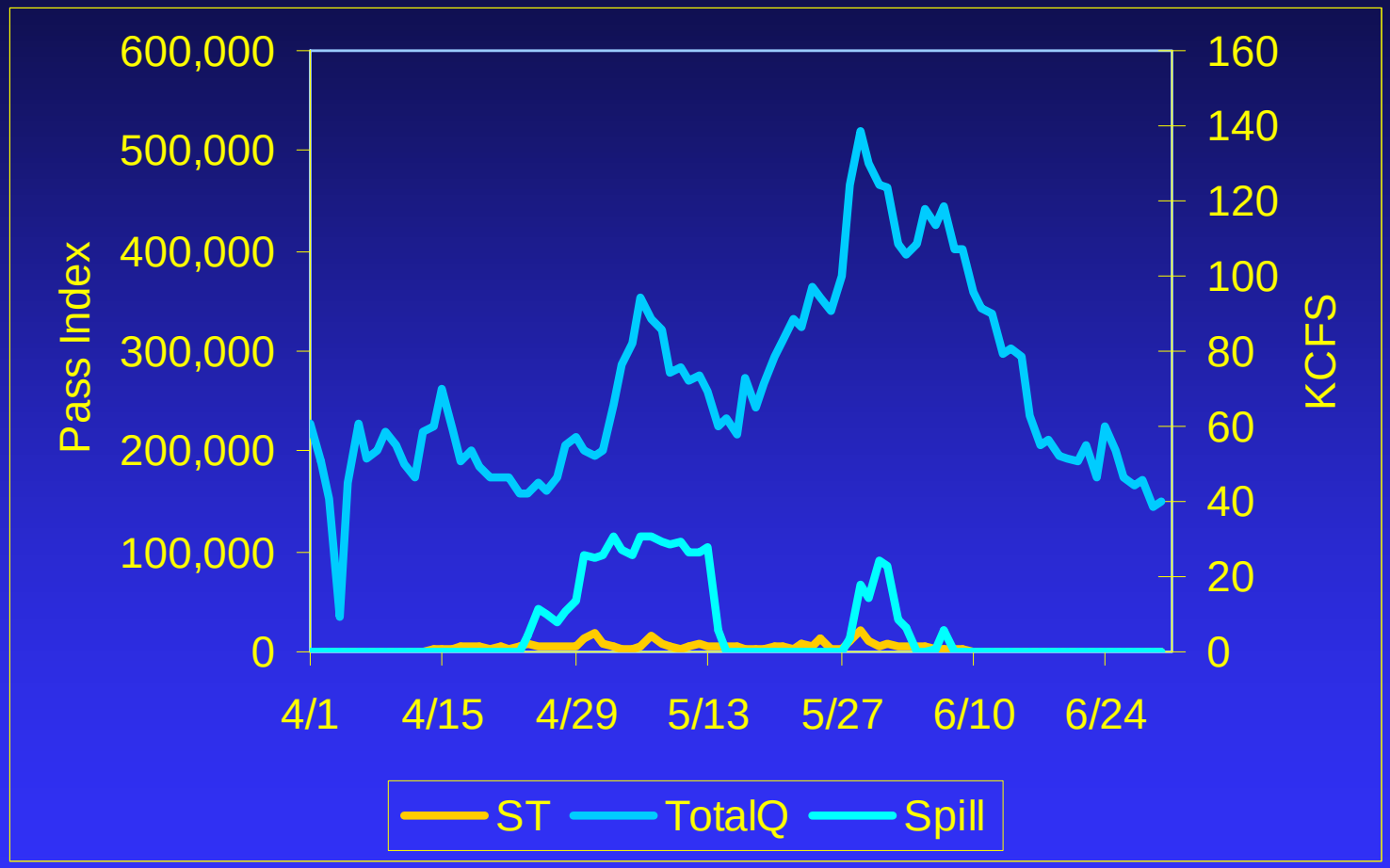
Steelhead at Lower Granite 2004



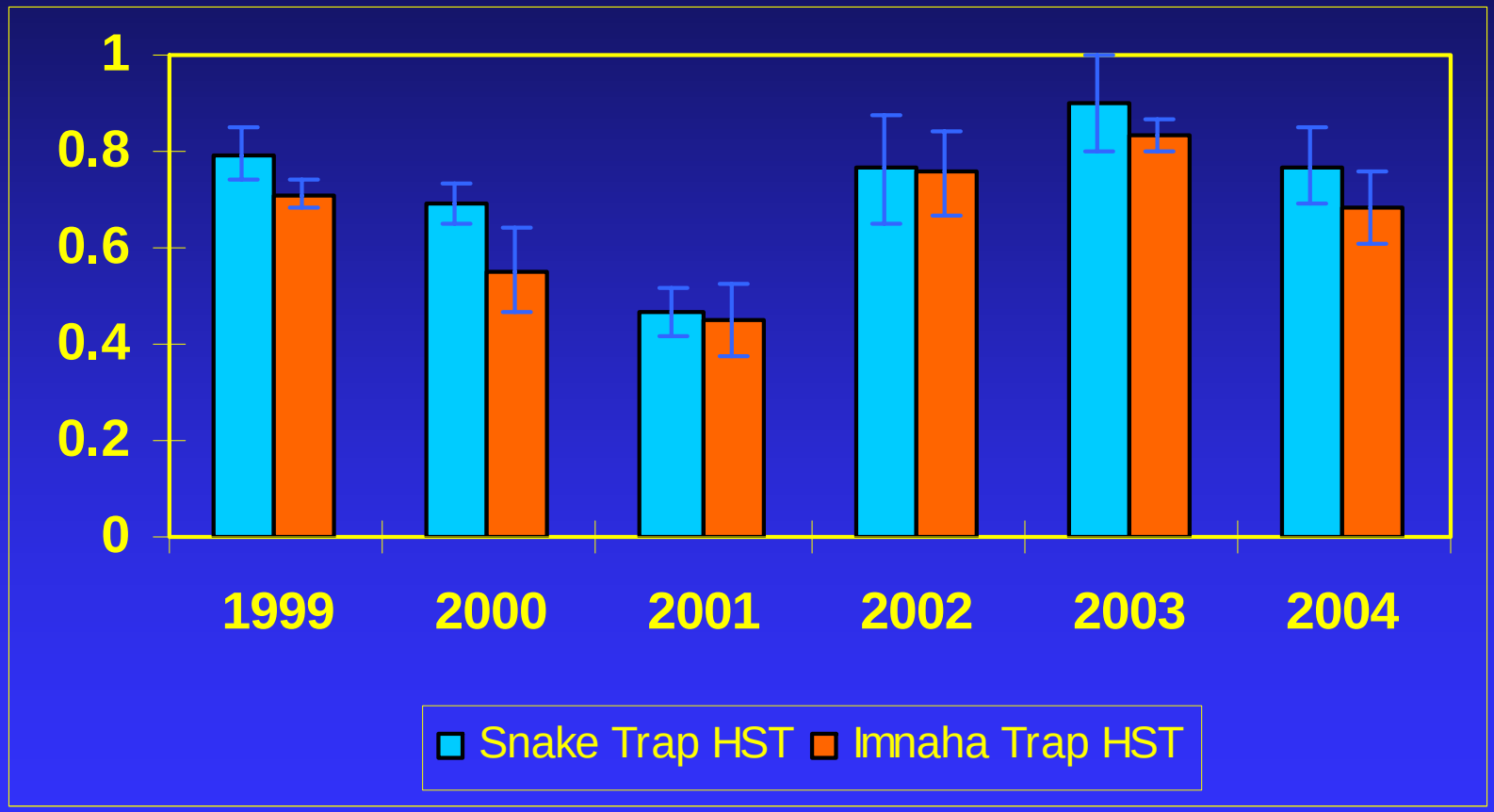
Steelhead at Little Goose 2004



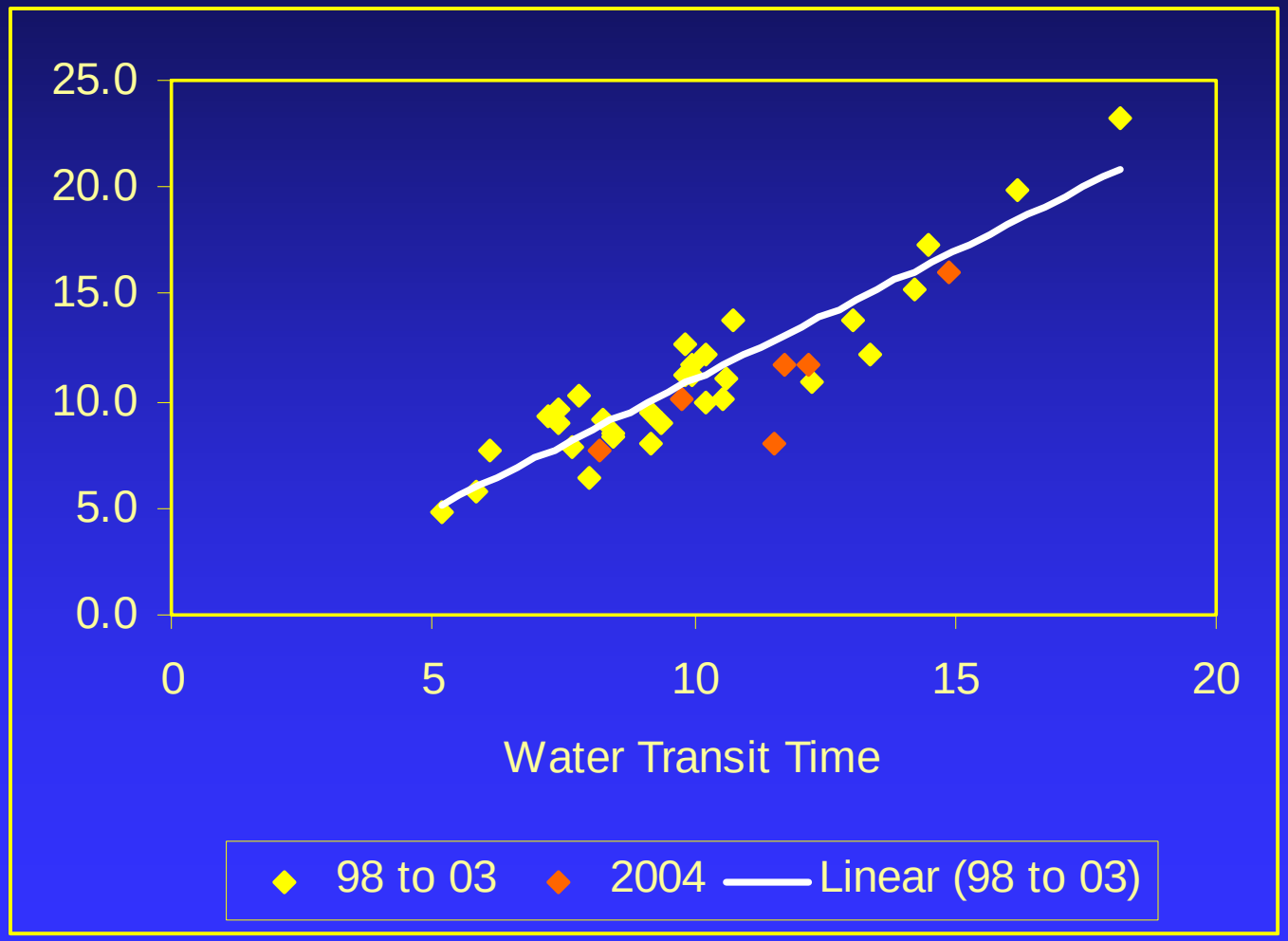
Steelhead at Lower Mon. 2004



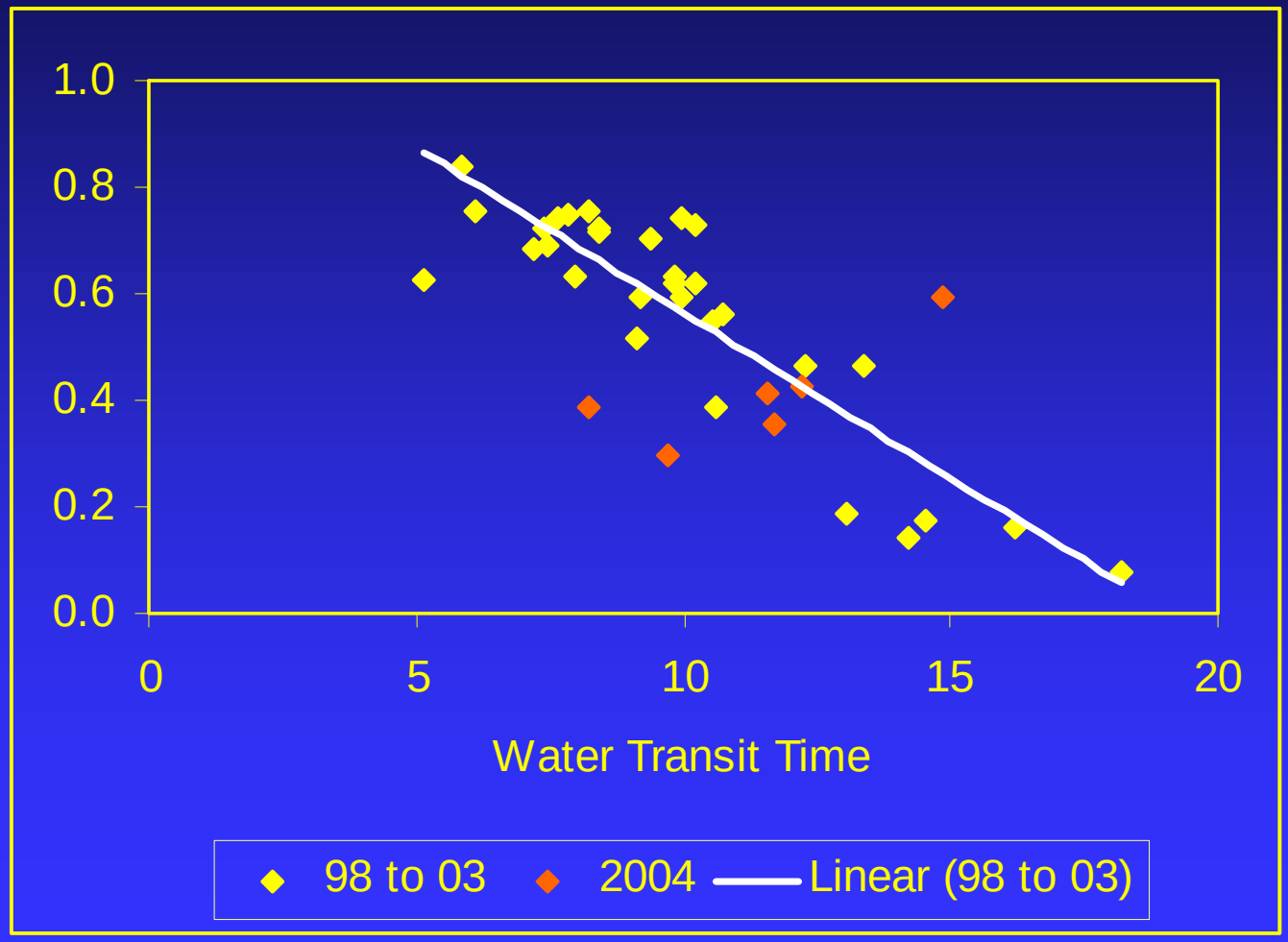
Survival of Hatchery Steelhead from Traps to LMN



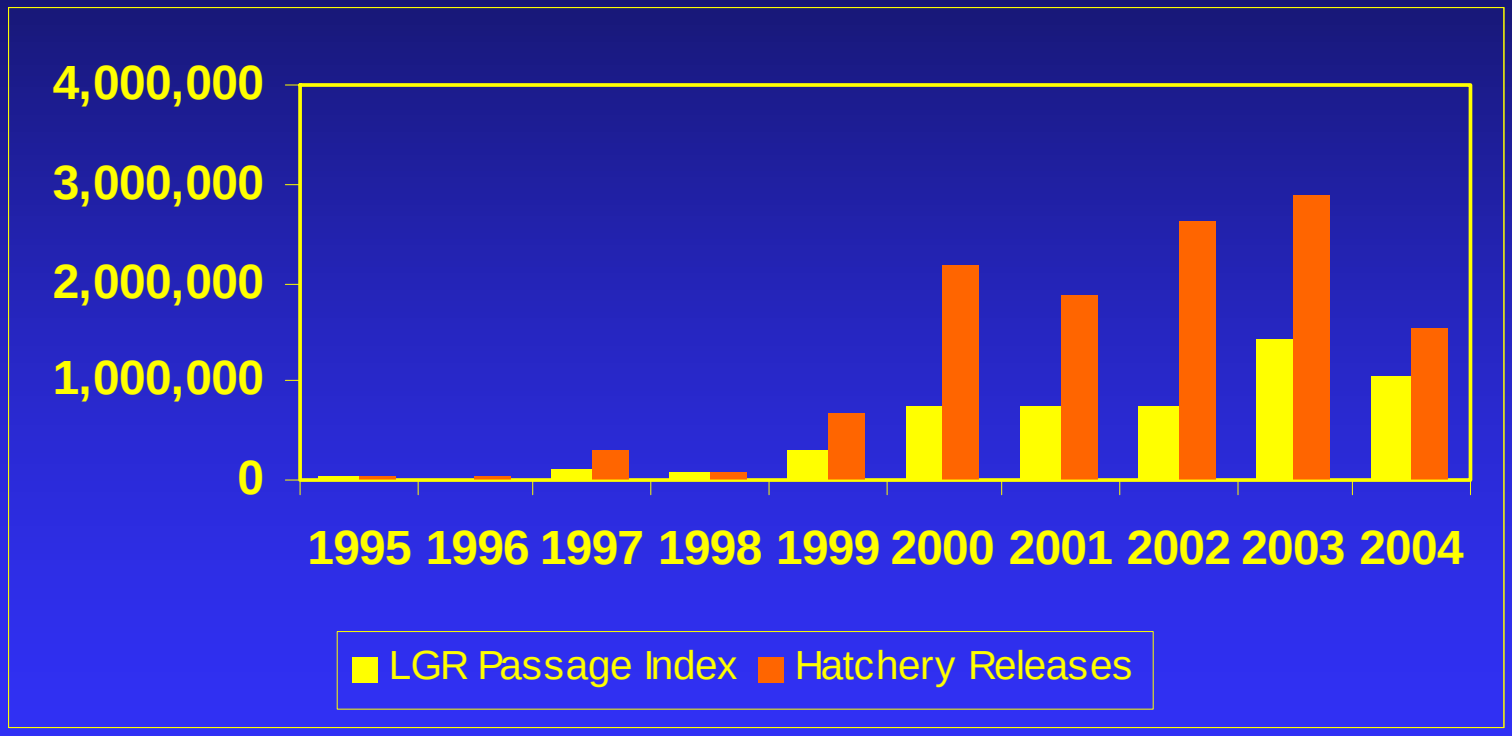
Travel Time LGR to MCN for Steelhead '98 to '03 and 2004



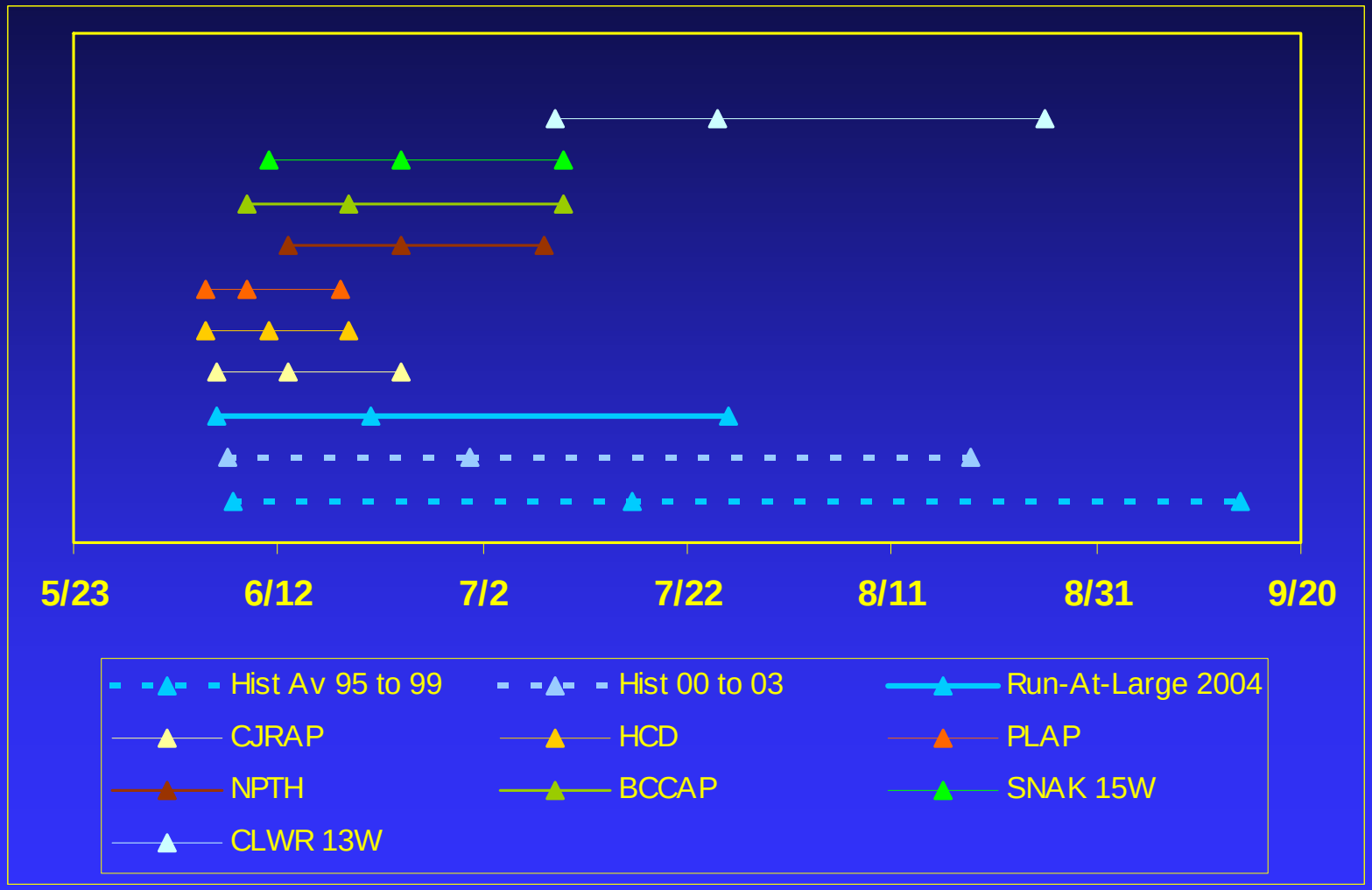
Survival LGR to MCN for Steelhead '98 to '03 and 2004



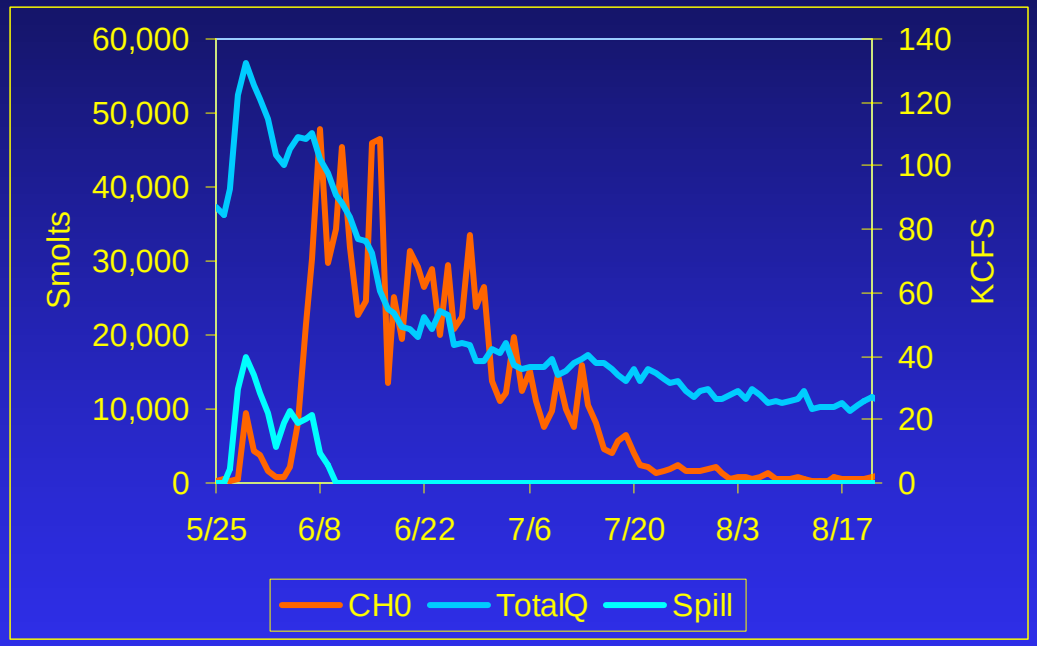
Hatchery/Supplementation Releases of Subyearling Chinook above LGR



Subyearling Chinook Timing at LGR



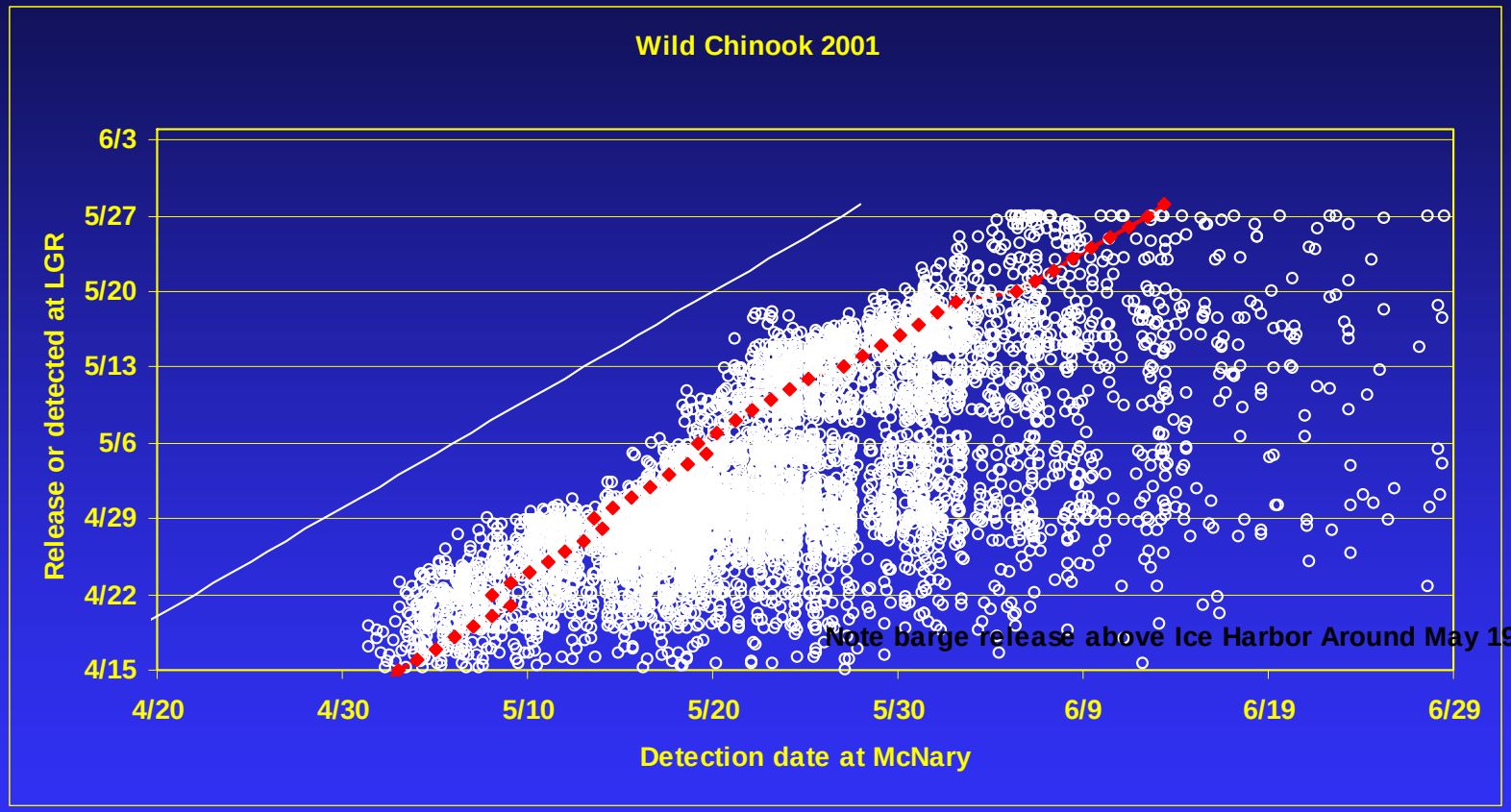
Subyearling Chinook at LGR 2004



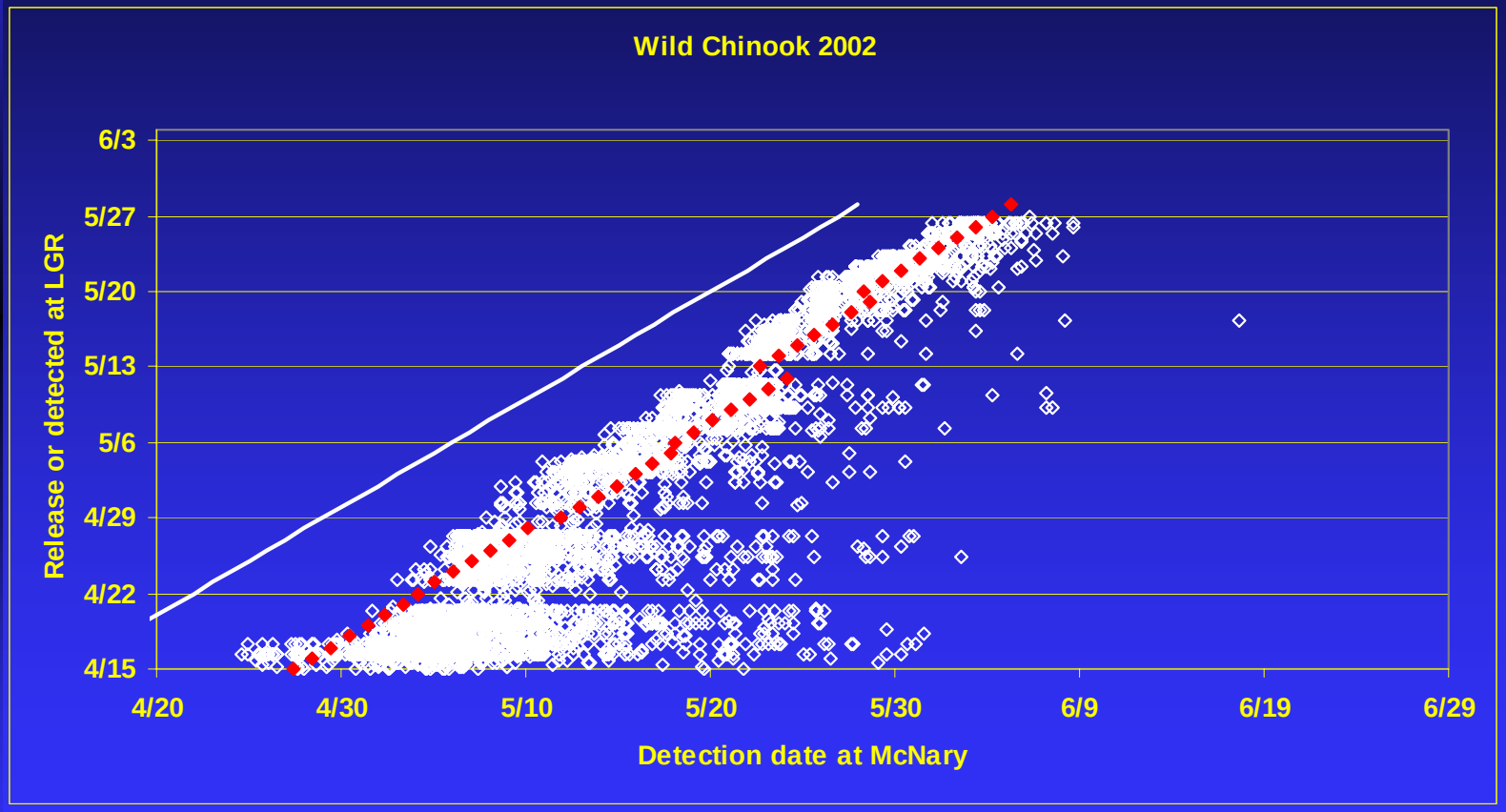
Conclusions

- Population size at LGR large in spring
- Operations at LGR, LGS maximized transport and made poorer in-river conditions
- Low Survival for Snake River yearling chinook and steelhead LGR to MCN reach
- Timing for subyearlings earlier than historic average due to supplementation

Wild Chinook LGR to McNary Travel Time 2001

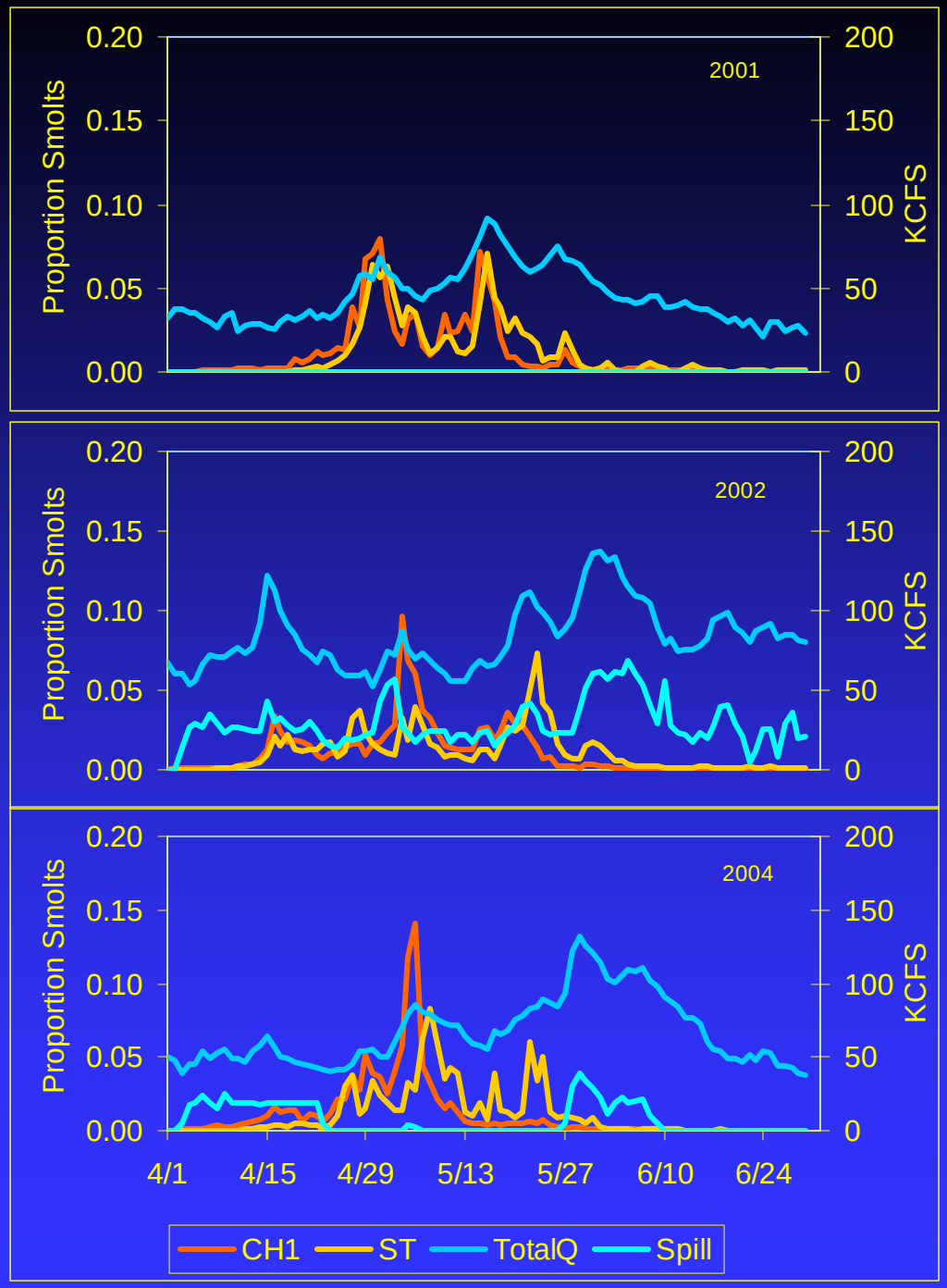


Wild Chinook LGR to McNary Travel Time 2002



Wild Chinook LGR to MCN

	SURVIVAL	*WTT*	*0.1*	*0.5*	*0.9*
SURVIVAL	1				
WTT	-0.546283	1			
0.1	-0.234268	0.644868	1		
0.5	-0.322707	0.661808	0.981807	1	
0.9	-0.570706	0.704685	0.821351	0.886621	1


2001
2002
2004
Proportion Smolts
KCFS
0.20
0.15
0.10
0.05
0.00
200
150
100
50
0
4/1
4/15
4/29
5/13
5/27
6/10
6/24
CH1
ST
TotalQ
Spill