

Science, Service, Stewardship



Agenda Item G.1.a
Supplemental NWR LCR PowerPoint
March 2010

Lower Columbia River tule Chinook Harvest Guidance

Pacific Fishery Management Council

March 8, 2010

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Sources of Information

- Recovery Plans
- Earlier Technical Work and Biops
- Hatchery Scientific Review Group (HSRG)
- Species Life-Cycle Analysis Model (SLAM)



Recovery Plan Goals

- Delisting/ESA Requirements
- Broad sense recovery that goes beyond delisting to also provide for healthy and harvestable populations



Recovery Planning Principles

- Collaborative process designed to include all stakeholders
- Solution designed to address all limiting factors
- Fundamental policy decision of recovery plans is to continue hatchery production and harvest as part of a balanced strategy for recovery



Recovery Plan Recommendations for Hatcheries

- Hatchery strategy
 - Aggressive schedule of hatchery reforms designed to reduce the effect of hatchery fish on the spawning grounds

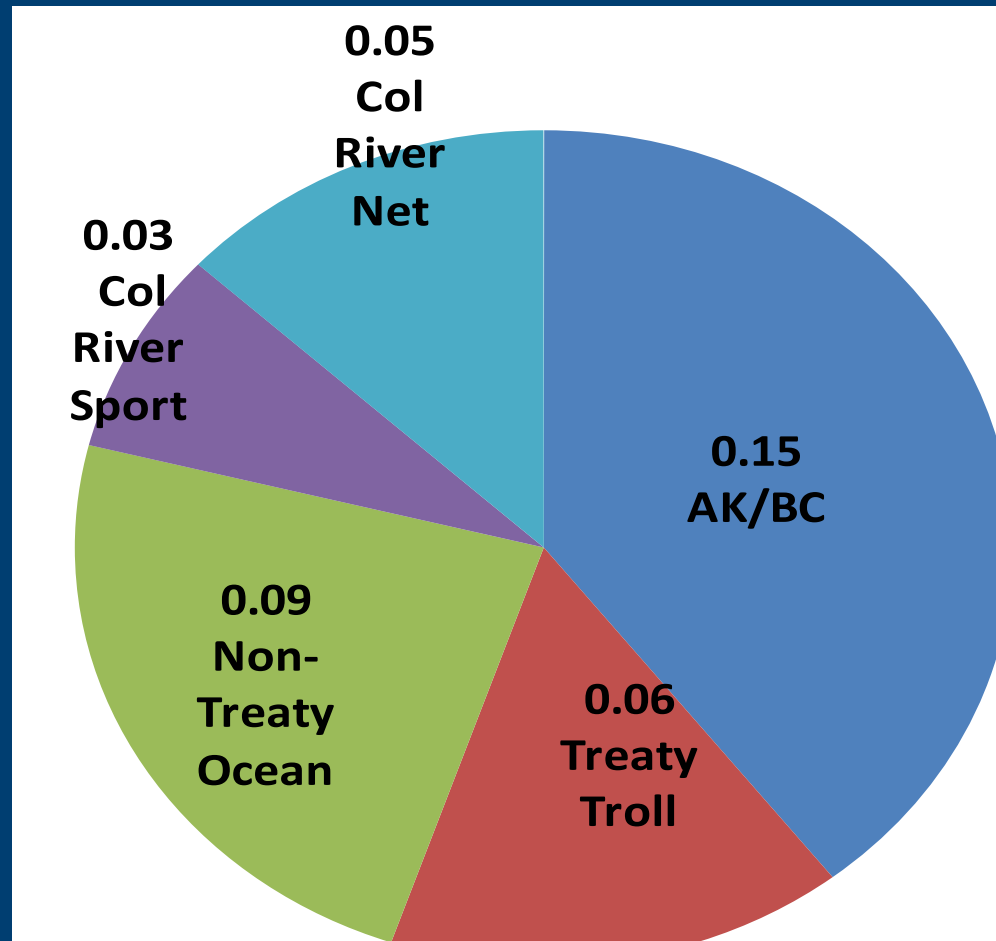


Recovery Plan Recommendations for Harvest

- Front-loaded impact reduction strategy – harvest rate of 25-35% (LCFRB)
- Harvest rate “guideline” modeled at 35% (Oregon)
- Develop and implement mark selective fisheries
- Develop and implement abundance based management framework



Fishery Impact Distribution



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Results of Technical Analyses



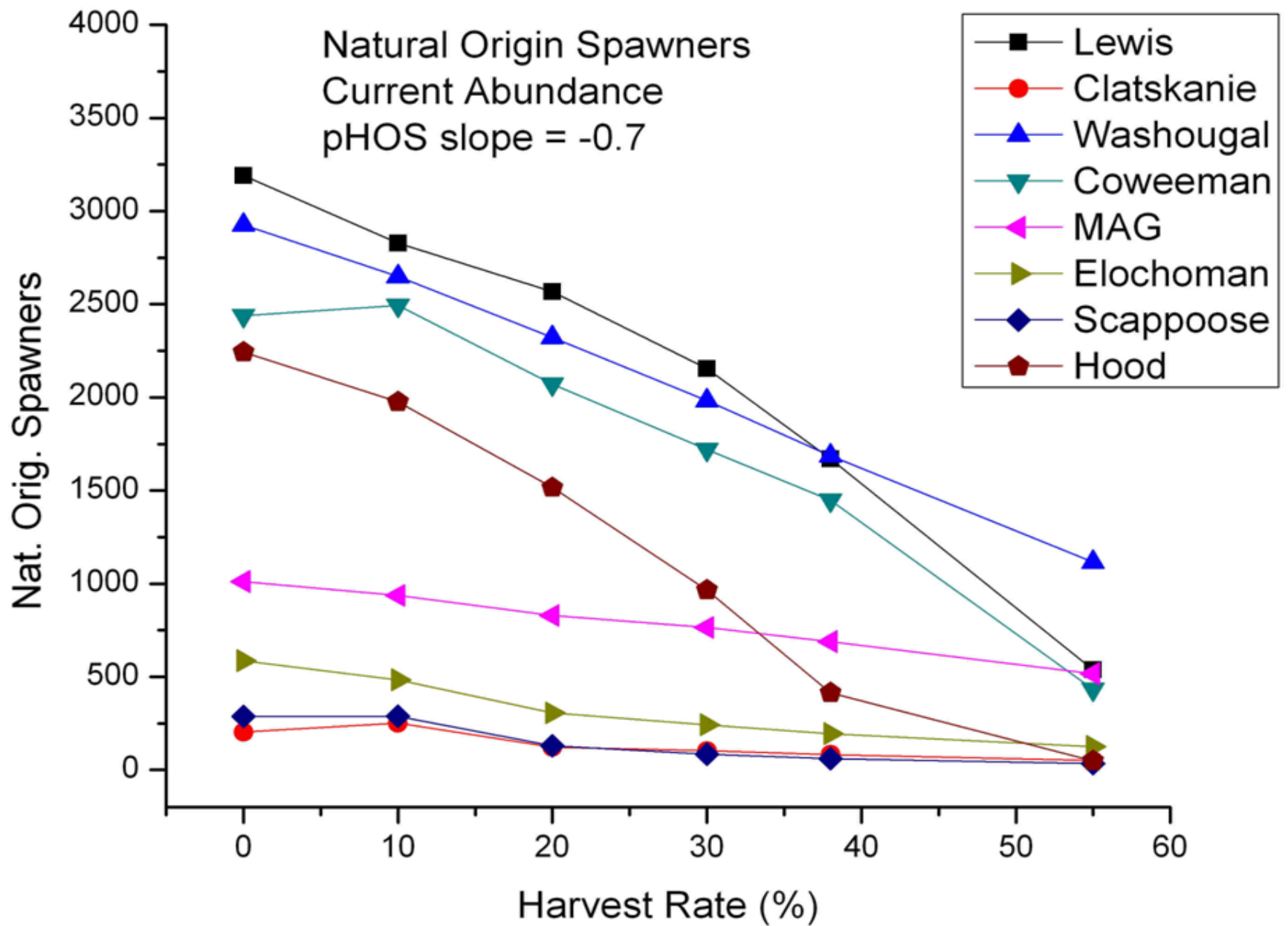
VRAP Analysis from 2008 and 2009 BiOp

Population	RER
Coweemen	0.34 – 0.58
East Fork Lewis	0.44 – 0.52
Grays	0.00 – 0.20



SPAZ Analysis from 2008 and 2009 BiOp

Population	Probability of meeting viability criteria					
	QET = 50			QET = 150		
	0 harvest	25% harvest	50% harvest	0 harvest	25% harvest	50% harvest
Coweeman	1.00	0.99	0.95	0.99	0.95	0.56
EF Lewis	1.00	0.99	0.80	0.99	0.80	0.05
Grays	0.43	0.10	0.00	0.00	0.00	0.00





General Conclusions

- Lewis, Washougal, Coweeman show low risk at rates from 30-55% depending on populations and assumptions
- Scappoose, Clatskanie, Elochoman show high risk even at very low harvest
- Mill/Germany/Abernathy, Hood show intermediate risk at intermediate harvest



Coastal Populations

- Coastal populations are at risk regardless of the harvest strategy
- Biop must explain why harvest strategy is not likely to appreciably reduce the survival and recovery of the ESU, which requires consideration for these coastal populations



Coastal Populations

- Populations subject to high harvest, hatchery stray rates, and habitat degradation for decades – e.g., Clatskanie
- Populations likely have generic tule-like characteristics, but are no longer uniquely adapted or genetically distinct
- Survival and recovery therefore depends on long term transition strategy



Transition Strategy for Coastal Populations

- Steady implementation of recovery actions
 - Reduce harvest
 - Reduce hatchery strays
 - Improve habitat
- Better monitoring to improve understanding of what we have
- Hatchery conservation program if appropriate
- Allow time for readaptation and recovery