

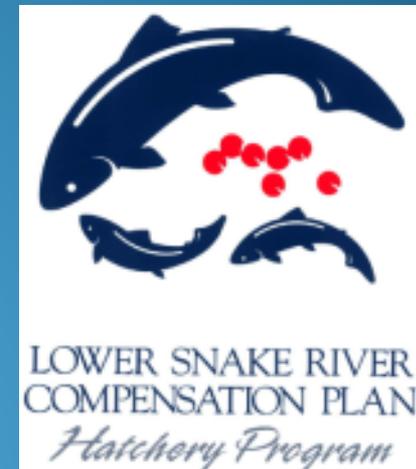
LSRCP Hatchery Mitigation

Snake River Fall Chinook

by

Deborah Milks, WDFW

Bill Young, Jay Hesse,
Bill Arnsberg NPT



Mitigation Goals

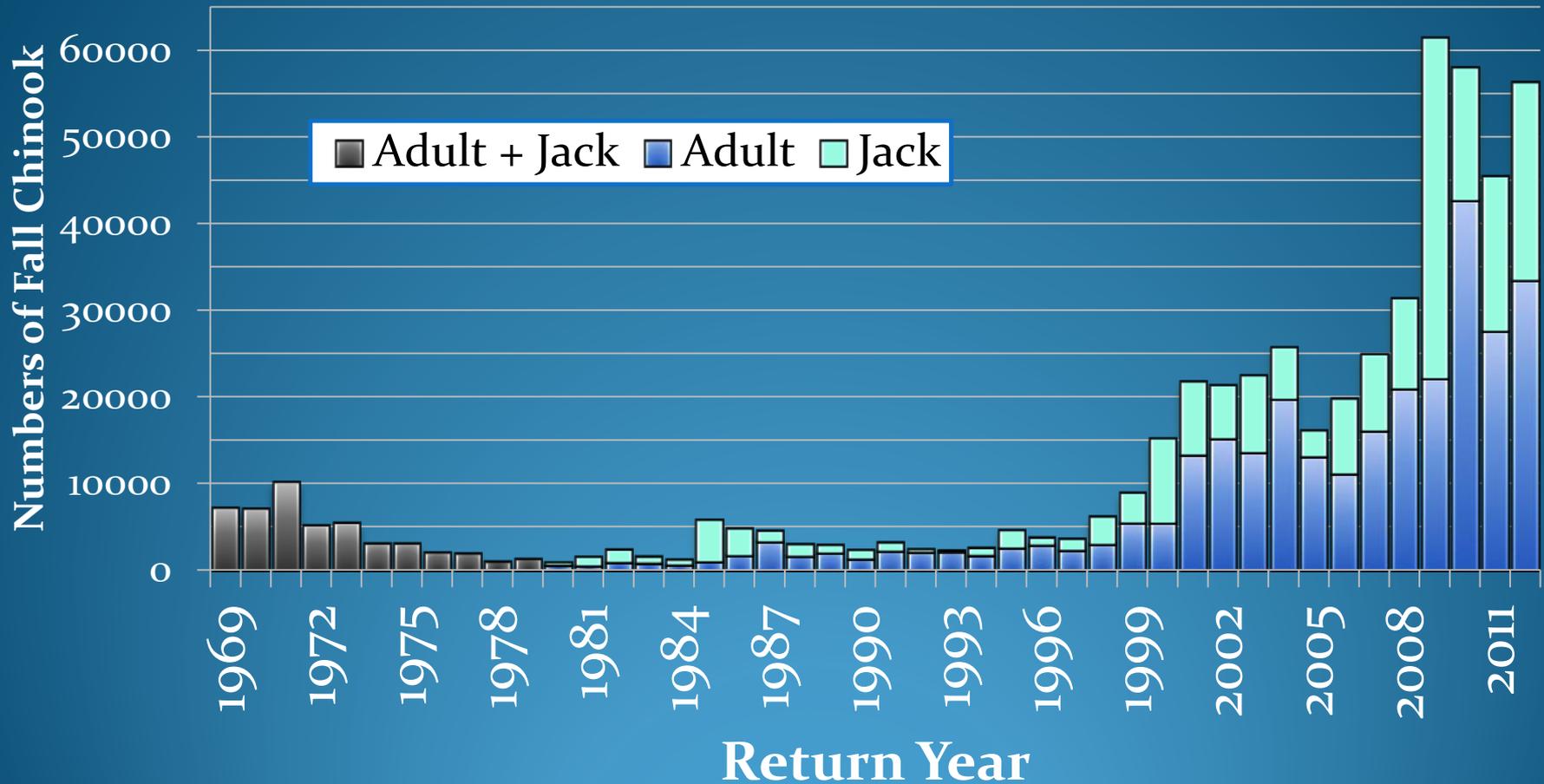
18,300 LSRCP hatchery returns to the Snake River

54,900 Commercial harvest

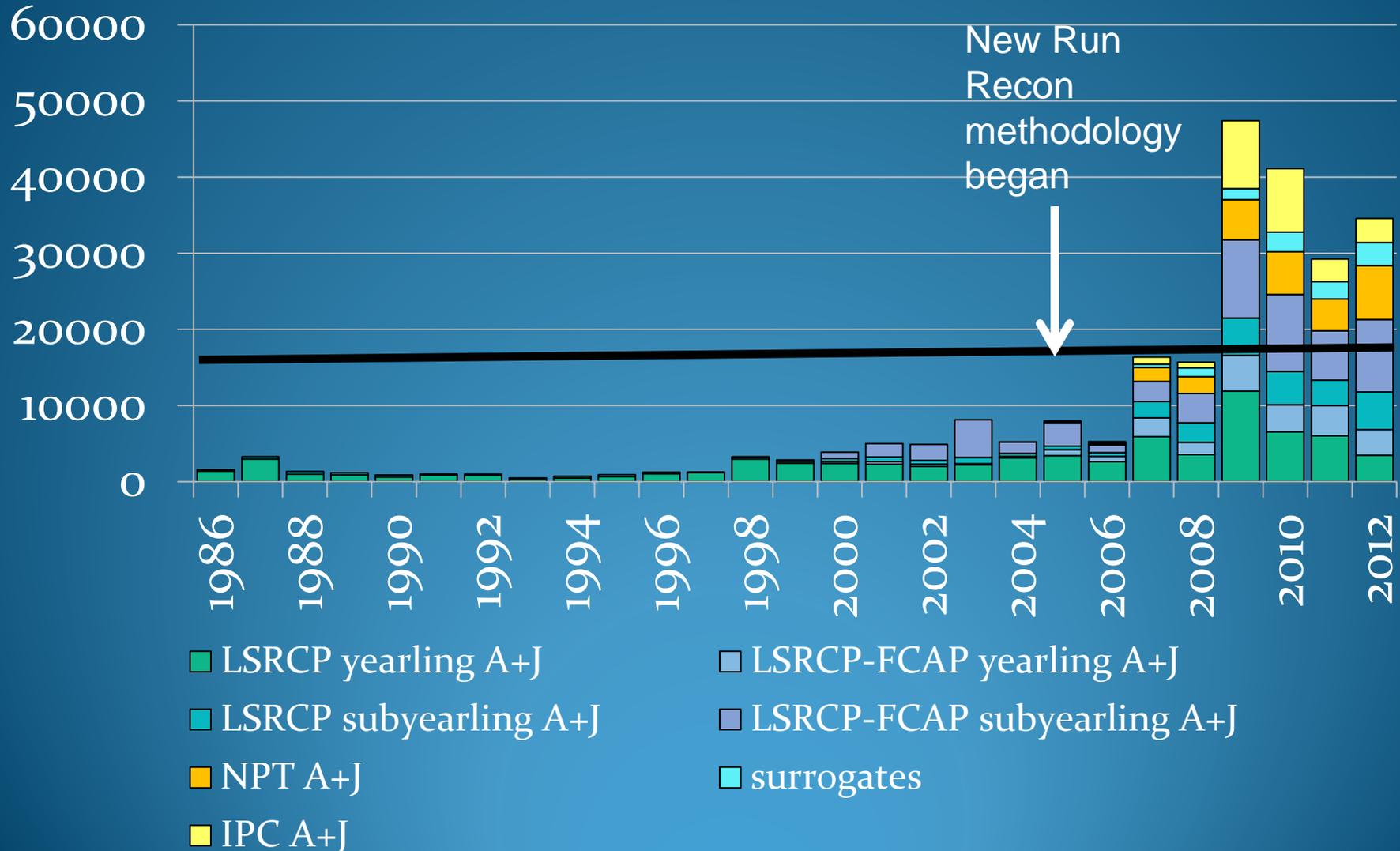
18,300 Sport harvest

91,500 Adults+Jacks

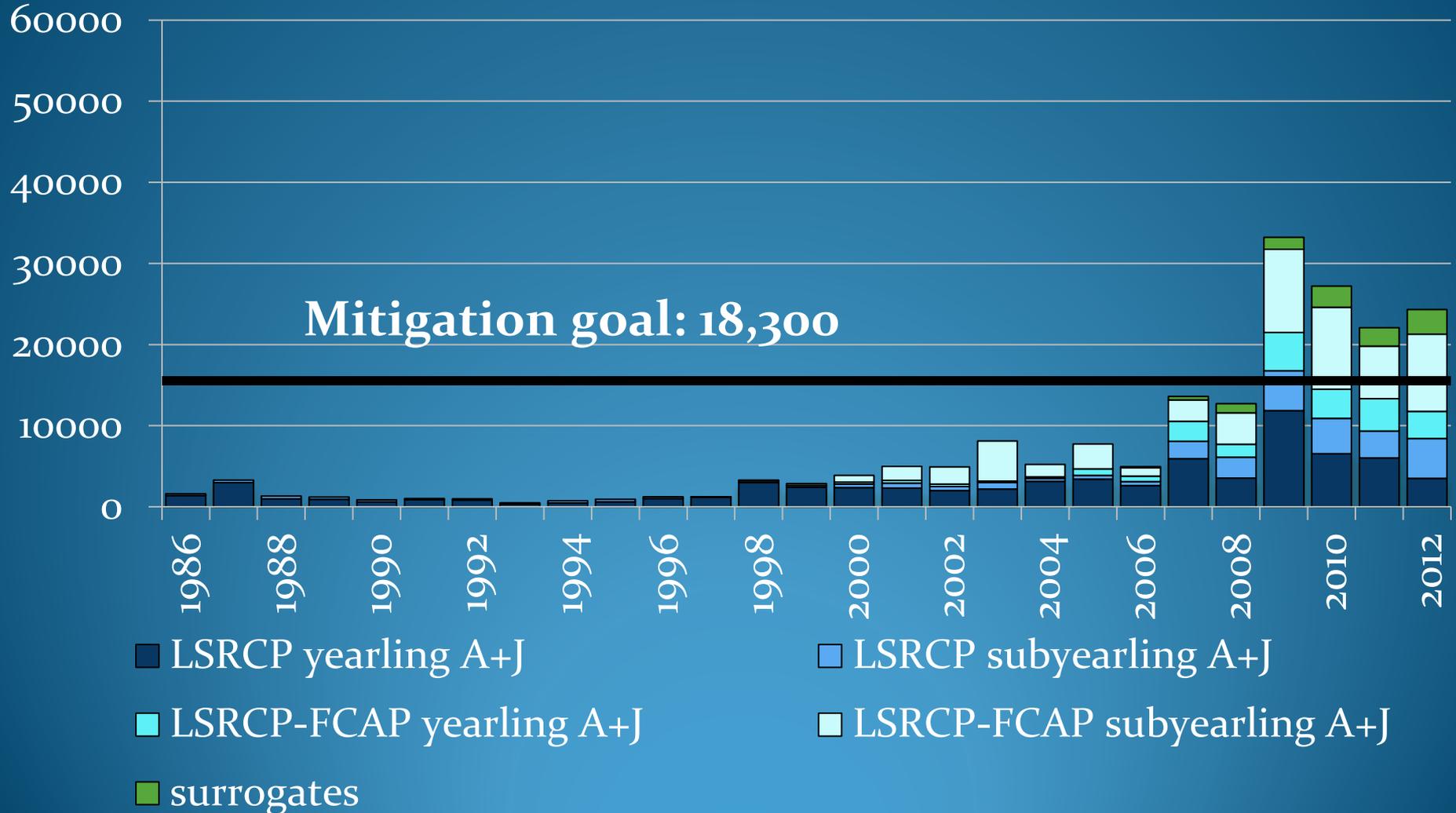
Fish Counts at LMO



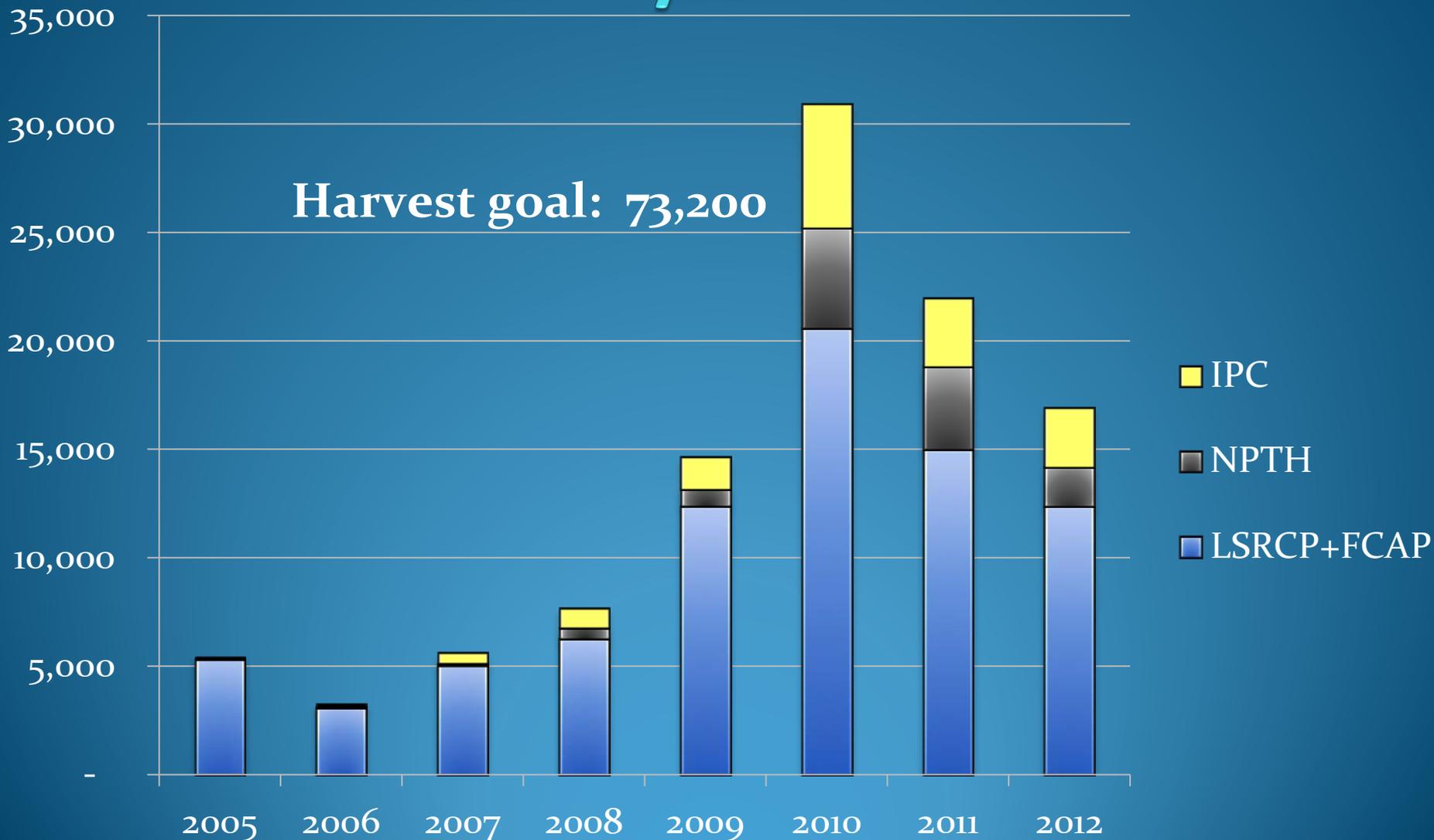
All Snake River Hatchery returns to Snake River



LSRCP returns to Snake River

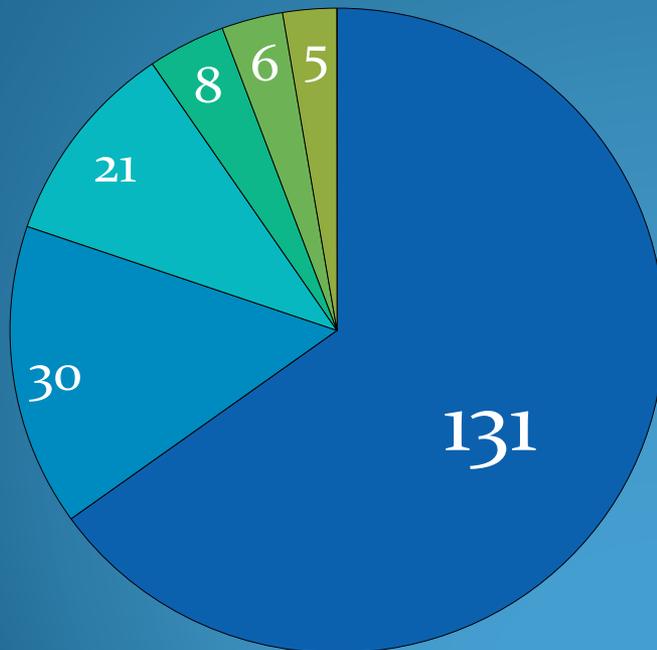


Estimated Harvest Col R/Ocean



Recoveries outside of Snake River Basin Hatchery Returns

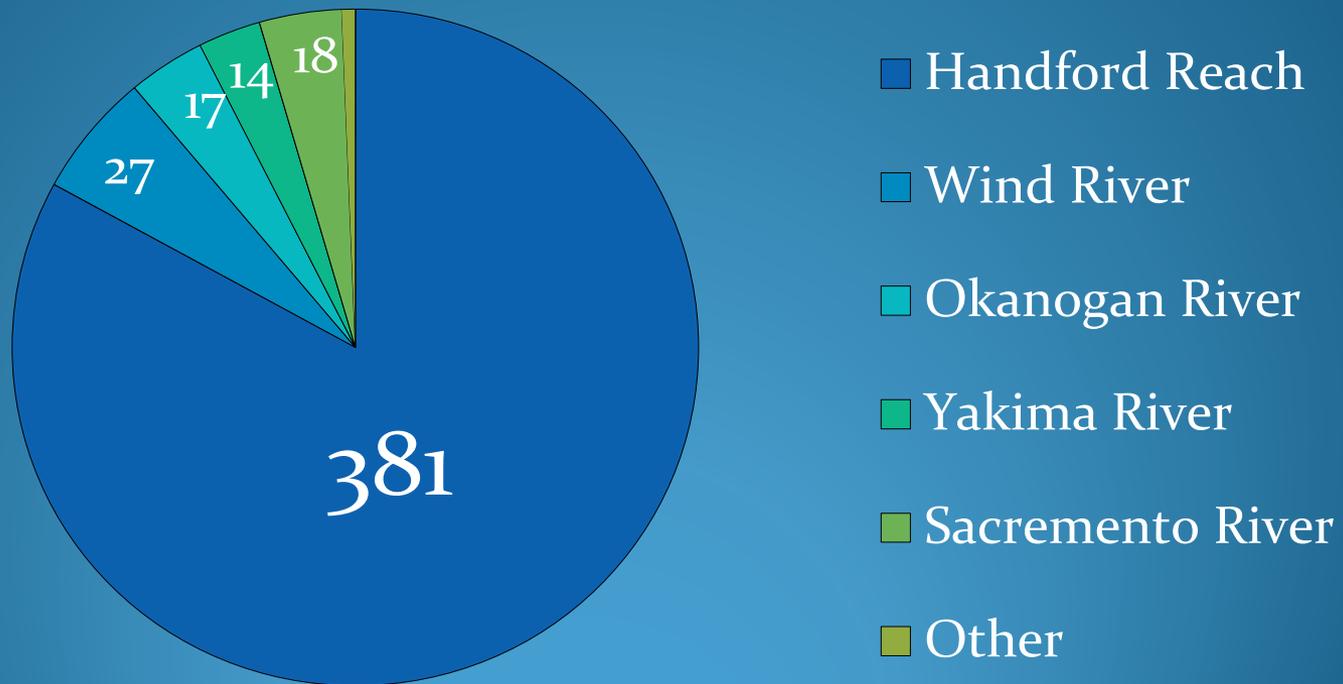
Estimated Recoveries, 2005 - 2012



- Umatilla River
- Priest Rapids Hatchery
- Bonneville Hatchery
- Ringold Springs
- LTL White Salmon
- Other

Recoveries outside of Snake on Spawning Grounds

Estimated Recoveries, 2005 - 2012



Did LSRCP reach their goals?

18,300 LSRCP hatchery returns to the Snake River

Yes ! LSRCP

54,900 Commercial harvest

No

18,300 Sport harvest

No

Return Years
2005-2012

91,500 Adults+Jacks

No!

Reported Col R/Ocean Recoveries by Clip: BY94-BY07

Program	AD clip	No clip	Total
IPC	4,863		4,863
LSRCP	46,150	5,226	51,375
FCAP	20,099	4,591	24,691
NPTH	2,173	1,210	3,382

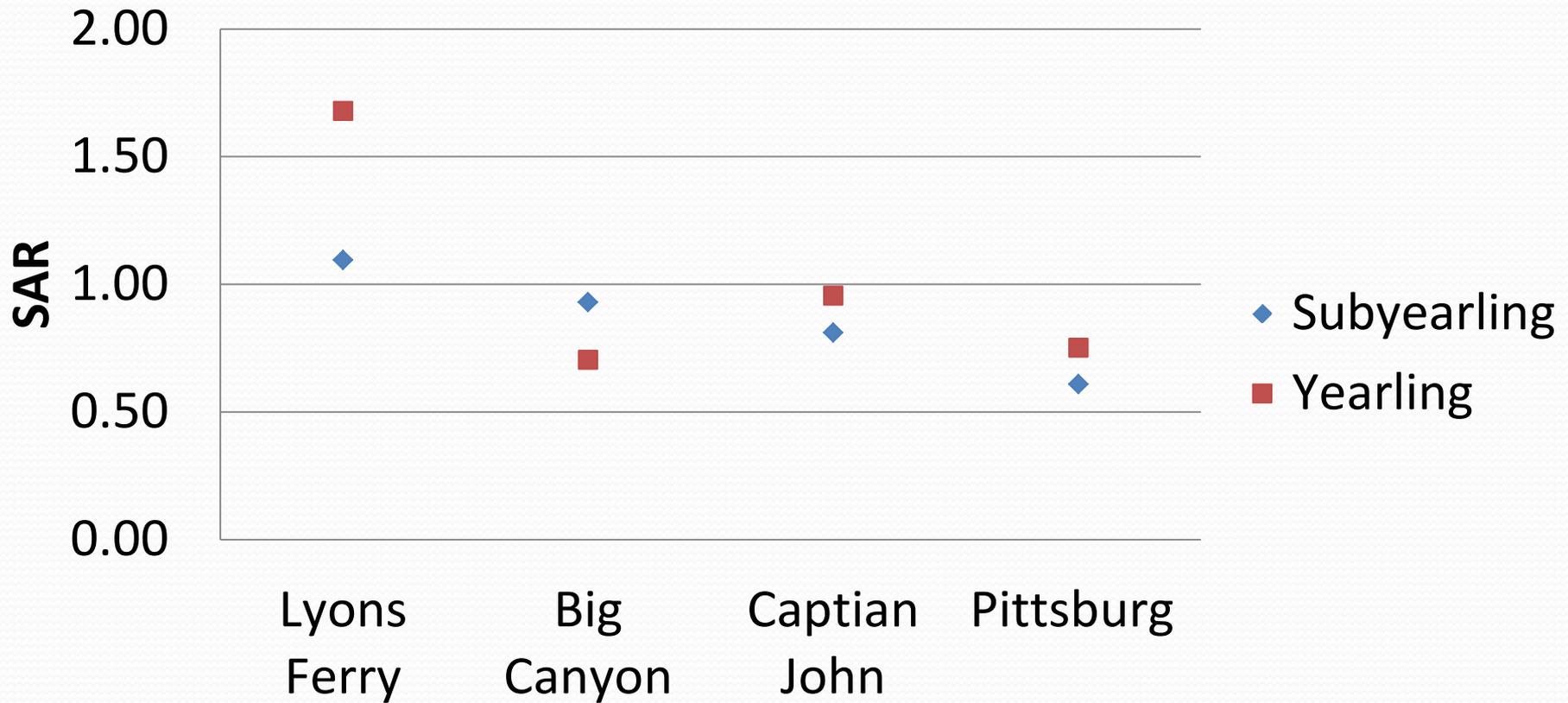
SAR to Snake River SAS including Col R and Ocean BY94-BY07 (all wires)

Program	Yearling		Subyearling	
	SAR (%)	SAS (%)	SAR (%)	SAS (%)
IPC	-	-	0.67	1.02
LSRCP	0.94	1.65	0.40	0.60
FCAP	0.33	0.63	0.41	0.59
NPTH	-	-	0.42	0.54

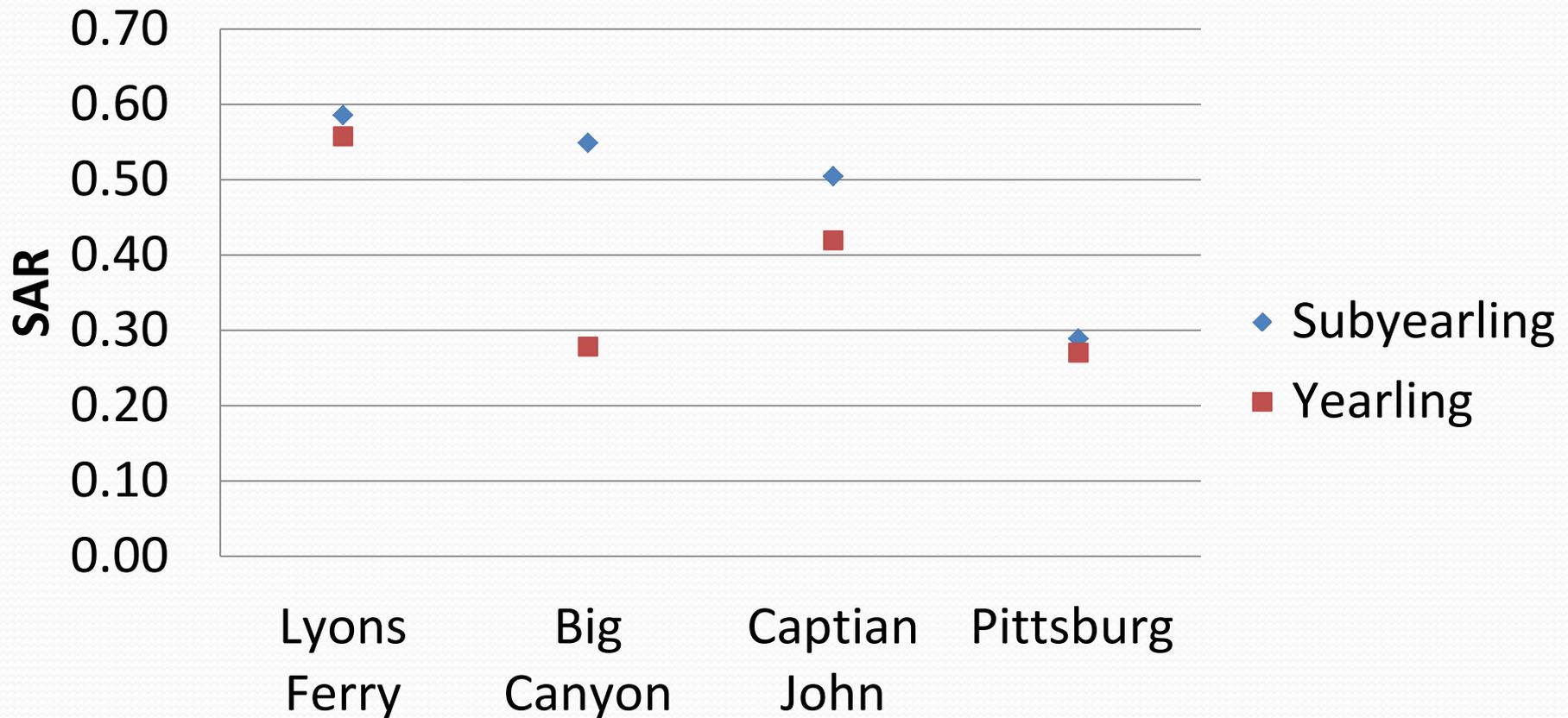
Exploitation rates: BY94-BY07 (ADCWT groups)

Program	Returns + Harvest	Col R/Ocean (%)	Snake R. (%)	Total (%)
IPC	24,791	20	0.1	20
LSRCP	104,684	44	0.3	44
FCAP	45,284	44	0.3	45
NPTH	8,334	26	<0.1	26

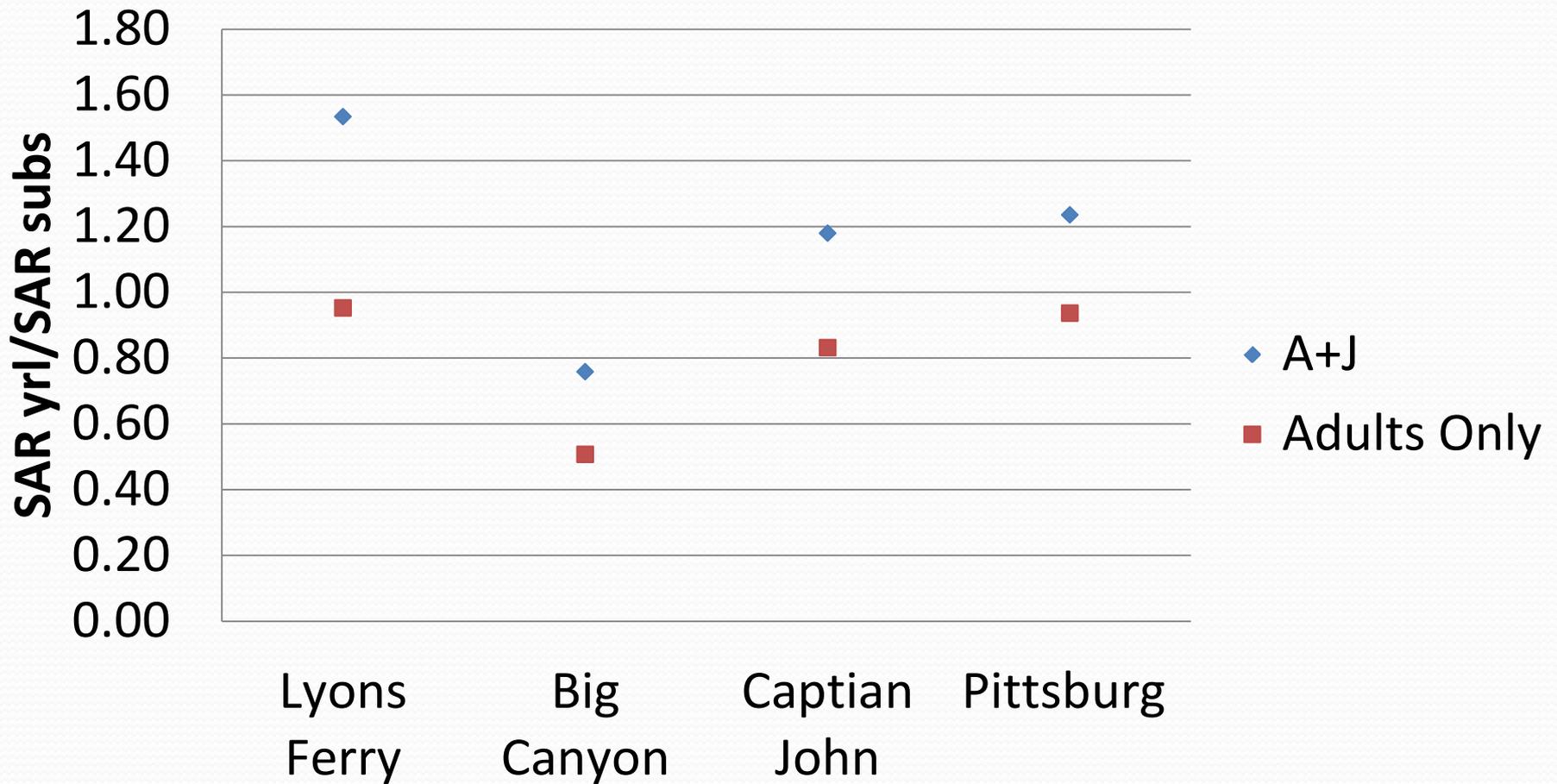
Yearling vs Subyearling SAR Total Returns (Release Years 2006-2008)



Yearling vs Subyearling SAR Adults Only (Release Years 2006-2008)



Demographic Boost from Yearling vs Subyearling Release (Release Years 2006-2008)

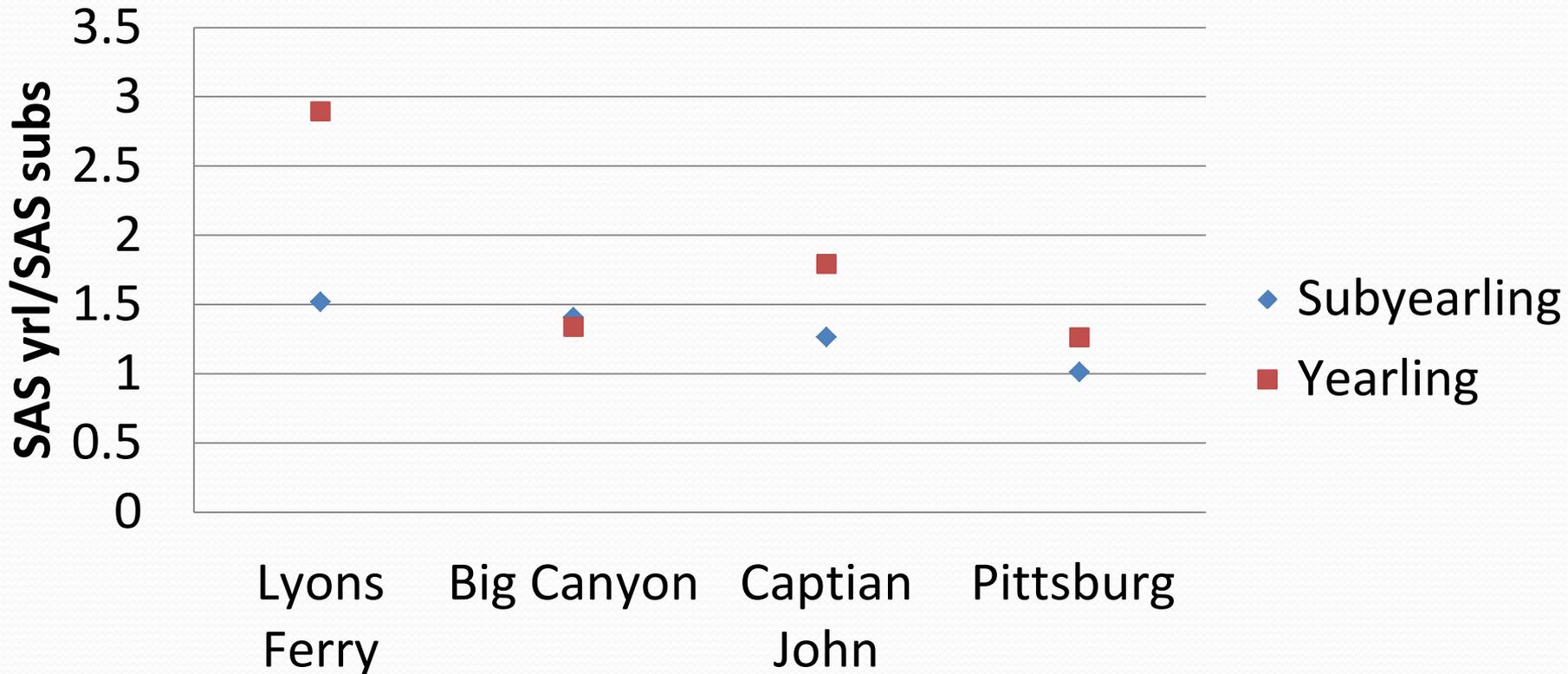


SAS: harvest plus returns

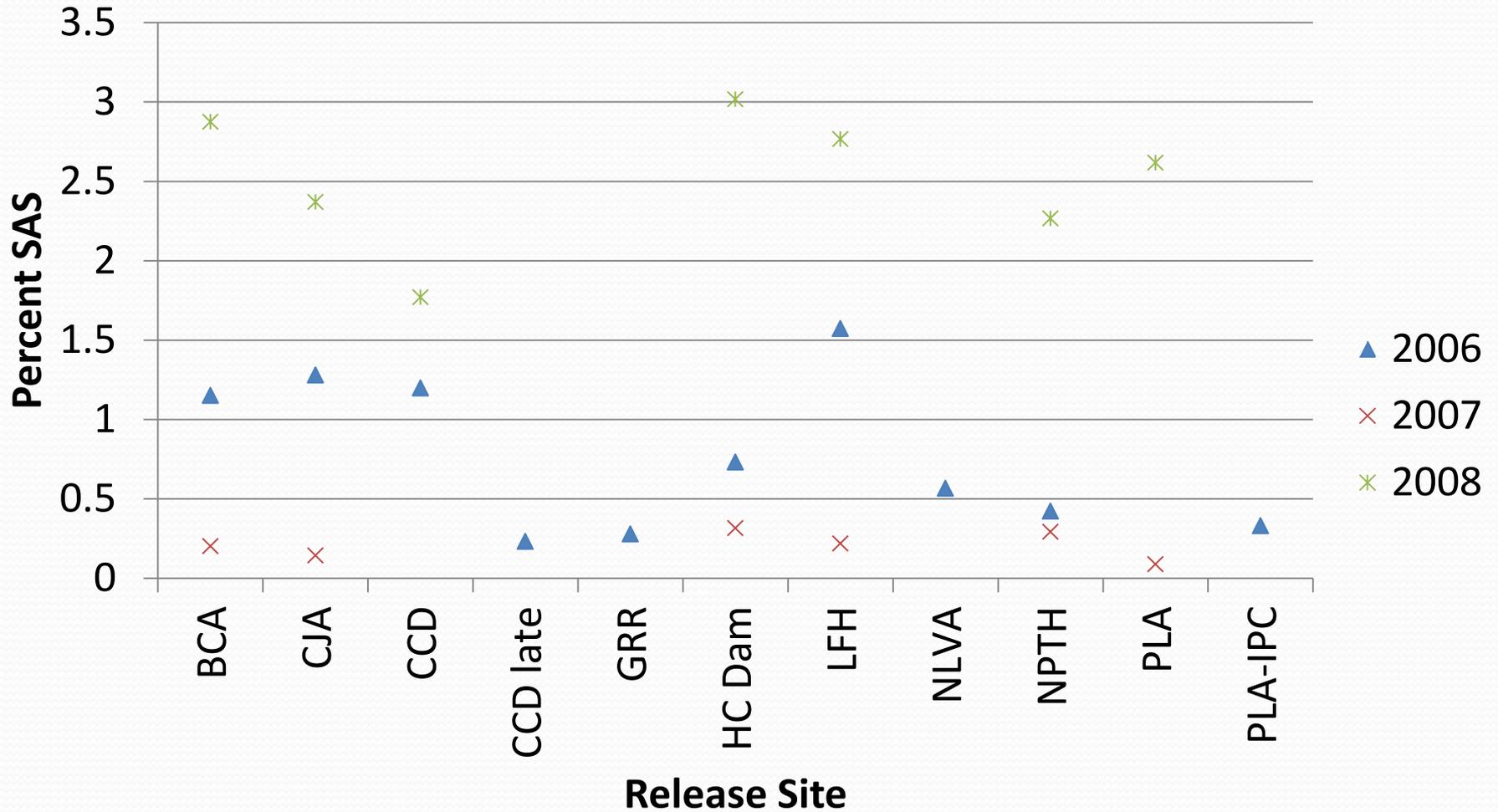
Yearling vs Subyearling SAS

Adults+Jacks

(Release years 2006-2008)



Release site SAS, Subyearlings



Conclusions

- Due to the multitude of release sites, differing marking scenarios, and ages at release of juveniles released into the Snake River Basin, determining performance between the release groups is challenging.

Conclusions on SARs

- Yearlings out perform subyearlings at all sites except BC when looking at SAR of 1-salt and older fish combined.
- When looking at SARs of just adults (2 salts and older) subyearlings out perform yearlings at all sites, most notably at Big Canyon and Captain John.
- Demographic boost from using yearlings over subyearlings occurs at most sites except Big Canyon where subyearlings outperform yearlings.

Conclusions on SAS

- Taking into account downstream harvest, there is a demographic boost from using yearlings over subyearlings at most of the sites when you compare Jack+Adult recoveries.



Any Questions?

