

Addendum:
Further Preliminary alternate recovery target results for alternate future poaching scenarios based on different tunings of the current OMP

Explanation of Subsistence/IR Allocation

S.J. Johnston and D.S. Butterworth.

Fig. 4 of the main paper, which shows a marked initial reduction in the subsistence/IR allocation (in median terms) from 270 MT for 2010/11 to 164 MT for 2011/12 for the example shown, merits some explanation. It is important to appreciate that for this example:

- a) The existing proportional baseline allocations for the sectors are assumed to apply, i.e. an 8.8% to subsistence/IR.
- b) As agreed by the SWG, the subsistence/IR catch for 2010/2011 is to be taken to be 270 MT, with this figure used in extrapolating the resource dynamics into the future. This is the value plotted in Fig. 4 of the main paper for 2010/2011.

The reason for the marked reduction is that under the allocation rules, for the existing baseline allocation for the subsistence/IR take component, the following algorithm is applied:

$C_y^{SUB} = C_{y-1}^{SUB}$ (i.e. the allocation for the $y = 2011/2012$ season is preliminarily set to that for the 2010/2011 season, which is the **200 MT** that was formally allocated to the subsistence/IR sector for the 2010 fishing season, and which constituted 8.8% of the global TAC for that season)

$$\text{If } C_y^{SUB} / TAC_y^G > 0.11 \quad \text{then} \quad C_y^{rec} = 0.088 TAC_y^G$$

$$\text{If } C_y^{SUB} / TAC_y^G < 0.07 \quad \text{then} \quad C_y^{rec} = 0.088 TAC_y^G$$

$$\text{If } C_y^{SUB} > 500 \text{ MT} \quad \text{then} \quad C_y^{IRc} = 500 \text{ MT}$$

where C_y^{SUB} is the overall subsistence/IR **allocation** for season y , and TAC_y^G is the “global” (commercial plus recreational plus subsistence/IR) TAC for season y as output by the OMP.

For the example shown, for 2011/2012, 200 MT is more than 11% of the global TAC (for the median over the set of future scenarios considered), so in terms of the rules above the allocation to subsistence/IR is outside its buffer limits and is accordingly changed back to its baseline 8.8% of the global TAC, as shown in Fig. 4 of the main document¹.

The SWG may wish to review whether it would wish the rules to act this way in these circumstances.

¹ Note that subsistence allocation limits are not imposed directly. Rather if a change in this allocation is indicated, recommendations for changes to the extent of the subsistence season will be made which are chosen with the intent of achieving the change in allocation sought.