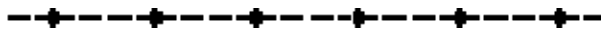




Lower Fraser River Fishwheel Operations 2011

Prepared by LGL Limited
for
Tsawwassen and Matsqui First Nations
& Pacific Salmon Foundation



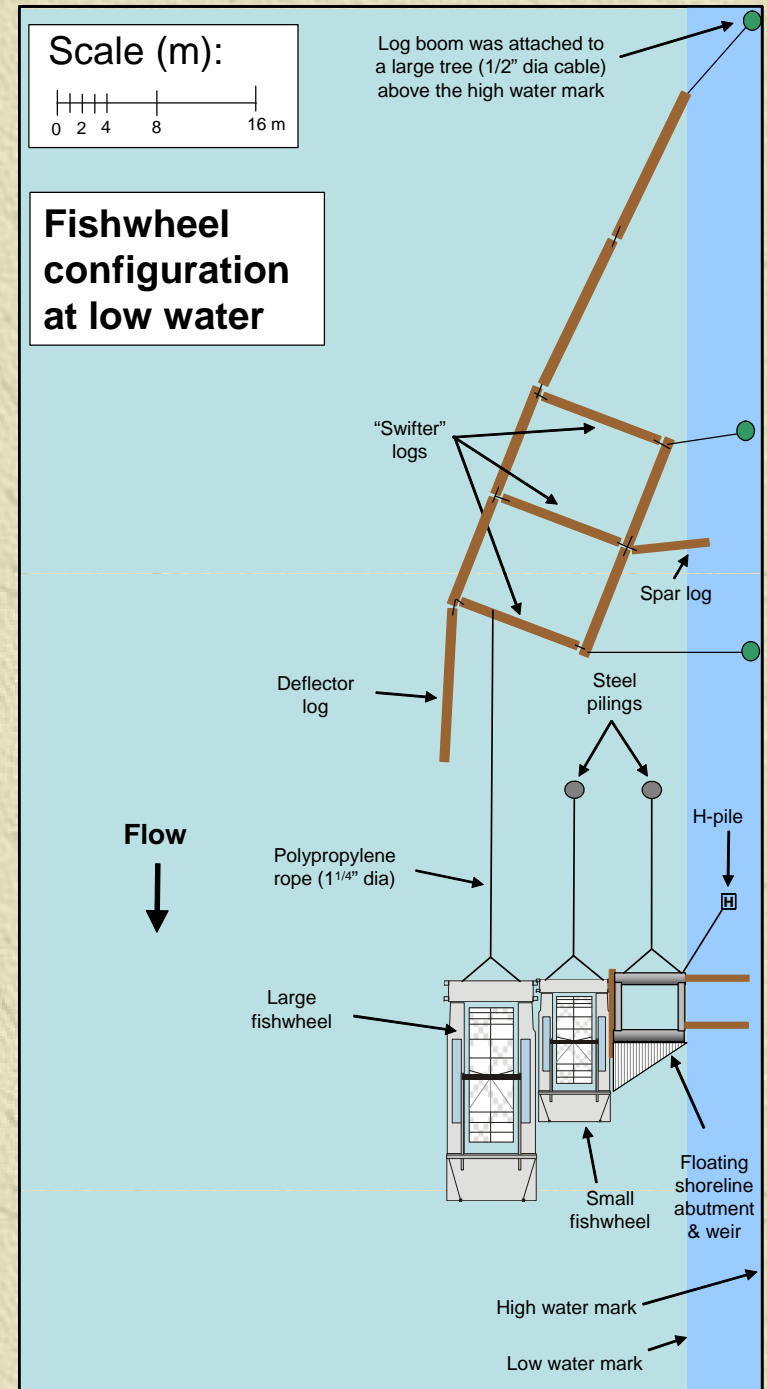
Main Study Objectives for 2011

- ✦ Operate Crescent Island fishwheels for near-shore species composition
- ✦ Conduct a selective harvest of pink salmon using fishwheels through a collaborative agreements involving:
 - the Tsawwassen and Matsqui First Nations,
 - the Tsawwassen Treaty allocation for pink salmon,
 - support from the PSF and LGL; and
 - harvesting permits from DFO

Fishwheels at Crescent Site similar to 2009



10/25/2011



Fishwheel Harvesting Setup



10/25/2011

Pinks slide directly into totes
bycatch removed within seconds of capture



10/25/2011

5

Full totes ready for transport



10/25/2011

Totes lifted onto shoreline barge



10/25/2011

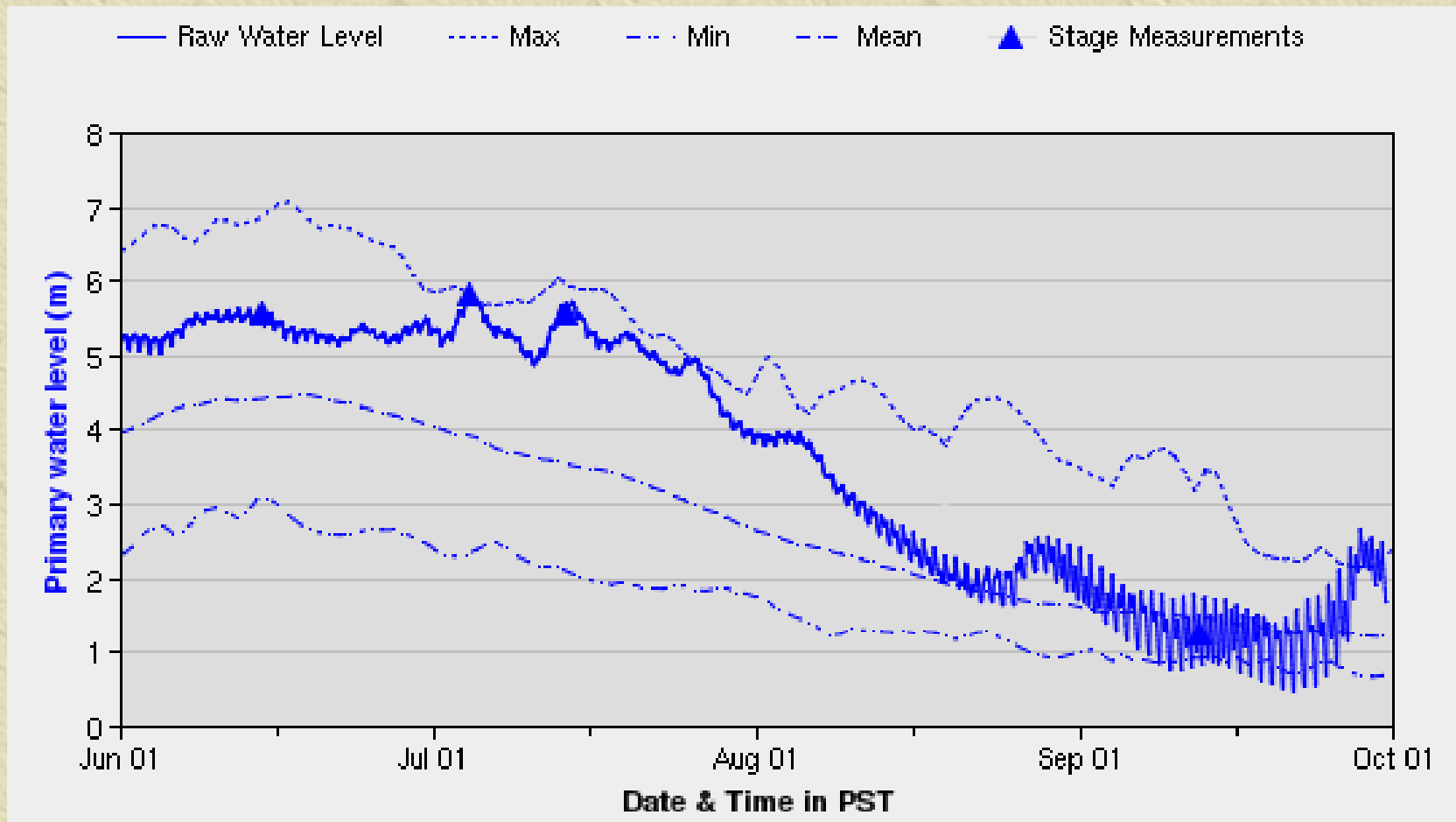
Example of high quality pinks.



10/25/2011

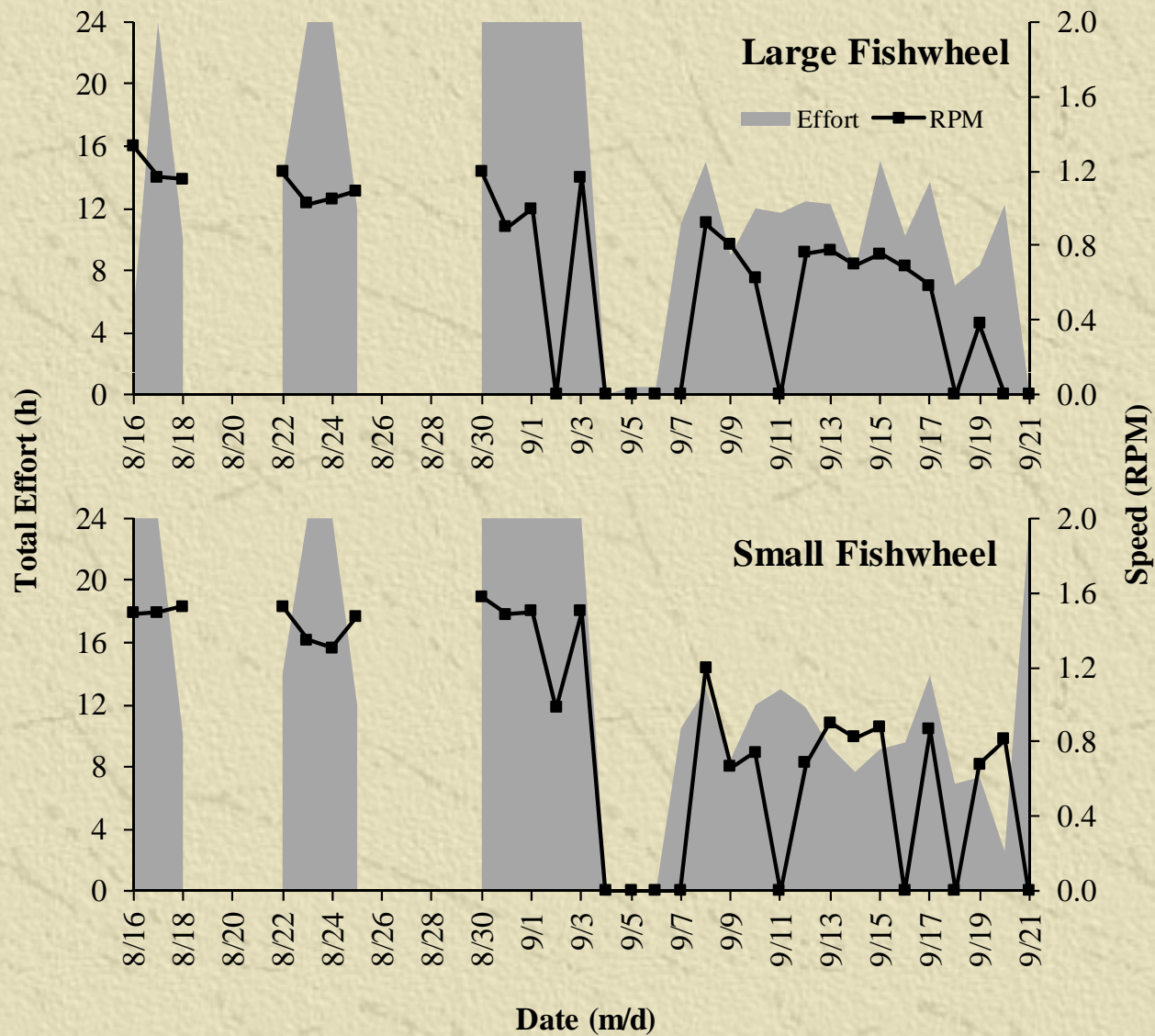
Fraser River Water Levels 2011

- Mission hydrometric station



Data from Environment Canada web site

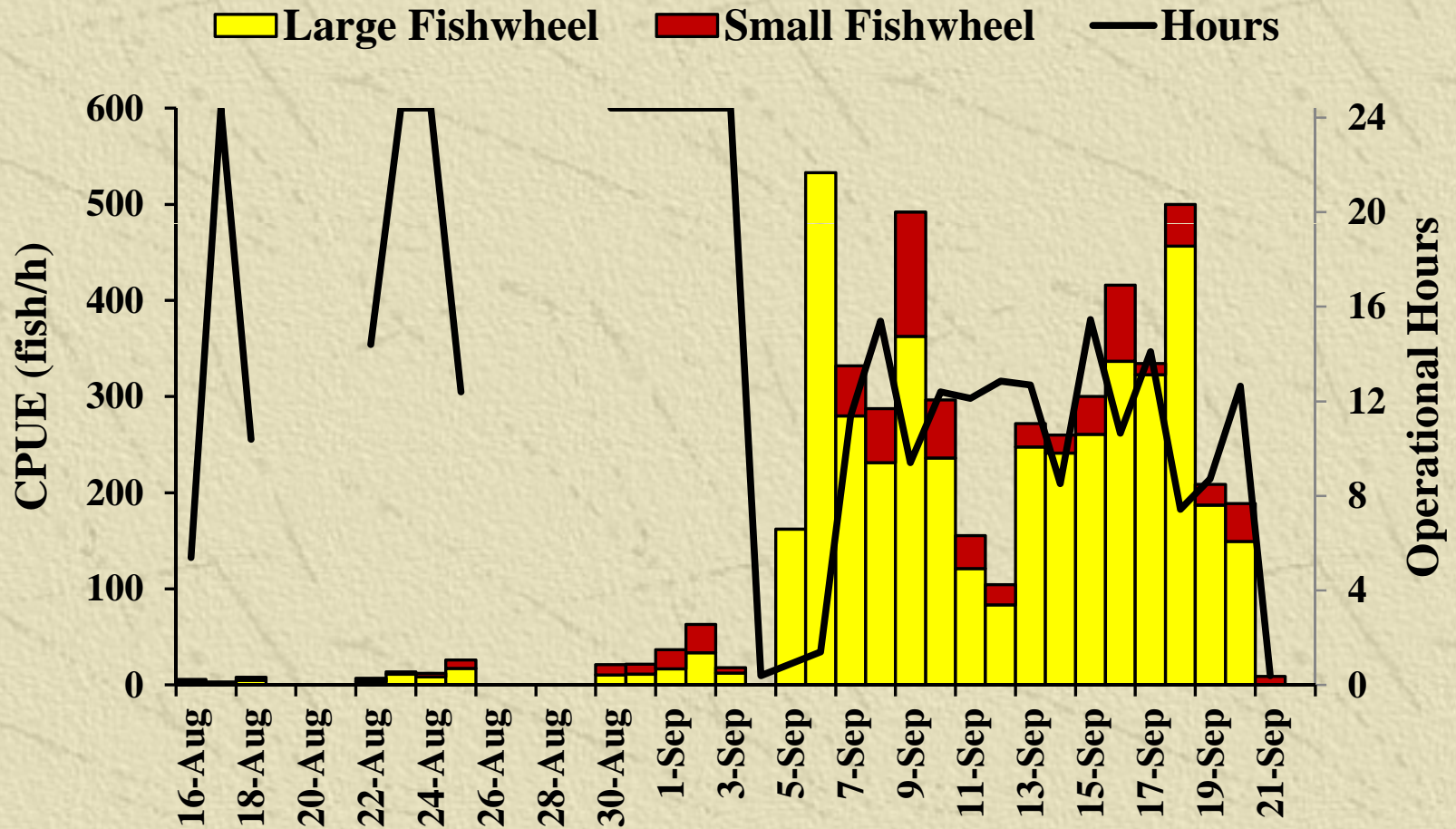
Daily Fishwheel Effort & Speed (RPM)



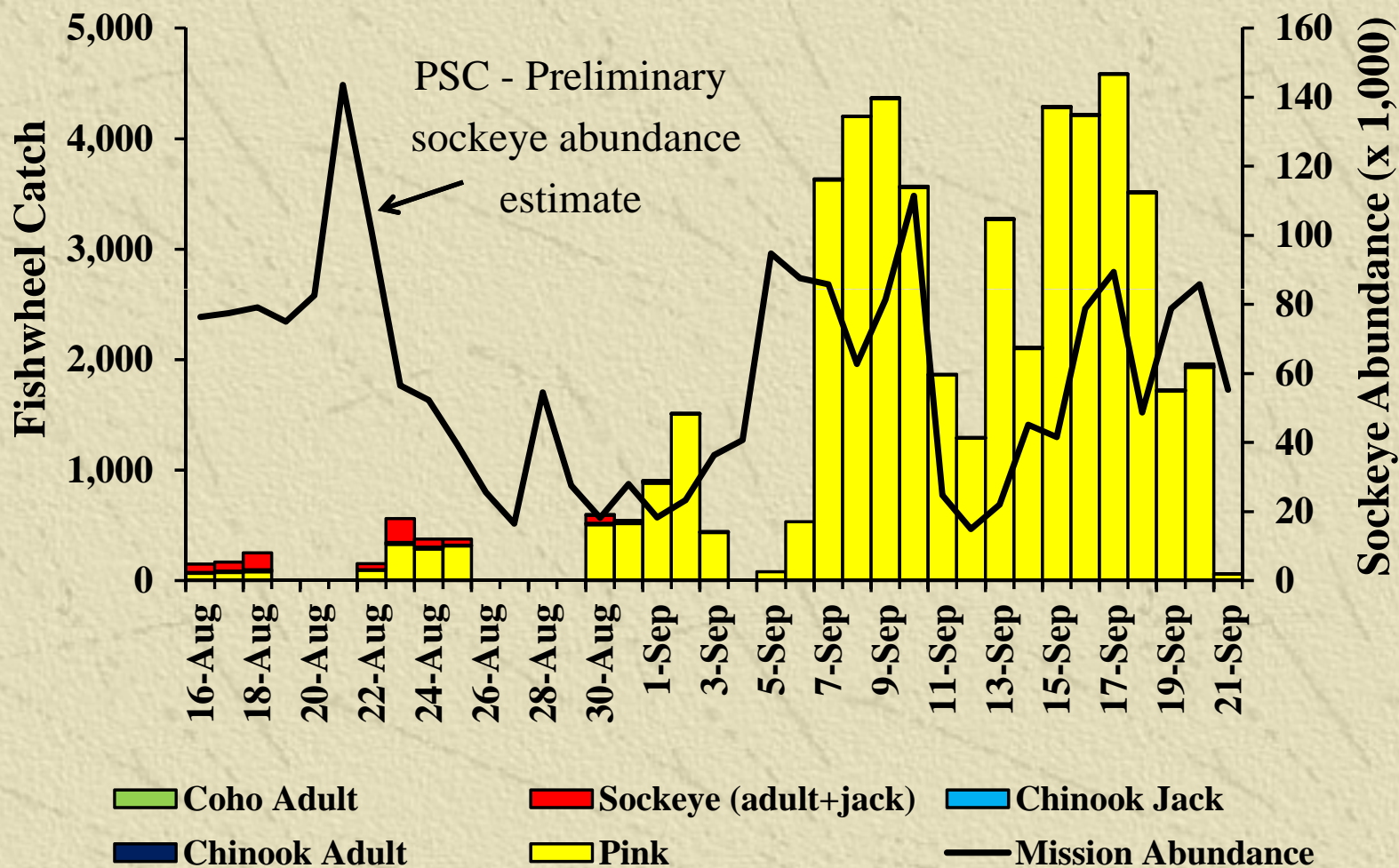
Fishwheel Catch Summary

Species	Adults	Jacks	Total	Percent
Pink	50,270		50,270	97.9%
Sockeye	820	7	827	1.6%
Chinook	87	79	166	0.3%
Coho	65	7	72	0.1%
Steelhead	20		20	0.0%
Sturgeon	4		4	0.0%
Total	51,266	93	51,359	100.0%

Fishwheel CPUE - Pink Salmon 2011

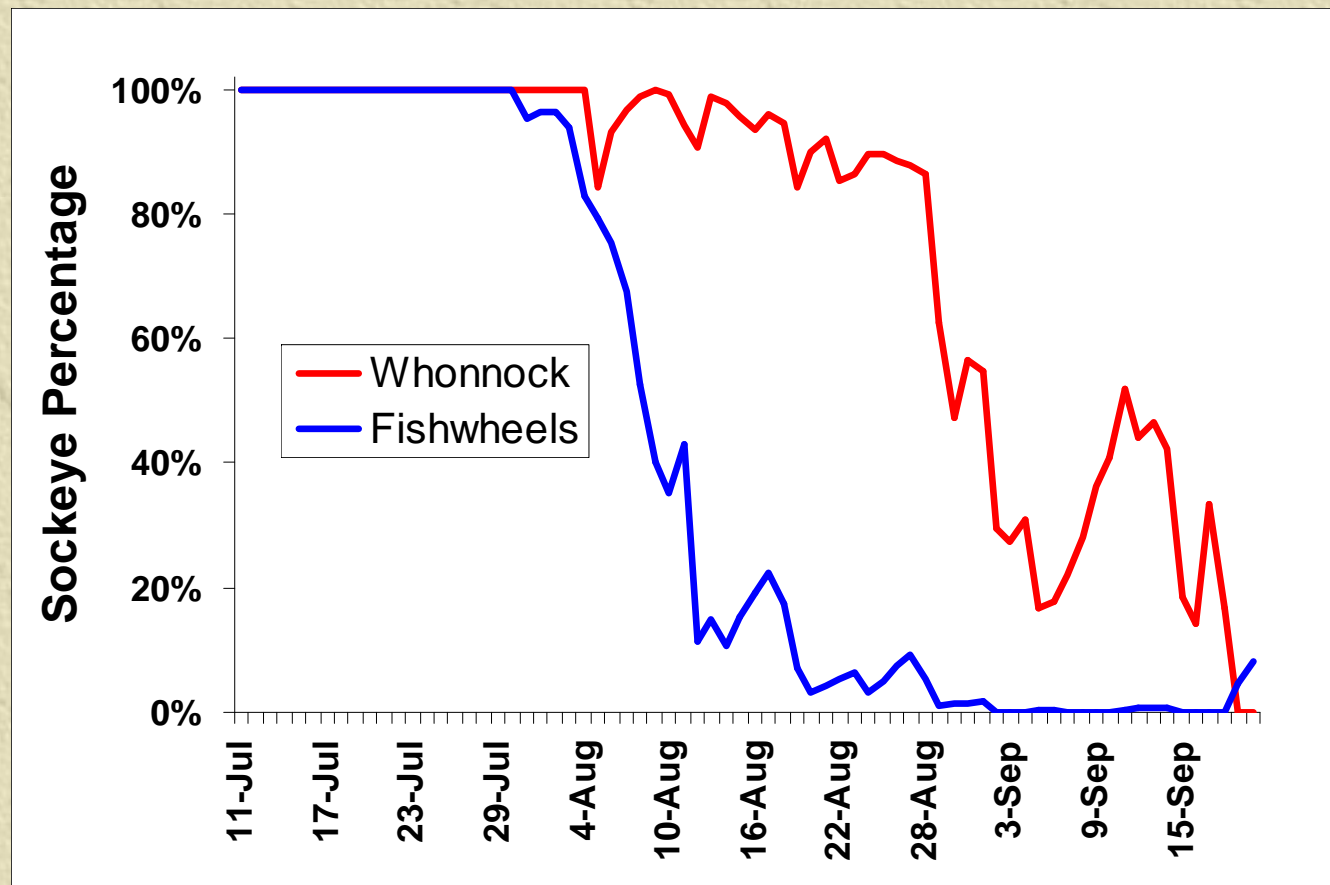


Fishwheel Catch by Species 2011

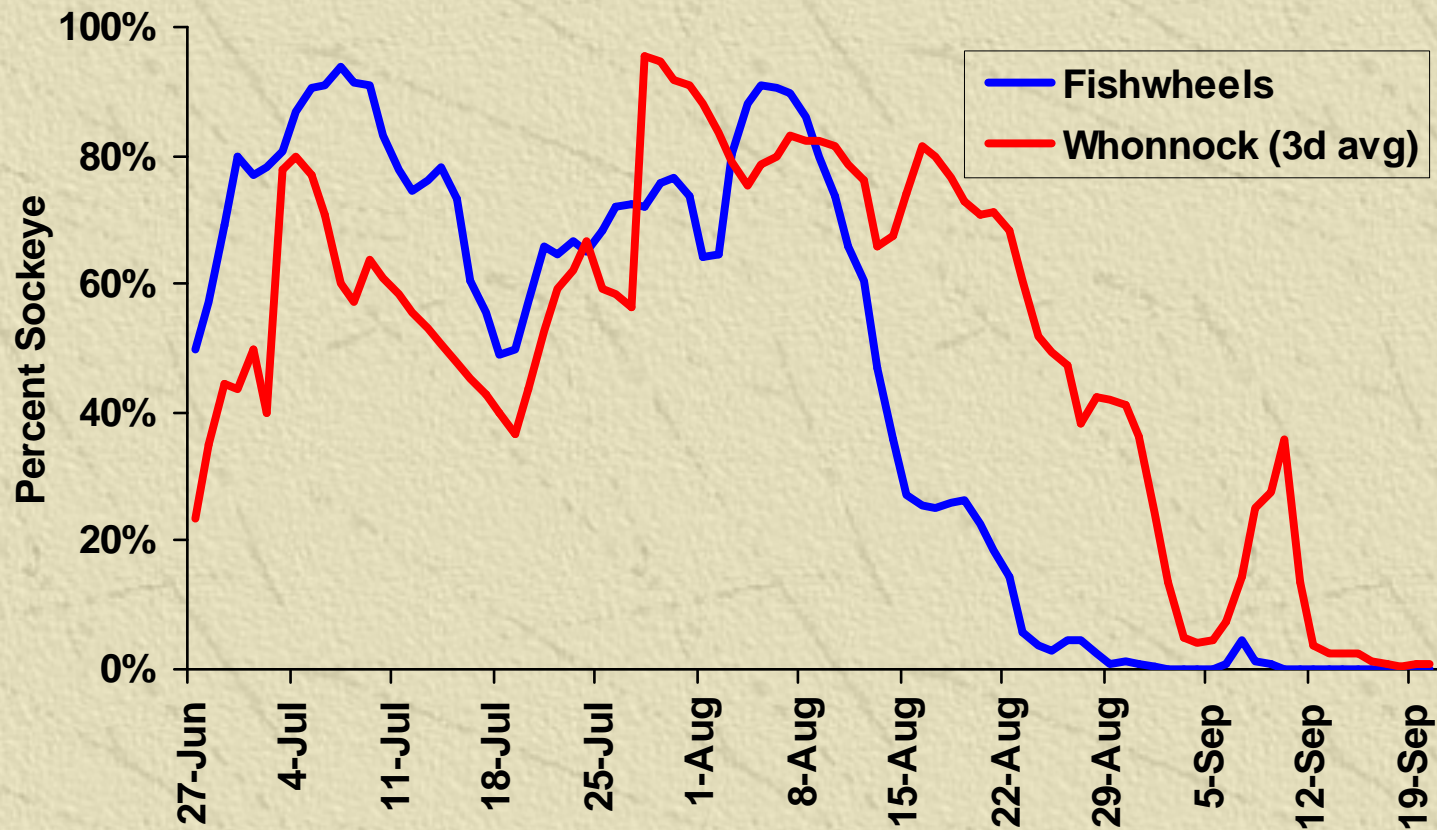


Species Composition 2007

- ✦ Mission fishwheels and Whonnock gillnet test fishery provided very different SC estimates in 2007

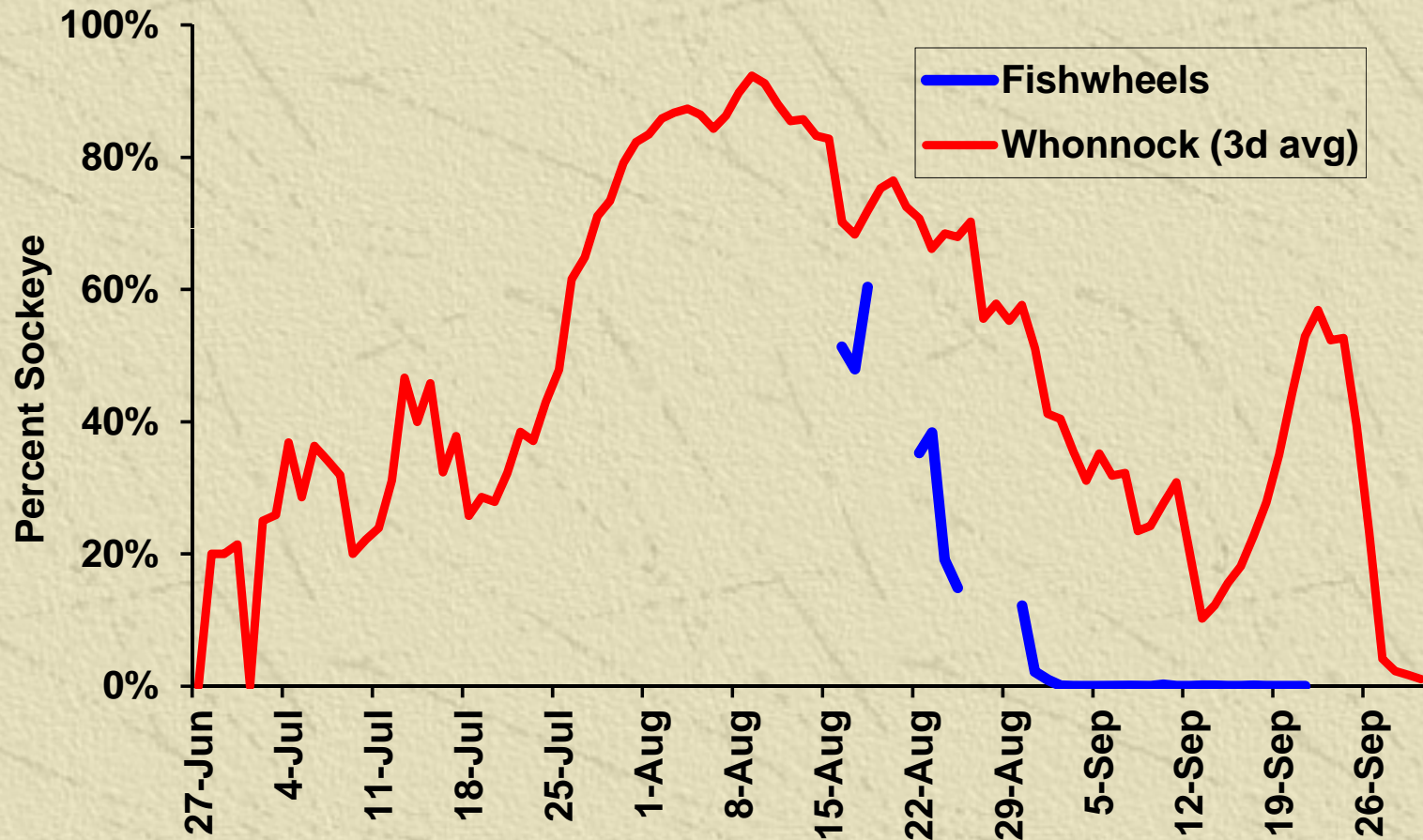


SC differences again in 2009



Major SC differences in 2011

Limited operations – no DFO or PSC funding for fishwheels



Fishwheel Summary

- Stock assessment operations (Aug 15 – Sep 6)
 - 3-5 days/week (12-24 hrs/day)
- Pink salmon harvest operations (Sep 7-20)
 - 44,447 pink salmon harvested
 - 98-100% pink salmon
 - 100-900 pinks/hr (7-15 hrs/day)
 - All bycatch released in excellent condition
- Daily Species Composition Estimates
 - Substantial differences between Whonnock and Fishwheel SC, as observed in 2009.

Next steps

- Post-season evaluation of alternative estimates of species composition for the Mission hydroacoustic counts
- Combine spatially stratified hydroacoustic counts with near-shore and off-shore SC estimates
- Implement plans to reduce harvesting and monitoring costs for any future fishwheel pink salmon harvest operations