Final SCRL OMP candidates to be considered for OMP 2014

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At the SWG SCRL meeting on 24 July 2014, the request was made that further and final OMP results be presented for the following:

- A (maximum) cap on the annual TAC of 450 tons
- No constraint on the TAC for area A1E
- Projections for a 20 year period
- The combined CPUE output in figures that reflect annual values (not the three year averaged values)
- Bsp(2025/2006) median tunings: values of **1.20**, **1.30** and **1.40** to be presented. The results for the three tunings above are reported for the following OMP variants:

  Variant 1: The TAC is constrained to not decrease in first two seasons (2014[1] and 2015), thereafter the 5% maximum inter-annual TAC change constraint is imposed.

  Variant 2: The TAC is increased by 5% in the first season (2014) and thereafter the OMP rules are used to set the annual TACs (and the 5% maximum inter-annual TAC change constraint is imposed).

Results

Tables 1a and b report results for the two alternate OMP variants (for the three selected tunings for median B(2025/2006) of 1.20[2], 1.30 or 1.40).

Figure 1 compares results for both Variant 1 and Variant 2 for the three different CPUE target tunings.

Figure 2a reports results for the Variant 1 tuning of the CPUE target of 1.3 where the left plots show the median trajectories along with the 5th and 95th percentiles. The right hand plots show the results of the first six (of 1000) simulations. Figure 2b is similar, but for the Variant 2 tuning of the CPUE target of 1.3.

Table 3 reports the median , 5th and 95th percentiles of the TACs for the first three seasons (2014, 2015, and 2016) for both Variant 1 and Varian 2 OMP candidates.

[1] The convention is that, e.g., 2014 refers to the 2014/15 season.
[2] Given the (maximum) cap on the TAC, this value could not be achieved. The results reported correspond to a slightly larger value.

Table 1a: Variant 1 OMP results presented for three tunings (TAC is not allowed to decrease in the first 2 seasons). Values reported are medians, with the 5th and 95th percentiles shown in parentheses for some statistics.

$\mathbf{CPUE}_{targ}$	$\mathbf{CPUE}_{targ}$ in industry units(tails kg per day)	CPUE threshold (tails kg per day)	CPUE (2025)	CPUE (2025) in industry units (tails kg per day)	Bsp(2025/06)	Bsp(2025/K)	Cave (2014-2025)	AAV (2014-2025)	A1E B^{exp}(2025)/K Lower 5th%ile	A1W B^{exp}(2025)/K Lower 5th%ile	A2+3 B^{exp}(2025)/K Lower 5th%ile	Effort (2025/2014)
0.800	280	180	1.28	332	1.21 (0.63; 2.75)	0.39 (0.21; 0.89)	427 (388; 428)	2.34	0.12	0.19	0.19	1.35
1.195	310	180	1.43	370	1.30 (0.75; 2.81)	0.42 (0.24; 0.91)	407 (307; 419)	2.37	0.16	0.25	0.21	1.16
1.340	347	180	1.53	402	1.40 (0.86; 2.89)	0.45 (0.27; 0.93)	374 (273; 416)	3.20	0.17	0.29	0.25	0.95

Table 1b: Variant 2 OMP results presented for three tunings (TAC increased 5% in first season, thereafter OMP rules set TAC). Values reported are medians, with the 5th and 95th percentiles shown in parentheses for some statistics.

$\mathbf{CPUE}_{targ}$	$\mathbf{CPUE}_{targ}$ in industry units(tails kg per day)	CPUE threshold (tails kg per day)	CPUE (2025)	CPUE (2025) in industry units (tails kg per day)	Bsp(2025/06)	Bsp(2025/K)	Cave (2014-2025)	AAV (2014-2025)	A1E B^{exp}(2025)/K Lower 5th%ile	A1W B^{exp}(2025)/K Lower 5th%ile	A2+3 B^{exp}(2025)/K Lower 5th%ile	Effort (2025/2014)
0.95	246	180	1.35	350	1.22 (0.65; 2.75)	0.39 (0.21; 0.89)	427 (381; 428)	2.34	0.13	0.20	0.19	1.33
1.22	316	180	1.46	378	1.30 (0.75; 2.79)	0.41 (0.24; 0.91)	409 (300; 427)	3.20	0.16	0.25	0.22	1.13
1.35	350	180	1.55	401	1.40 (0.86; 2.89)	0.45 (0.27; 0.93)	373 (275; 426)	4.06	0.17	0.29	0.25	0.93

Figure 1: Results for the three different scenarios for Variant 1 (LHS) and Variant 2 (RHS) (median shown).

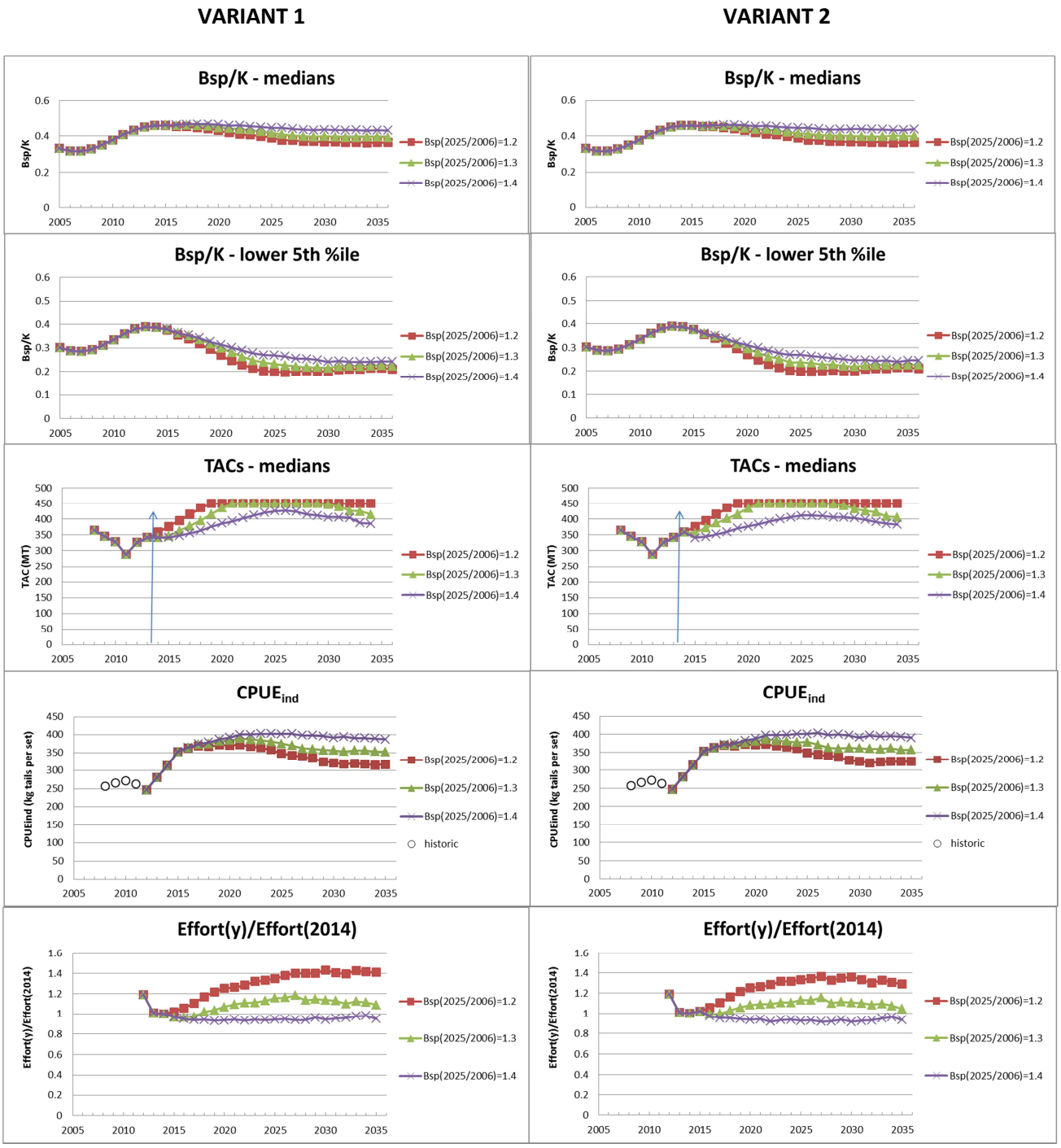

Figure 2a: Median Bsp(2025/2006) = 1.3 tuning (Variant 1). The left hand plots show the medians (solid dots) with the 5th and 95th %iles as dashed lines. The right hand side plots show results for the first six (of 1000) simulations run (except for the top right plot which is identical to the top left plot but for a shorter time period).

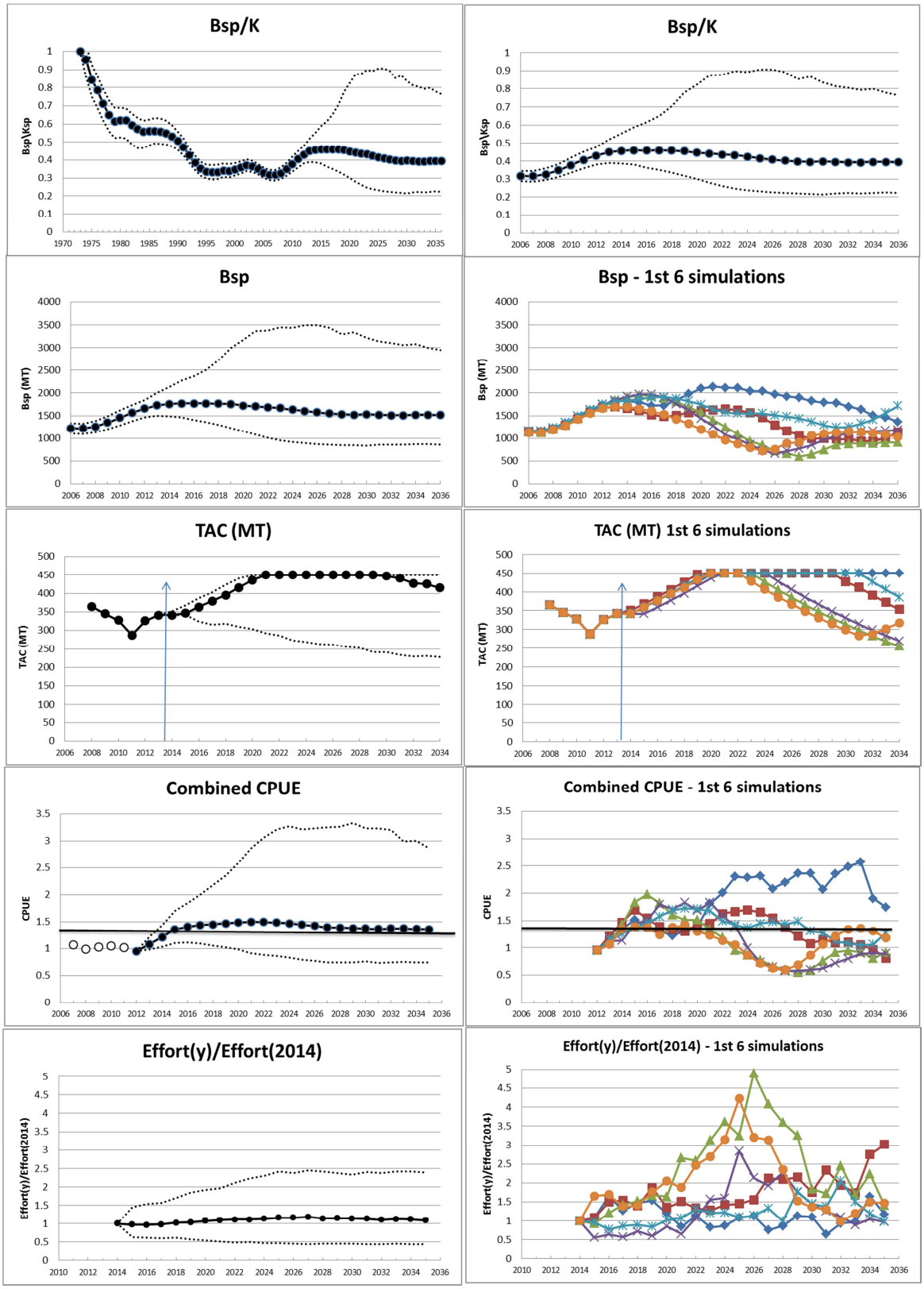

Figure 2b: Median Bsp(2025/2006) = 1.3 tuning (Variant 2). The left hand plots show the medians (solid dots) with the 5th and 95th %iles as dashed lines. The right hand side plots show results for the first six (of 1000) simulations run (except for the top right plot which is identical to the top left plot but for a shorter time period).

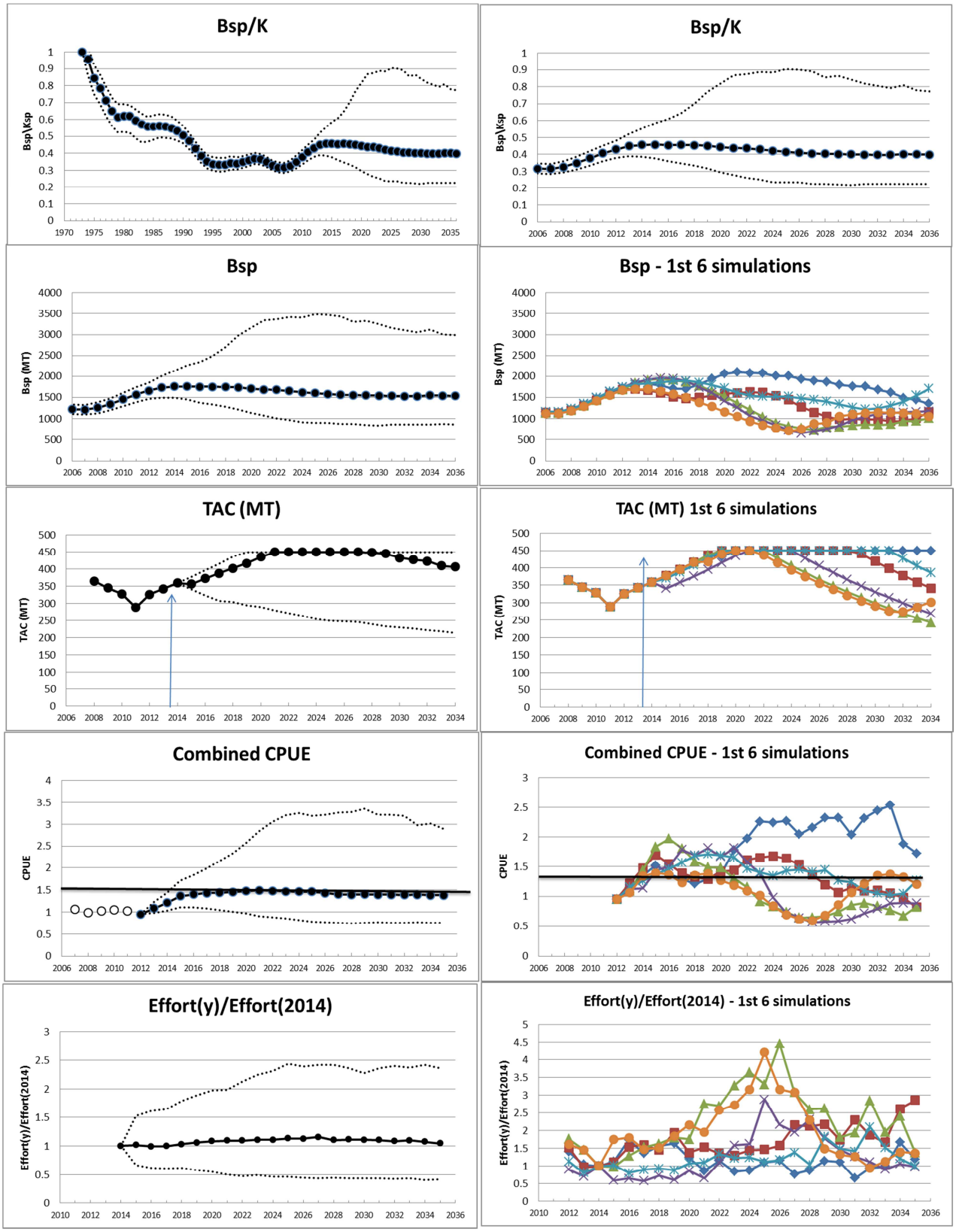

Table 3: Median and 5th and 95th percentile TACs for 2014, 2015 and 2016 for both Variant 1 (no TAC decrease in first two seasons) and Variant 2 (5% TAC increase for first year). Results shown for three tunings of median B(25/06) – 1.2, 1.3 and 1.4.

	B(25/06) tuning	**TAC(2014)**	**TAC(2015)**	**TAC(2016)**
Variant 1	1.2	359 (359; 359)	377 (377; 377)	396 (396; 396)
	1.3	342 (342; 352)	347 (342; 369)	363 (325; 387)
	1.4	342 (342; 342)	342 (342; 377)	348 (325; 377)
Variant 2	1.2	359 (359; 359)	377 (377; 377)	396 (396; 396)
	1.3	359 (359; 359)	356 (341; 377)	373 (324; 396)
	1.4	359 (359; 359)	341 (341; 377)	344 (324; 396)