

Task to the Workgroup as Described in the Terms of Reference

Develop a proposed harvest control rule for the Southern Oregon/Northern California Coast (SONCC) Coho Evolutionarily Significant Unit (ESU) for Pacific Fishery Management Council (Council, PFMC) consideration that would (Council adopted TORs):

- *allow fishing on abundant salmon stocks while not impeding the recovery of SONCC coho;*
- *establish harvest control rules in the form of fixed or tiered exploitation rates including consideration of control rules which reduce exploitation rates at low abundance levels, and which may include minimum or target spawner levels;*
- *assess a range of control rules including marine and freshwater fisheries combined, the marine and freshwater fisheries components, and marine fisheries only, affecting SONCC coho as appropriate, given potential data limitations, and what is feasible to accomplish within the timeline described below;*
- *evaluate the feasibility of considering the status of subcomponents of the ESU (e.g., Klamath and Trinity Rivers), marine and freshwater environmental conditions and other relevant factors as appropriate and as supported by the data available (similar to the Oregon Coast Natural coho salmon matrix).*

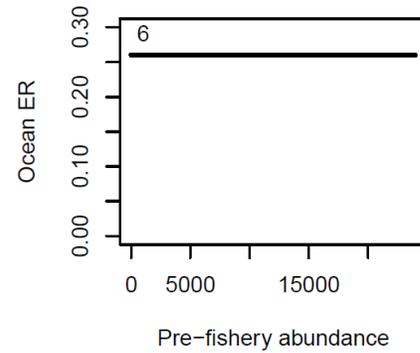
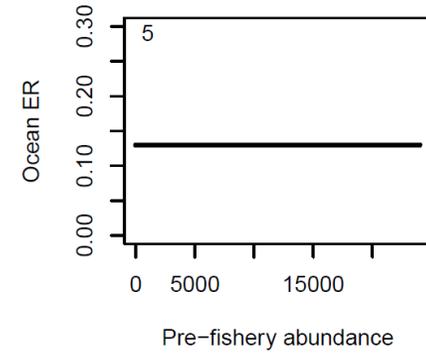
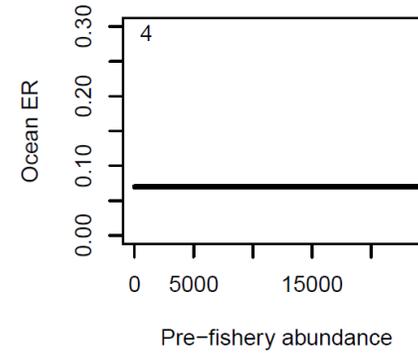
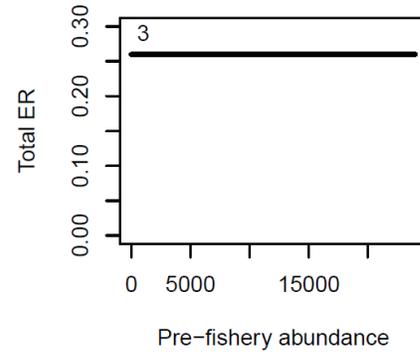
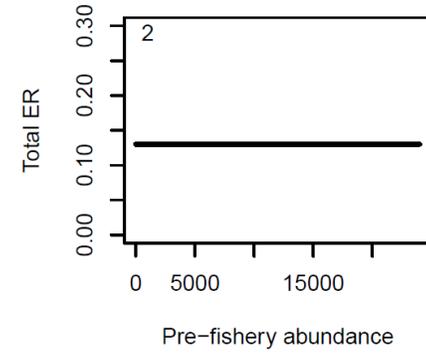
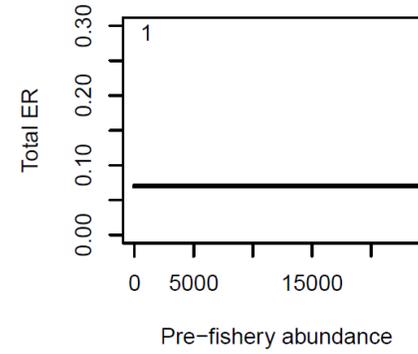
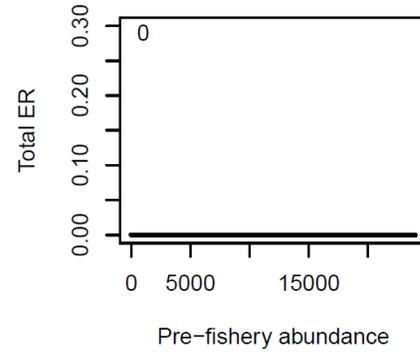
Four general classes of control rules:

- Fixed ER control rules
- Matrix-based control rules
- Escapement goal-based control rules
- Abundance-based control rules

Considerations for any control rule

- Is the control rule only applied to natural-origin fish?
- Is the ER applied to ocean fisheries or combined ocean and freshwater fisheries?
- Is the control rule applied to the entire ESU, or individually to subcomponents of the ESU?
- Is an index of marine survival required
- Is an abundance forecast required?
 - What needs to be forecast?
- Are the data needed to implement the control rule available in time

Fixed ER control rules

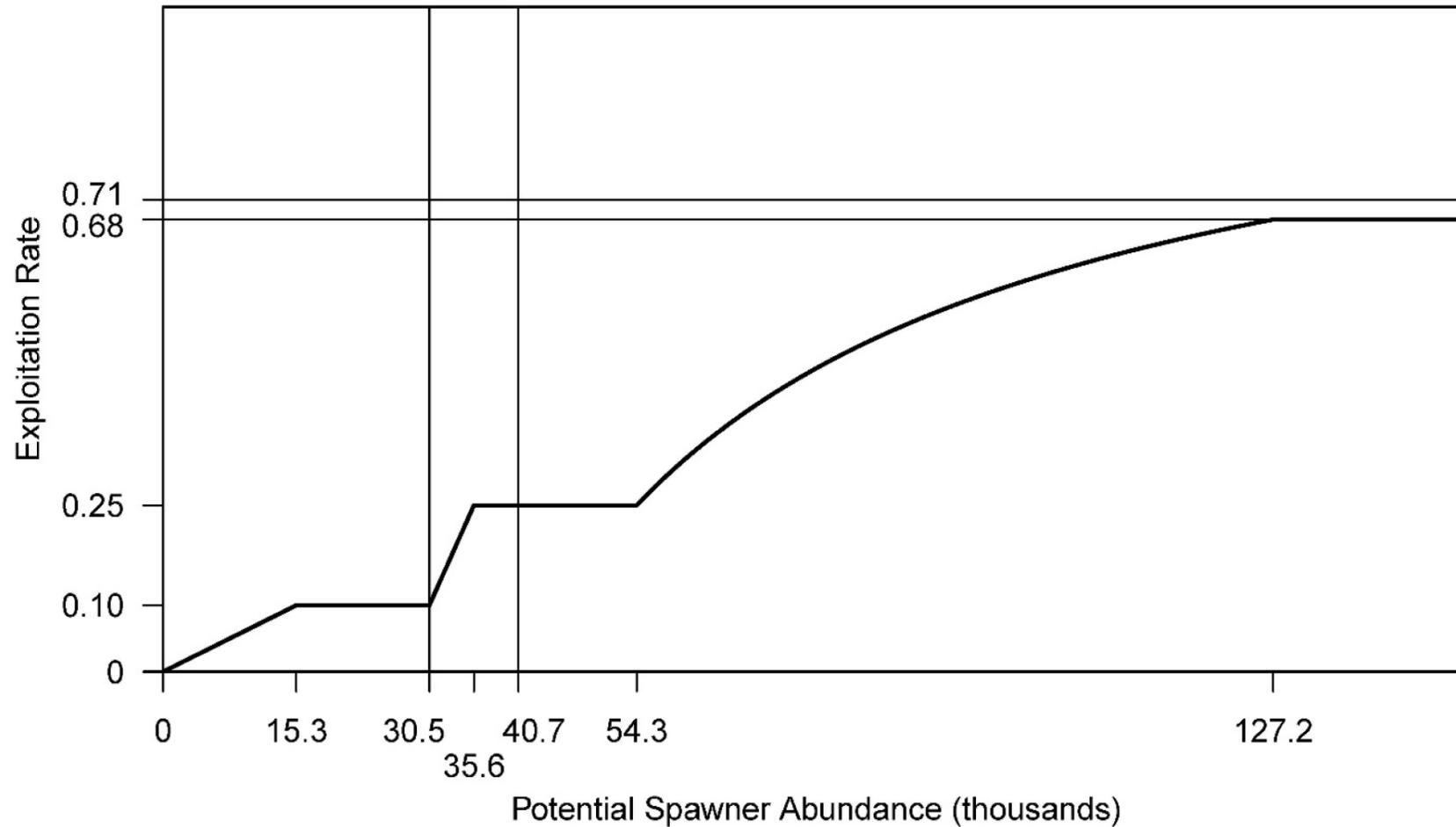


Matrix-based control rule

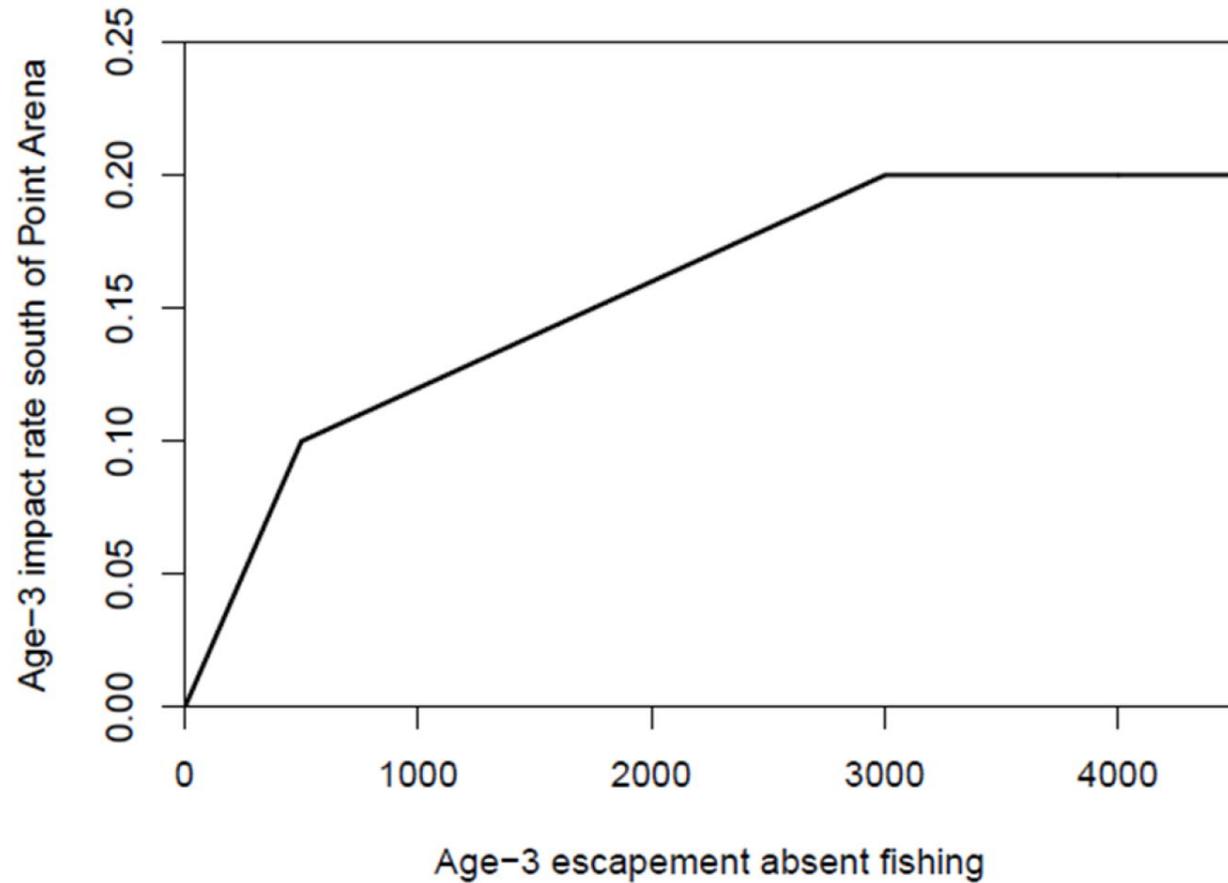
Parent Spawner Status ^{a/}	Marine Survival Index <i>(Wild adult coho salmon survival as predicted by the two-variable GAM ensemble forecast)</i>						
	Extremely Low <2%	Low 2%-4.5%	Medium >4.5%-8%	High >8%			
High Parent Spawners > 75% of full seeding	E ≤ 8%	J ≤ 15%	O ≤ 30%	T ≤ 45%			
Medium Parent Spawners > 50% & ≤ 75% of full seeding	D ≤ 8%	I ≤ 15%	N ≤ 20%	S ≤ 38%			
Low Parent Spawners > 19% & ≤ 50% of full seeding	C ≤ 8%	H ≤ 15%	M ≤ 15%	R ≤ 25%			
Very Low Parent Spawners > 4 fish per mile & ≤ 19% of full seeding	B ≤ 8%	G ≤ 11%	L ≤ 11%	Q ≤ 11%			
Critical Parent Spawners ≤ 4 fish per mile	A 0 – 8%	F 0 – 8%	K 0 – 8%	P 0 – 8%			
Sub-aggregate and Basin Specific Spawner Criteria Data							
Sub-aggregate	Miles of Available Spawning Habitat	100% of Full Seeding	"Critical"		Very Low, Low, Medium & High		
			4 Fish per Mile	12% of Full Seeding	19% of Full Seeding	50% of Full Seeding	75% of Full Seeding
Northern	899	21,700	3,596	NA	4,123	10,850	16,275
North-Central	1,163	55,000	4,652	NA	10,450	27,500	41,250
South-Central	1,685	50,000	6,740	NA	9,500	25,000	37,500
Southern <i>(Removed per adoption of Amendment 16)</i>							
Coastwide Total	3,747	126,700	14,988		24,073	63,350	95,025

a/ Parental spawner abundance status for the OCN aggregate assumes the status of the weakest sub-aggregate.

Hybrid escapement/abundance-based control rule



Abundance-based control rule



Potential abundance-based control rule

