Final OMP 2015 options for west coast rock lobster

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Summary

The results for the OMP variants requested at the previous SWG meeting are reported. These take into account adjusting the amount transferred from A8 to A56 (over and above abundance change related transfers) to be 5% only, allowing the maximum TAC increase constraint to be 11%, and permitting tolerance allowances of 10% for the offshore fishing sector. Results for a further OMP candidate which extends tolerance to the nearshore+interim relief/subsistence sectors (but excluding A8+) is also reported. Note these two OMP variants will result in the same initial TAC values for the 2015 season – the extent to which tolerance during the season is allowed may be the only variable.

Introduction

Following results presented in FISHERIES/2015/JUL/SWG/WCRL/25, the SWG recommended that the OMP variant that allowed for only a 5% A8+ offshore TAC to be shifted into A56 (over and above abundance change related transfers) was preferred. This OMP is expected to provide acceptable resource recovery for all super-areas. A maximum TAC increase constraint of 11% was also selected as part of OMP 2015. Tolerance in the offshore sector at the 10% level was accepted to be biological defensible. It was requested that tolerance be further explored for the nearshore and interim relief/subsistence sectors, for which A8+ would be excluded from tolerance transfers.

Results

Results for the final two OMP variants are reported in Table 1:

OMP1 - 11% maximum TAC increase constraint, **5%** A8 offshore shifted into A56 and 10% offshore tolerance only allowed.

OMP2 - 11% maximum TAC increase constraint, **5%** A8 offshore shifted into A56 and 10% offshore tolerance, as well as nearshore+interim relief/subsistence tolerance (excluding A8+), allowed.

Tables 2a and b report the probability (expressed as a %) that the EC rule is invoked at least once in any one super-area over the six year period 2015-2020 (Table 2a), or the four year period 2015-2018 (Table 2b).

Figure 1 reports the projected biomass recovery and associated TAC allowances for each sector assuming OMP1 variant is implemented. Note only very small differences are expected for the OMP2 variant as regards overall sector allowances.

Discussion

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As expected, OMP1 shows acceptable performance in relation to earlier discussions of trade-offs in the WCRL SWG. The same can be said of OMP2, where acceptable performance is now achieved given the exclusion of super-area A8+ from possible tolerance adjustments for the nearshore and interim relief/subsistence sectors.

Table 1: OMP 2015 simulation results of for OMP1 and OMP2. Medians with 5th and 95th percentile values shown in parentheses. Note the super-area specific offshore TAC values reported here are those set by the OMP prior to changes perhaps resulting from any tolerances allowed.

		OMP1	OMP2
		(offshore tolerance only)	(offshore and Nearshore+IR tolerance allowed
6-vr (2015-2020)	A1-2	50 [40: 50]	34 [31: 38]
Ave Global TAC	A3-4	333 [118: 396]	328 [115: 395]
	A5-6	415 [334; 485]	411 [330; 487]
	A7	293 [238; 335]	300 [248; 338]
	A8	1249 [1109; 1353]	1212 [1094; 1316]
	Т	2310 [1945; 2318]	2310 [1940; 2318]
	A1-2	0 [0; 0]	0 [0; 0]
6-yr (2015-2020)	A3-4	183 [50; 248]	181 [50; 247]
Ave offshore TAC	A5-6	310 [238; 380]	309 [234; 384]
	A7	265 [210; 307]	267 [217; 306]
	A8	713 [633; 816]	712 [633; 816]
	Т	1493 [1281; 1500]	1494 [1279; 1500]
	A1-2	32 [25; 32]	21 [20; 26]
6-yr (2015-2020)	A3-4	86 [34; 86]	84 [34; 88]
Ave nearshore	A5-6	38 [31; 38]	35 [30; 39]
TAC	A7	16 [14; 16]	18 [16; 18]
	A8	322 [272; 323]	295 [265; 296]
	Т	458 [372; 459]	458 [371; 459]
	A1-2	17 [13; 17]	11 [9; 11]
6-yr (2015-2020)	A3-4	52 [20; 53]	52 [20; 54]
Ave IR TAC	A5-6	56 [46; 57]	53 [48; 59]
	A7	10 [8; 10]	11 [10; 11]
	A8	158 [131; 161]	148 [132; 148]
	Т	277 [229; 278]	277 [227; 278]
6 yr (2015-2020)	Т	81 [68; 82]	81 [68; 82]
Ave Total Rec. Take			
	A1-2	0.76 [0.41; 2.00]	0.82 [0.46; 2.05]
	A3-4	1.71 [0.90; 2.91]	1.70 [0.90; 2.90]
B75 _m (21/06)	A5-6	2.16 [1.17; 4.73]	2.27 [1.17; 4.71]
	A7	1.78 [1.12; 2.86]	1.79 [1.16; 2.81]
	A8	1.21 [0.67; 2.48]	1.21 [0.68; 2.48]
	Т	1.56 [0.97; 2.53]	1.55 [0.97; 2.54]

	OMP1	OMP2
A1+2	6.00%	3.00%
A3+4	2.67%	15.00%
A5+6	0.83%	5.00%
A7	0.00%	0.00%
A8+	0.00%	0.00%
Т	4.50%	23.00%

Table 2a: The probability (expressed as a %) that the EC rule is invoked at least once in any one super-area **over the six year period** 2015-2020. Results shown for the two OMP variants.

Table 2b: The probability (expressed as a %) that the EC rule is invoked at least once in any one super-area **in the first four years.** Results shown for the two OMP variants.

	OMP1	OMP2
A1+2	0.00%	0.00%
A3+4	1.50%	6.00%
A5+6	0.25%	1.00%
A7	0.00%	0.00%
A8+	0.00%	0.00%
Т	1.75%	1.75%



Figure 1: OMP 2015 – (OMP1 variant) simulated results. Medians (black circles) and 5th and 95th percentiles (dotted lines) are shown.