Further OMP 2007 results for West Coast rock lobster

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A third OMP tuning is reported in Table 1, which is aimed at being between the "2245" MT and "2401" MT tunings w.r.t. median resource recovery levels. This has resulted in a "2336" MT tuning. These three tunings are compared in Table 1.

Some variants on the "2336" MT tuning

In order to provide some immediate relied to the commercial industry, the following two variants (on the "2336" MT tuned OMP) have been produced:

Variant 1

This variant assumes that 510 MT of lobsters will not be caught in the 2006 season. It assumes then that 170 MT (510/3) will be caught each year for the 2007, 2008 and 2009 seasons, on top of what the OMP estimates for those seasons. The OMP procedure will however continue to assume a global TAC of 2857 MT for the 2006 season.

Variant 2

The current OMP imposes a maximum 10% TAC downward constraint for the 2007 and 2008 seasons (thereafter this value can range from 10% to 20%). Variant 2 is identical except that it imposes a 6% TAC downward constraint for the 2007 season. Variant 2a imposes this 6% constraint on the global TAC only, whilst variant 2b imposes this 6% constraint on the global and commercial TACs. Note that Variant 2 requires a slight modification of the OMP tuning parameter, in order to achieve the same level of median resource rebuilding as the "2336" OMP.

Table 2 compares the results of Variants 1 and 2a and 2b with the original "2336" MT tuned OMP.

Table 1: Median and 5th and 95th percentile values for three candidate OMPs tuned so that median 10-year average commercial TAC = 2245 MT, 2336 MT and 2401 MT Results are for the full stochastic integration over the Reference Set.

		OMP Tuning 2245 MT	**OMP Tuning 2336 MT**	**OMP Tuning 2401 MT**
10-yr Ave commercial TAC	A1-2	30 [30; 30]	30 [30; 30]	30 [30; 30]
	A3-4	186 [145; 234]	197 [151; 244]	203 [158; 252]
	A5-6	40 [40; 40]	40 [40; 40]	40 [40; 40]
	A7	633 [490; 774]	659 [501; 806]	677 [523; 832]
	A8	1340 [1092; 1578]	1390 [1124; 1626]	1438 [1162; 1666]
	T	2245 [1830; 2587]	2336 [1893; 2678]	2401 [1954; 2744]
2007-2009 Ave commercial TAC	T	2100 [2021; 2229]	2126 [2021; 2229]	2151 [2021; 2229]
10-yr Ave offshore TAC	A1-2	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A3-4	96 [55; 144]	106 [62; 154]	113 [68; 162]
	A5-6	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A7	633 [490; 774]	659 [401; 806]	677 [523; 832]
	A8	940 [692; 1178]	990 [724; 1226]	1038 [762; 1266]
	T	1655 [1241; 1997]	1746 [1303; 2086]	1811 [1364; 2165]
Ave Total Recreational Take	T	262 [202; 294]	272 [209; 305]	281 [214; 308]
Ave V commercial	A1-2	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A3-4	13 [10; 18]	14 [10; 18]	14 [11; 19]
	A5-6	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A7	17 [14; 22]	18 [14; 22]	18 [14; 22]
	A8	7 [5; 9]	6 [5; 9]	6 [4; 9]
	T	9 [6; 11]	9 [6; 11]	9 [6; 11]
B_m(16/06)	A1-2	0.79 [0.50; 1.32]	0.79 [0.50; 1.32]	0.78 [0.50; 1.31]
	A3-4	1.06 [0.62; 2.58]	1.04 [0.60; 2.57]	1.02 [0.58; 2.56]
	A5-6	1.77 [0.61; 11.30]	1.77 [0.60; 10.35]	1.77 [0.60; 11.28]
	A7	1.26 [0.36; 3.26]	1.23 [0.31; 3.19]	1.16 [0.26; 3.12]
	A8	1.01 [0.39; 2.83]	0.95 [0.32; 2.75]	0.90 [0.25; 2.69]
	T	1.26 [0.62; 3.00]	1.21 [0.56; 2.96]	1.16 [0.52; 2.92]
B_m(16/80)	A1-2	0.25 [0.16; 0.42]	0.25 [0.15; 0.42]	0.25 [0.15; 0.42]
	A3-4	0.72 [0.42; 1.79]	0.71 [0.41; 1.78]	0.70 [0.39; 1.78]
	A5-6	0.39 [0.13; 2.45]	0.39 [0.13; 2.48]	0.39 [0.13; 2.45]
	A7	0.54 [0.15; 1.40]	0.52 [0.13; 1.37]	0.51 [0.11; 1.34]
	A8	1.14 [0.44; 3.24]	1.09 [0.36; 3.16]	1.03 [0.28; 3.09]
	T	0.72 [0.35; 1.76]	0.70 [0.32; 1.73]	0.68 [0.30; 1.70]
B_m(16/1910)	A1-2	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]

	A3-4	0.04 [0.02; 0.09]	0.03 [0.02; 0.09]	0.03 [0.02; 0.09]
	A5-6	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]
	A7	0.02 [0.01; 0.06]	0.02 [0.01; 0.06]	0.02 [0.004; 0.06]
	A8	0.06 [0.02; 0.17]	0.06 [0.02; 0.16]	0.05 [0.01; 0.16]
	T	0.04 [0.02; 0.09]	0.04 [0.02; 0.09]	0.03 [0.02; 0.09]
$\boldsymbol{B}_{\mathbf{m}}$**(16)/** K_m^{curr}	A1-2	0.32 [0.15; 0.50]	0.32 [0.15; 0.50]	0.32 [0.15; 0.50]
	A3-4	0.29 [0.14; 0.93]	0.28 [0.14; 0.91]	0.28 [0.74; 0.88]
	A5-6	0.13 [0.05; 1.13]	0.12 [0.05; 1.13]	0.12 [0.05; 1.12]
	A7	0.23 [0.08; 0.50]	0.22 [0.07; 0.49]	0.21 [0.05; 0.48]
	A8	0.18 [0.09; 0.36]	0.17 [0.07; 0.34]	0.16 [0.06; 0.33]
	T	0.21 [0.12; 0.41]	0.20 [0.11; 0.40]	0.19 [0.10; 0.39]
Effort(15/06)	T	0.72 [0.33; 1.72]	0.80 [0.35; 1.99]	0.90 [0.37; 2.42]

Table 2: Median and 5th and 95th percentile values for three variants of the "2336" MT tuned candidate OMP. Results are for the full stochastic integration over the Reference Set.

		Base Case	Variant 1 510 split into 3*170	Variant 2a 6% 2007 constraint global TAC	Variant 2b 6% 2007 constraint global+commercial TAC
10-yr Ave commercial TAC	A1-2	30 [30; 30]	30 [30; 30]	30 [30; 30]	30 [30; 30]
	A3-4	197 [151; 244]	184 [149; 220]	195 [152; 245]	194 [151; 244]
	A5-6	40 [40; 40]	40 [40; 40]	40 [40; 40]	40 [40; 40]
	A7	659 [501; 806]	609 [482; 726]	662 [511; 815]	658 [509; 811]
	A8	1390 [1124; 1626]	1296 [1101; 1480]	1398 [1135; 1645]	1393 [1131; 1638]
	T	2336 [1893; 2678]	2583 [2233; 2824]	2335 [1903; 2718]	2323 [1896; 2707]
2007-2009 Ave commercial TAC	T	2126 [2021; 2229]	3421 [3320; 3420]	2183 [2093; 2311]	2192 [2106; 2224]
10-yr Ave offshore TAC	A1-2	0 [0; 0]	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A3-4	106 [62; 154]	95 [60; 131]	105 [62; 156]	104 [61; 155]
	A5-6	0 [0; 0]	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A7	659 [401; 806]	609 [482; 726]	662 [511; 815]	658 [509; 811]
	A8	990 [724; 1226]	896 [701; 1080]	998 [735; 1245]	993 [731; 1238]
	T	1746 [1303; 2086]	1993 [1643; 2234]	1745 [1313; 2127]	1733 [1306; 2117]
Ave Total Recreational Take	T	272 [209; 305]	254 [198; 207]	280 [216; 315]	279 [215; 310]
Ave V commercial	A1-2	0 [0; 0]	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A3-4	14 [10; 18]	18 [16; 21]	14 [10; 18]	14 [10; 18]
	A5-6	0 [0; 0]	0 [0; 0]	0 [0; 0]	0 [0; 0]
	A7	18 [14; 22]	17 [14; 21]	17 [13; 21]	17 [13; 22]
	A8	6 [5; 9]	8 [6; 11]	6 [4; 9]	6 [4; 9]
	T	9 [6; 11]	20 [18; 22]	8 [5; 10]	8 [5; 10]
B_m(16/06)	A1-2	0.79 [0.50; 1.32]	0.79 [0.50; 1.32]	0.78 [0.50; 1.32]	0.79 [0.50; 1.32]
	A3-4	1.04 [0.60; 2.57]	1.07 [0.61; 2.62]	1.04 [0.60; 2.55]	1.04 [0.61; 2.55]
	A5-6	1.77 [0.60; 10.35]	1.78 [0.61; 11.31]	1.77 [0.60; 11.28]	1.77 [0.60; 11.29]
	A7	1.23 [0.31; 3.19]	1.31 [0.40; 3.34]	1.22 [0.30; 3.19]	1.23 [0.31; 3.20]
	A8	0.95 [0.32; 2.75]	1.05 [0.42; 2.90]	0.94 [0.32; 2.72]	0.95 [0.33; 2.73]
	T	1.21 [0.56; 2.96]	1.29 [0.62; 3.02]	1.20 [0.56; 2.94]	1.21 [0.57; 2.94]
B_m(16/80)	A1-2	0.25 [0.15; 0.42]	0.25 [0.16; 0.42]	0.25 [0.15; 0.42]	0.25 [0.15; 0.42]
	A3-4	0.71 [0.41; 1.78]	0.73 [0.42; 1.82]	0.71 [0.41; 1.78]	0.71 [0.41; 1.78]
	A5-6	0.39 [0.13; 2.48]	0.39 [0.13; 2.45]	0.39 [0.13; 2.45]	0.39 [0.13; 2.45]
	A7	0.52 [0.13; 1.37]	0.56 [0.16; 1.44]	0.52 [0.12; 1.37]	0.52 [0.12; 1.38]
	A8	1.09 [0.36; 3.16]	1.19 [0.47; 3.35]	1.06 [0.36; 3.12]	1.07 [0.37; 3.13]
	T	0.70 [0.32; 1.73]	0.74 [0.35; 1.78]	0.70 [0.32; 1.72]	0.70 [0.33; 1.723

B_m(16/1910)	A1-2	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]	0.01 [0.01; 0.02]
	A3-4	0.03 [0.02; 0.09]	0.04 [0.02; 0.09]	0.03 [0.02; 0.09]	0.04 [0.02; 0.09]
	A5-6	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]	0.02 [0.01; 0.15]
	A7	0.02 [0.01; 0.06]	0.02 [0.01; 0.06]	0.02 [0.01; 0.06]	0.02 [0.01; 0.06]
	A8	0.06 [0.02; 0.16]	0.06 [0.02; 0.17]	0.05 [0.02; 0.16]	0.05 [0.02; 0.16]
	T	0.04 [0.02; 0.09]	0.04 [0.02; 0.09]	0.04 [0.02; 0.09]	0.04 [0.02; 0.09]
B_m(16)/ K_m^{curr}	A1-2	0.32 [0.15; 0.50]	0.32 [0.15; 0.50]	0.32 [0.15; 0.50]	0.32 [0.15; 0.50]
	A3-4	0.28 [0.14; 0.91]	0.29 [0.14; 0.92]	0.28 [0.14; 0.91]	0.28 [0.14; 0.91]
	A5-6	0.12 [0.05; 1.13]	0.13 [0.05; 1.13]	0.12 [0.05; 1.13]	0.12 [0.05; 1.13]
	A7	0.22 [0.07; 0.49]	0.23 [0.09; 0.52]	0.22 [0.07; 0.48]	0.22 [0.07; 0.48]
	A8	0.17 [0.07; 0.34]	0.19 [0.09; 0.36]	0.17 [0.07; 0.34]	0.17 [0.07; 0.34]
	T	0.20 [0.11; 0.40]	0.22 [0.12; 0.42]	0.20 [0.11; 0.40]	0.20 [0.11; 0.40]
Effort(15/06)	T	0.80 [0.35; 1.99]	0.87 [0.38; 2.08]	0.79 [0.35; 1.96]	0.77 [0.34; 1.91]
TAC 2007 commercial	T	2314 [2314; 2314]	3617 [3617; 3617]	2365 [2365; 2365]	2403 [2403; 2403]
TAC 2008 commercial	T	2082 [2082; 2082]	3392 [3392; 3392]	2175 [2175; 2175]	2175 [2175; 2175]
Recreational 2007		257 [257; 257]	213 [213; 213]	320 [320; 320]	320 [320; 320]
Recreational 2008		231 [231; 231]	191 [191; 191]	242 [242; 242]	242 [242; 242]