

MODIFICATION TO PUCL3 RULE FOR BYCATCH

Previously: PUCL3 = 18000 tonnes

Change: PUCL3 = 15589 tonnes
or
PUCL3 = 16814 tonnes with a maximum in any one year of 8407 tonnes

Reasons for change: i) Updated assessment – improved selectivity model led to lower pre-exploitation levels.
ii) Used empirical distribution to resample previous catches rather than a fitted distribution

MODIFICATION TO TAC RULE FOR DIRECTED MIDWATER CATCHES

$$TAC_{y+1} = \Delta_y TAC_y$$

$$\Delta_y = \begin{cases} 1 - X_{decr} & \text{for } I_y < I_{decr} \\ 1 - X_{decr} + \frac{X_{incr} + X_{decr}}{I_{incr} - I_{decr}} (I_y - I_{decr}) & \text{for } I_{decr} \leq I_y < I_{incr} \\ 1 + X_{incr} & \text{for } I_y \geq I_{incr} \end{cases}$$

I_y is related to a weighted average of the last three years of survey and CPUE data.

- Reason for changes:
- i) Updated assessment – improved selectivity model led to lower pre-exploitation levels.
 - ii) Changed PUCL3 rule.
 - iii) Criterion to select rule unchanged (match previous results for lower percentile of B^{SP} with bycatch = 5000 tonnes plus midwater = 38115 tonnes, both fixed).

