A3 Goals Objectives Performance Metrics Halibut ABM workshop material FEBRUARY 2017

## This spreadsheet translates the Council's overarching goals to measurable objectives and defines performance metrics for those objectives.

A number of questions related to each overarching goal are asked to identify the measureable objective.

We have included some questions that could be asked. Additional questions may be added, or some of these may be removed.

The threshold is the value related to the measureable objective (such as a limit or a value that should not be exceeded).

Time Frame is the period of time over which to measure the objective. This can be short-term, long-term, annual, a period of 10 years, etc.

The Performance Metric is determined from the Threshold and Time Frame.

For a few rows, an example of how cells could be filled in is given.

## The workshop on February 2nd will

Note the Council's overarching goals Add, remove, or rephrase questions Fill in threshold values when possible Fill in time-frame when possible Define performance metrics when possible

Council Objectives (overarching goals)	Question to stakeholders and managers	Example Measurable Objective	Threshold	Time Frame	Performance metric
	What is the minimum catch to prosecute the fishery?	Does PSC limit allow for current directed groundfish fishing			
	Is there a desired minimum catch?	The groundfish catch is above a value	X	Annual	P(Catch < X)
	Are there market constraints that should be considered?	There is an upper limit to the marketable catch			
There should be flexibility provided to avoid unnecessarily constraining the groundfish fishery particularly when halibut abundance is high	At what level of lost yield are you economically harmed? CPUE of target relative to halibut encounter rate.	Maintain CPUE above a minimum value to reach the TAC (taking into account the PSC limit)			
	Is foregone yield (unrelated to TAC negotiations) something to consider?	Keep foregone yield below a value			
	How does Flatfish flexibility factor into the considerations above?				
	What Incentives exist or can be developed to minimize bycatch?	Demonstrate bycatch minimized at all levels of Pacific halibut abundance			

Council Objectives (overarching goals)	Question to stakeholders and managers	Example Measurable Objective	Threshold	Time Frame	Performance metric
	What % change in PSC limits interannually disrupts groundfish planning and management activities?	Achieve a level of inter-annual variability in PSC levels that is below an acceptable level	X%	# of years	Average annual variation (AAV) in halibut PSC limit or P(AAV <x%)< td=""></x%)<>
	At what % change in PSC limits interannually is 4CDE Directed halibut fishery planning affected?	Achieve a level of inter-annual variability in PSC levels that is below an acceptable level			
Provide for some	Will incentives to minimize bycatch be reduced if PSC limits jump up quickly from one year to next				
stability in PSC limits on an inter-					
annual basis.					

Council Objectives (overarching goals)	Question to stakeholders and managers	Example Measurable Objective	Threshold	Time Frame	Performance metric
Halibut spawning stock biomass should be protected especially at lower levels of abundance	What is a useful measure for the impact on spawning biomass?	Measure the impact on spawning biomass	X	Annual	SPR
	Should a maximum level of impact on spawning biomass be specified?	Not allow the impact on the spawning biomass to exceed a specific level.	x	Annual	Probability that B is above X in any year
	Is there a desired minimum abundance/biomass of spawning halibut?	Maintain the spawning biomass above a value	х	Annual	Probability that B is less than X in any year
	Is there a target spawning abundance/biomass?	Keep the spawning abundance/biomass above a threshold with a high probability.			
	Is there a threshold spawning abundance/biomass?	Keep the spawning abundance/biomass above a threshold with a high probability.			
	Should precautionary action be taken when below the threshold, and when below the minimum?	Take action when the spawning biomass is below critical levels			

Council							
Objectives							
(overarching	Question to stakeholders and			Time	Performance		
goals)	managers	Example Measurable Objective	Threshold	Frame	metric		
	Note: The process for arriving at FCEY is done by the IPHC. Their decisions are outside NPFMC.						
	Is there a minimum FCEY to prosecute the directed halibut fishery in 4CDE?	A minimum FCEY in 4CDE	x	Annual	P(FCEY < X)		
	Is there a target FCEY in 4CDE?	A target FCEY in 4CDE					
	Are there market constraints for the directed fishery in 4CDE that should be considered?	There is an upper limit to the marketable catch of halibut in the directed fishery					
	Should the directed halibut fishery O32 (or O26) catch limit be greater than a specific proportion of the total O32 (or O26) catch limit in	The proportion of the directed fishery catch limit is greater than X% of the total catch limit (floor and ceiling?)					
Provide for directed halibut	4CDE?						
fishing							
operations [in							
the Bering Sea].							

Council Objectives (overarching goals)	Question to stakeholders and managers	Example Measurable Objective	Threshold	Time Frame	Performance metric
	Does PSC limit increase and decrease with halibut abundance?	The change in PSC limit has a minimum level of variation relative to the indices	Slope > X	Annual	AAV of PSC limit or slope of combined control rule
	Is the PSC limit continuous, or does it have floors and/or ceilings?	The range of the index for which a minimum level of variation is achieved is sufficient			
	Is there a range over which PSC will index with abundance?	Same as above			
Halibut PSC limits should be indexed to halibut abundance	Should size compositions of indices be considered?	Incorporate appropriate size ranges to index the important components			