# Constant $F$ projections under single species assessments of Sebastes mentella and S. fasciatus in Units 1 and 2 

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November 2015

Results under constant fishing mortality $(F)$ projections for the single species assessments of $S$. mentella and S. fasciatus (Rademeyer and Butterworth 2014) are presented in Figure 1. These assume the same commercial selectivities, both by species and by Unit, as applied in the past for the assessment. The following three constant Fs have been used:

1) $F=0$;
2) $F=$ average of 2011-2015 values;
3) $F=$ average of 1980-2000 values;
4) $F=F 50 \%$ (i.e. that $F$ which reduces spawner biomass per recruit to $50 \%$ of its pristine value); and
5) $F=F 40 \%$ (often used as a proxy for $F_{\text {MSY }}$ for US fisheries).

It is important to appreciate that these are deterministic projections, i.e. they assume the assessment results are exact, and that future recruitment will each year be the mean of the values since 1980 omitting years of extraordinarily large (peak) recruitment. More elaborate computations would want to reflect the implications of the assessment uncertainty and the variability in future recruitment.

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Figure 1: Constant $F$ projection results for single species assessment of $S$. mentella and $S$. fasciatus.


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