



Slamgeesh Salmon Project 2000 - 2005

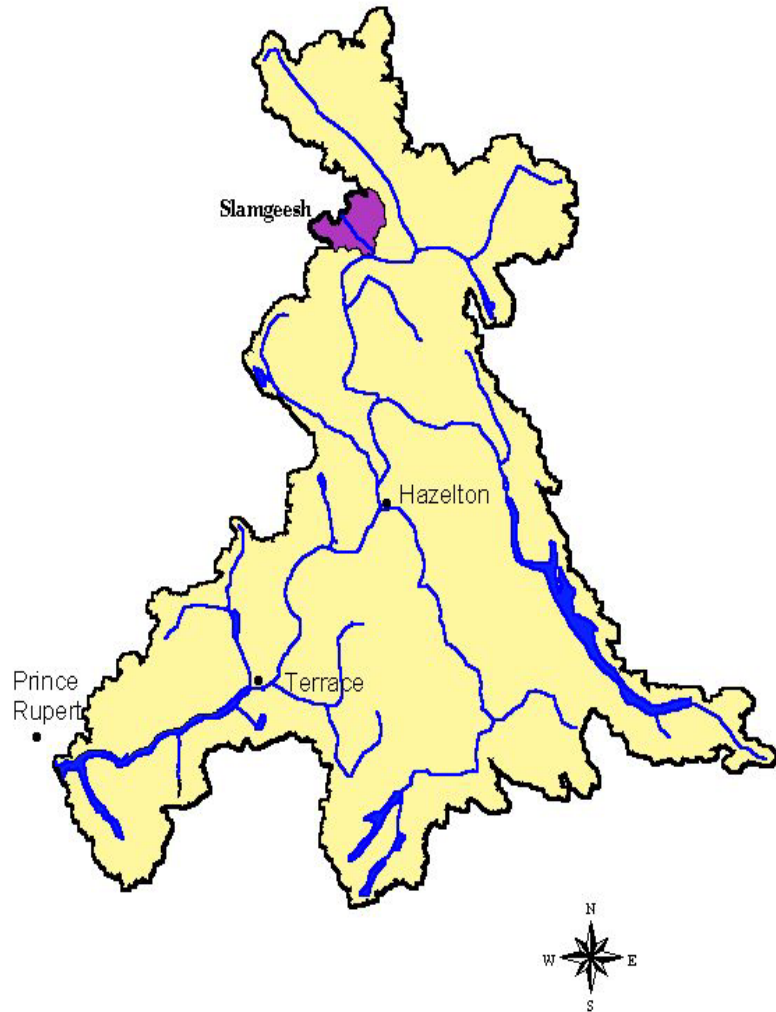
Upper Skeena Watershed

Peter Hall

Gitksan Watershed Authorities

Gitksan Watershed Authorities

Skeena Watershed



• Slangeesh Watershed

- Upper Skeena – High Interior
- Significant coho escapement #'s
- Small wild sockeye stock
- Lake-headed system
- Historical Gitksan occupation

• SX & CO Full Index Site

- Smolt population estimates
- Smolt adipose clipping
- Adult escapement counts
- Freshwater & Marine survival rates

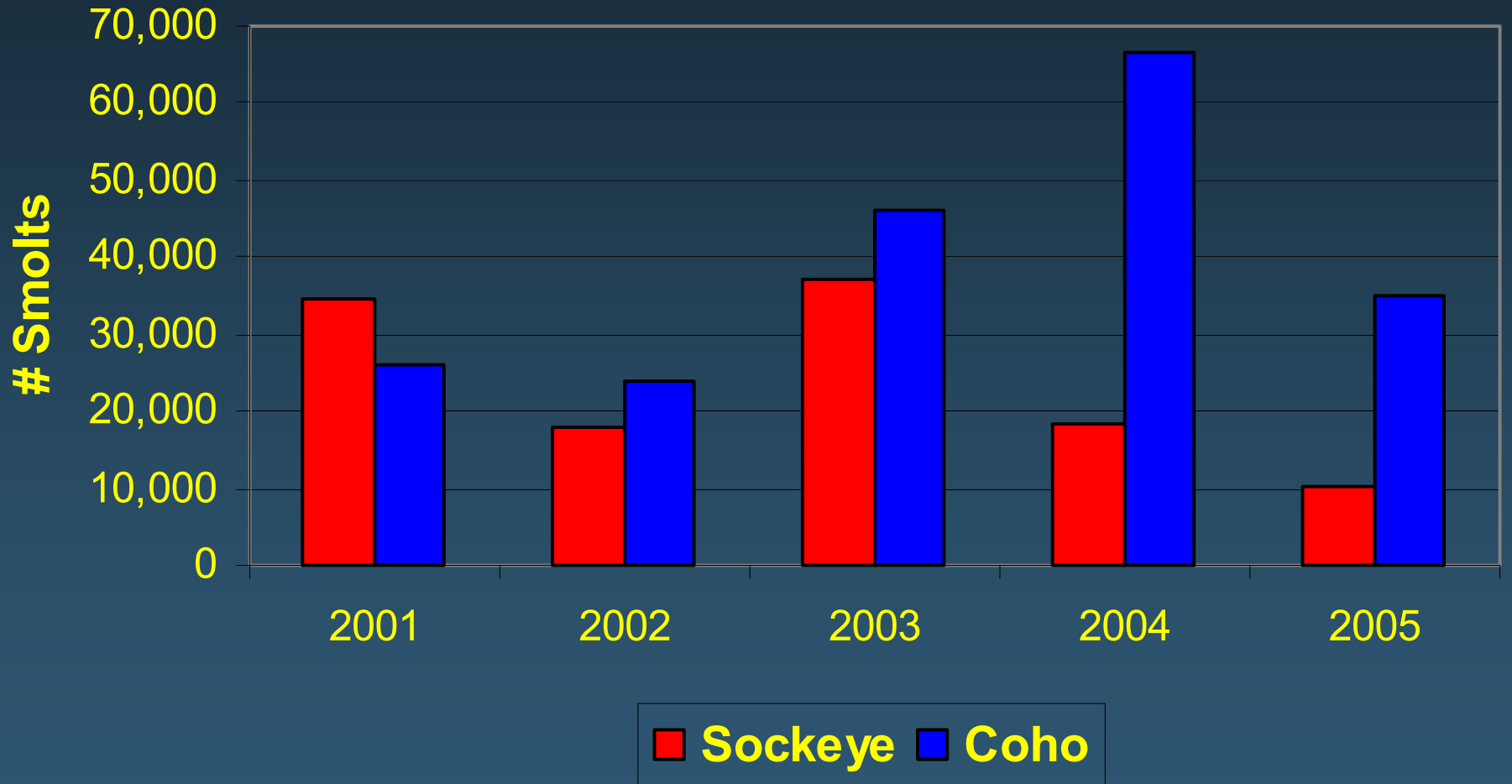
Sockeye Smolts (combined traps)

Year	Caught	Marked and Released	Recaptured	% Recaptured	Estimate
2001	9,125	4,198	1,134	27%	34,567
2002	10,096	4,966	2,264	46%	17,842
2003	6,945	5,319	992	19%	37,344
2004	8,301	5,432	2,053	38%	18,560
2005	2,084	1,640	386	24%	10,326

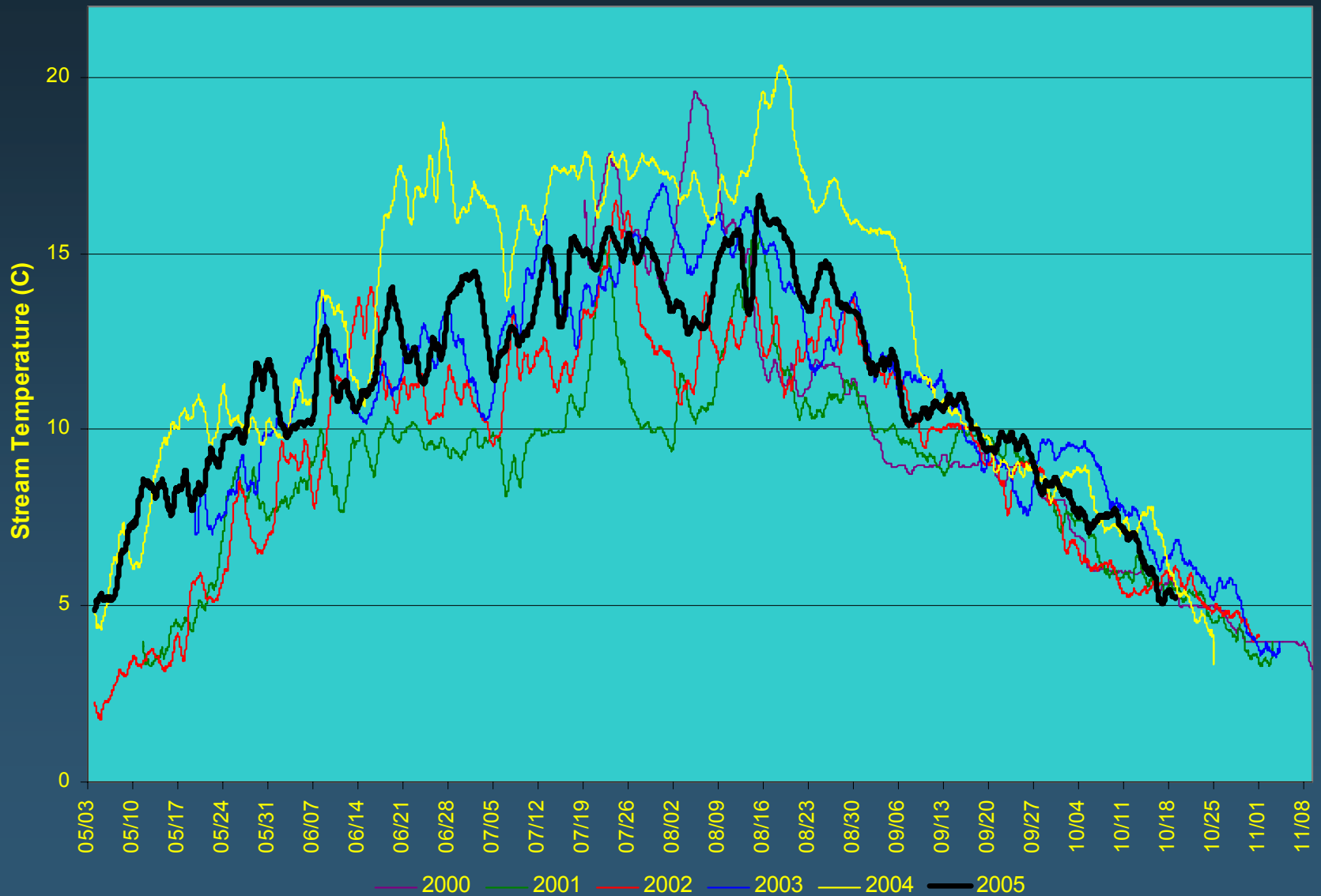
Coho Smolts (combined traps)

Year	Caught	Marked and Released	Recaptured	% Recaptured	Estimate
2001	5,591	1,974	413	21%	25,875
2002	3,249	1,372	226	16%	23,871
2003	6,871	5,156	753	15%	46,000
2004	16,242	11,739	3,234	28%	66,648
2005	6,815	5,005	1,145	23%	34,875

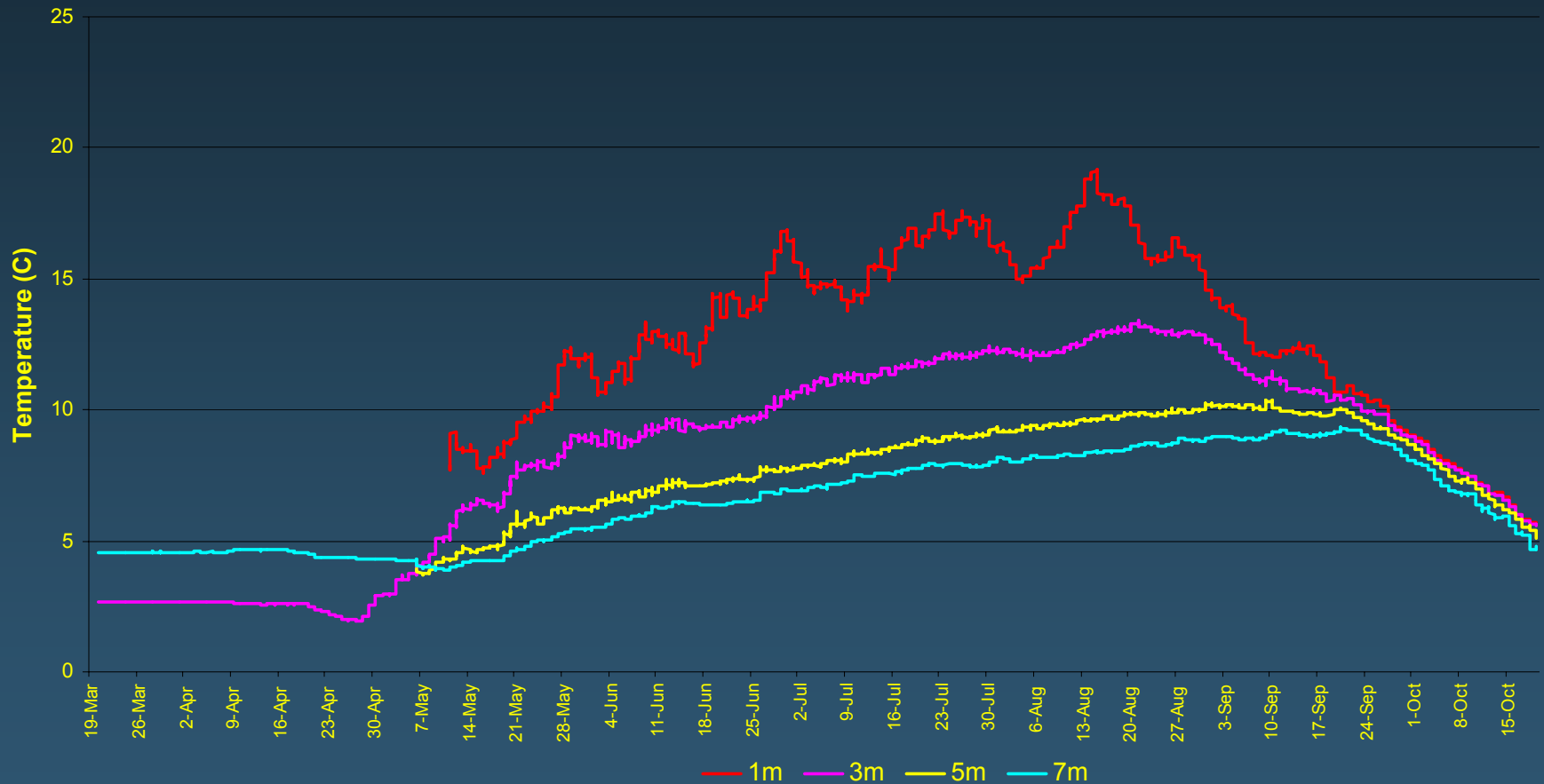
Slamgeesh Sockeye and Coho Annual Smolt Production



Damshilgwet Creek Water Temperatures 2001 - 2005



Slamgeesh Lake Vertical Temperature Profile Summer - 2005



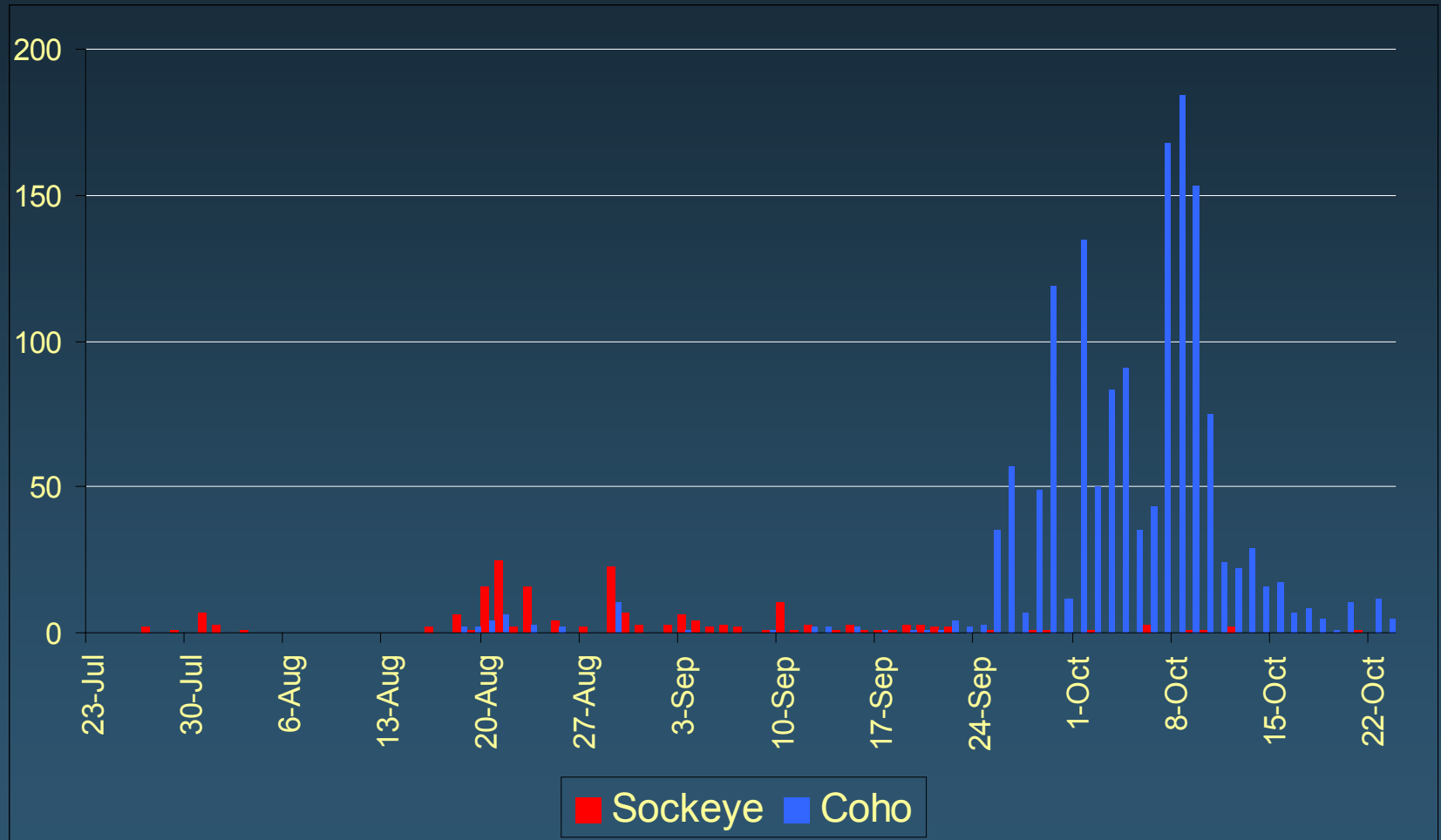
Slamgeesh Sockeye Smolts

Year	Avg. Smolt Pop. Est.	Average Weight (g)	Relative Lake Temp.	% Age 2.0
2001	3.46×10^4	10.0	?	0.0%
2002	1.94×10^4	9.2	Medium	0.3%
2003	3.77×10^4	8.6	Coollest	2.9%
2004	1.89×10^4	12.6	Warm	1.6%
2005	1.03×10^4	10.7	Warmest	?

Slamgeesh/Damshilgwet Lake Sockeye Smolt Carrying Capacity

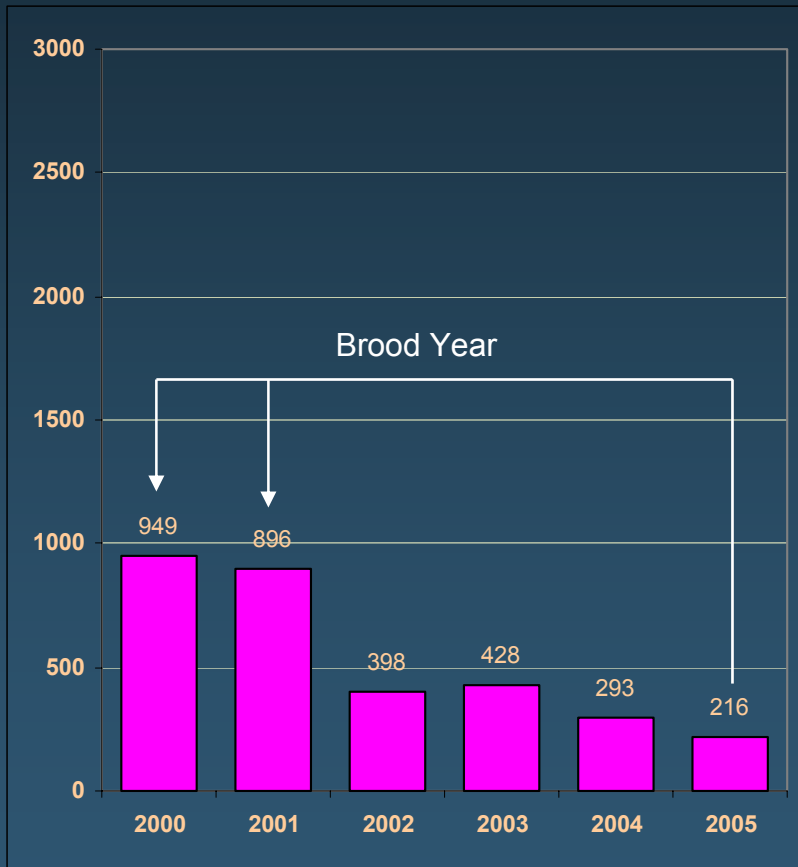
Smolt Year	Avg. Smolt Pop. Est.	Average Weight (g)	Est. Biomass (kg)	Slamgeesh Lake Rmax (kg)	Slamgeesh System Rmax (kg)	% Rmax
2001	3.46×10^4	10.0	346	200	394	88%
2002	1.94×10^4	9.2	178	200	394	45%
2003	3.77×10^4	8.6	324	200	394	82%
2004	1.89×10^4	12.6	238	200	394	60%
2005	1.03×10^4	10.7	110	200	394	28%

Sockeye and Coho Migration Timing 2005

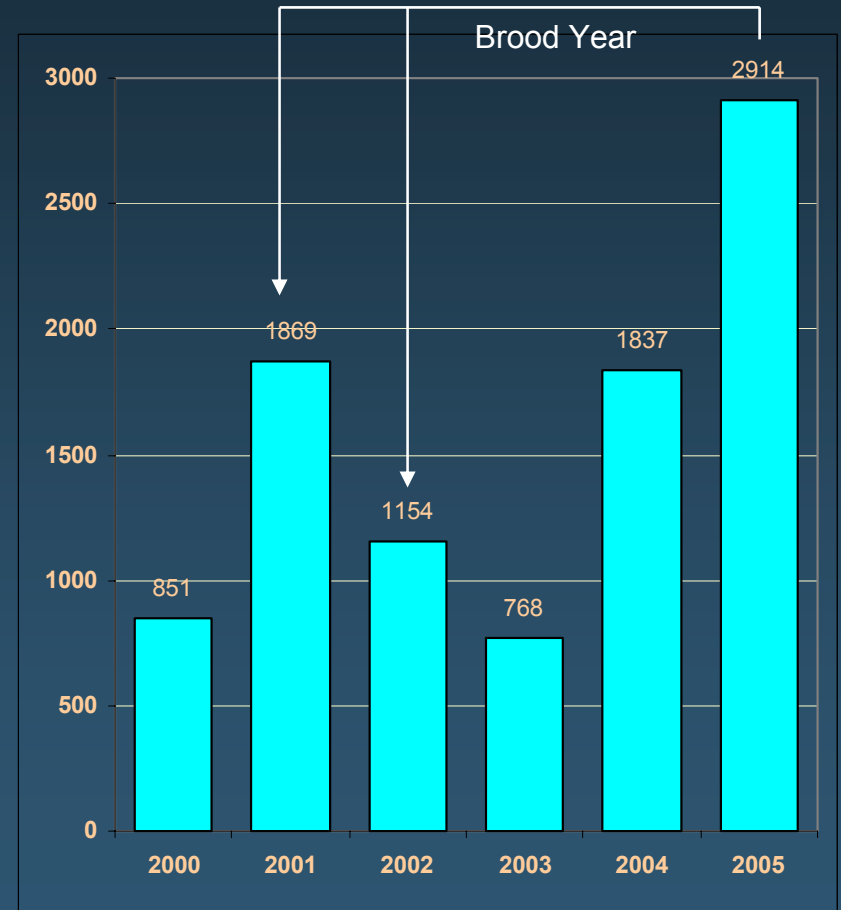


Slamgeesh Adult Escapements

Sockeye



Coho



Coho Exploitation Rates



Coho Survival Rates



Slamgeesh Overview 2000-2005

- **Adult escapements SX & CO 2000-2005**
- **Smolt population estimates 2001-2005**
- **Coho smolt – adult survival rates 2002-2005**
- **Sockeye smolt - adult survival rates 2004-2005**
- **Coho smolt coded-wire tagging**
- **Lake productivity work (Hume *et al.*) 2001**
- **Climate Data 2002 – 2005**
- **Bathymetric maps of Slamgeesh and Damshilgwet lakes**
- **Spawning ground surveys 2000-2005**
- **Bull trout studies 2001-2005**
- **Aquatic vegetation 2000**
- **Gitxsan Cultural Studies - ongoing**