

## Management Parameters and Projection Specifications

### I. SEDAR 32, blueline tilefish and gray triggerfish benchmark assessments

Table 1. Management Parameters

Criteria	Definition	Base Run Values	Median of Base Run MCBS
	MSST <sup>1</sup>	(1-M) Bmsy 0.5 Bmsy	
MFMT	Fmsy, if available		
F <sub>MSY</sub>			
MSY	Yield at F <sub>MSY</sub> , landings and discards, pounds and numbers		
Bmsy <sup>1</sup>	Total or spawning stock, to be defined		
Rmsy	Recruits @ MSY		
F Target	75% Fmsy		
Yield at Ftarget (Equilibrium)	landings and discards, pounds and numbers		
M	Natural Mortality, average across ages		
Terminal F	Exploitation		
Terminal Biomass <sup>1</sup>	Biomass		
Exploitation Status	F/MFMT		
Biomass Status <sup>1</sup>	B/MSST B/Bmsy		
Generation Time			
Trebuild (if appropriate)			

1. Biomass values reported for management parameters and status determinations should be based on the biomass metric recommended through the Assessment process and SSC. This may be total, spawning stock or some measure thereof, and should be applied consistently in this table.

Table 2. General Projection Specifications

First Year of Management	2015
Interim basis	ACL, if ACL is met average exploitation, if ACL is not met
Projection Outputs	
Landings	pounds and numbers
Discards	pounds and numbers
Exploitation	F & Probability F>MFMT
Biomass (total or SSB, as appropriate)	B & Probability B>MSST (and Prob. B>Bmsy if under rebuilding plan)
Recruits	number

Table 3. Base Run Projections Specifications. Long Term and Equilibrium conditions.

Criteria	Definition	If overfished	if overfishing	Neither overfished nor overfishing
Projection Span	Years	Trebuild	10	10
Projection Values	F <sub>current</sub>	X	X	X
	F <sub>msy</sub>	X	X	X
	75% F <sub>msy</sub>	X	X	X
	F <sub>rebuild</sub>	X		
	F=0	X		

NOTE: Exploitation rates for projections may be based upon point estimates from the base run (current process) or upon the median of such values from the MCBS evaluation of uncertainty. The critical point is that the projections be based on the same criteria as the management specifications.

Table 4. P-Star Projections. Short term specifications for OFL and ABC recommendations. Additional P-Star projections may be requested by the SSC once the ABC control rule is applied.

Criteria		overfished	Not overfished
Projection Span	Years	5	5
Probability Values	50%	Probability of stock rebuild	Probability of overfishing

## II. SEDAR 36, Snowy Grouper Standard Assessment

Table 1. Management Parameters

Criteria			
	Definition	Base Run Values	Median of Base Run MCBS
MSST <sup>1</sup>	0.75*SSB <sub>msy</sub>		
MFMT	F <sub>msy</sub>		
F <sub>MSY</sub>			
MSY	Yield at F <sub>MSY</sub> , landings and discards, pounds and numbers		
B <sub>msy</sub> <sup>1</sup>	based on SSB		
R <sub>msy</sub>	Recruits @ MSY		
F Target	75% F <sub>msy</sub>		
Yield at F <sub>target</sub> (Equilibrium)	landings and discards, pounds and numbers		
M	Natural Mortality, average across ages		
Terminal F			
Terminal Biomass <sup>1</sup>	SSB		
Exploitation Status	F/MFMT		
Biomass Status <sup>1</sup>	B/MSST B/B <sub>msy</sub>		
Generation Time			
Trebuild (if appropriate)	34Y; start 2003 end 2039		

1. Biomass values reported for management parameters and status determinations should be based on the biomass metric recommended through the Assessment process and SSC. This may be total, spawning stock or some measure thereof, and should be applied consistently in this table.

Table 2. General Projection Specifications

First Year of Management	2015
Interim basis	ACL, if ACL is met average exploitation, if ACL is not met
Projection Outputs	
Landings	pounds and numbers
Discards	pounds and numbers
Exploitation	F & Probability F>MFMT
Biomass (total or SSB, as appropriate)	B & Probability B>MSST (and Prob. B>B <sub>msy</sub> if under rebuilding plan)
Recruits	number

Table 3. Base Run Projections Specifications. Long Term and Equilibrium conditions.

Criteria	Definition	If overfished	if overfishing	Neither overfished nor overfishing
Projection Span	Years	to 2039	10	10
Projection Values	F <sub>current</sub>	X	X	X
	F <sub>msy</sub>		X	X
	75% F <sub>msy</sub>	X	X	X
	F <sub>rebuild</sub> = F <sub>msy</sub> <sup>1</sup>	X		

NOTE: Exploitation rates for projections may be based upon point estimates from the base run (current process) or upon the median of such values from the MCBS evaluation of uncertainty. The critical point is that the projections be based on the same criteria as the management specifications.

1. Snapper Grouper Amendment 15A specified the rebuilding strategy for snowy grouper, based on a modified constant F strategy with F-rebuild = F<sub>msy</sub>.

Table 4. P-Star Projections. Short term specifications for OFL and ABC recommendations.

NOTE: The SSC recommended a P\* of 30% during initial ABC control rule consideration.

Criteria		overfished	Not overfished
Projection Span	Years	5	5
Probability Values	50%	Probability of stock rebuild	Probability of overfishing
	30%		

## Management Parameters and Projection Specifications

### III. SEDAR 38, king mackerel

Table 1. Management Parameters

Criteria	Definition	Base Run Values	Median of Base Run MCBS
	MSST <sup>1</sup>	(1-M) Bmsy	
MFMT <sup>2</sup>	F30%SPR		
F <sub>MSY</sub>			
MSY	Yield at F <sub>MSY</sub> , landings and discards, pounds and numbers		
Bmsy <sup>1</sup>	Total or spawning stock, to be defined		
Rmsy	Recruits @ MSY		
F Target	75% Fmsy		
Yield at Ftarget (Equilibrium)	landings and discards, pounds and numbers		
M	Natural Mortality, average across ages		
Terminal F	Exploitation		
Terminal Biomass <sup>1</sup>	Biomass		
Exploitation Status	F/MFMT		
Biomass Status <sup>1</sup>	B/MSST B/Bmsy		
Generation Time			
Trebuild (if appropriate)			

1. Biomass values reported for management parameters and status determinations should be based on the biomass metric recommended through the Assessment process and SSC. This may be total, spawning stock or some measure thereof, and should be applied consistently in this table.

2. Fmsy was not available from the prior assessment. A proxy of F30%SPR was used. This should be replaced with Fmsy if a reliable estimate is provided from this assessment.

Table 2. General Projection Specifications

First Year of Management	2015 Fishing Year
Interim basis	ACL, if ACL is met average exploitation, if ACL is not met
Projection Outputs - By migratory group and Fishing Year	
Landings	pounds and numbers
Discards	pounds and numbers
Exploitation	F & Probability F>MFMT
Biomass (total or SSB, as appropriate)	B & Probability B>MSST (and Prob. B>Bmsy if under rebuilding plan)
Recruits	number

Table 3. Base Run Projections Specifications. Long Term and Equilibrium conditions.

Criteria	Definition	If overfished	if overfishing	Neither overfished nor overfishing
Projection Span	Years	Trebuild	10	10
Projection Values	F <sub>current</sub>	X	X	X
	F <sub>msy</sub> (proxy)	X	X	X
	75% F <sub>msy</sub>	X	X	X
	F <sub>rebuild</sub>	X		
	F=0	X		

NOTE: Exploitation rates for projections may be based upon point estimates from the base run (current process) or upon the median of such values from the MCBS evaluation of uncertainty. The critical point is that the projections be based on the same criteria as the management specifications.

Table 4. P-Star Projections. Short term specifications for OFL and ABC recommendations. Additional P-Star projections may be requested by the SSC once the ABC control rule is applied.

Criteria		overfished	Not overfished
Projection Span	Years	10	10
Probability Values	50%	Probability of stock rebuild	Probability of overfishing
	27.5% <sup>1</sup>		

1. Based on the SSC recommended P\*, December 2008.