RESULTS OF INTERSESSIONAL MP RUNS REQUESTED BY THE SPECIAL MEETING OF THE EXTENDED COMMISSION

Bali, Indonesia, 10 – 13 Oct 2011

Results of Additional MP Runs

Special Meeting requested TAC recommendations for 12 different variations of the Bali Procedure

- Tuning years of 2030 and 2035 (2040 eliminated)
- Maximum TAC changes of 3000 t and 5000 t
- TAC change at first TAC setting period – no increase, increase, 1000 t increase

Biomass Trajectories

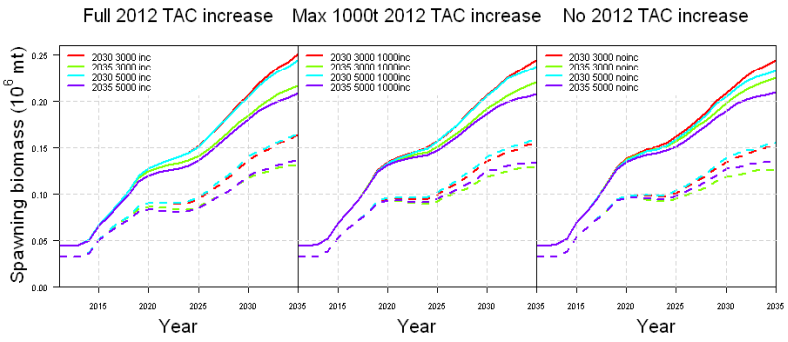


Figure 2: Spawning stock biomass (median, full line; 10th percentile, dashed line) summary. Each pane represents the specific first-year increase scenario, and therein all four tuning year and maximum TAC change scenarios.

Catch Trajectories

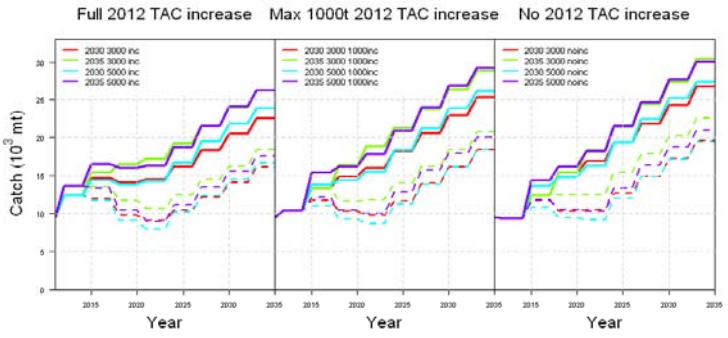


Figure 1: TAC (median, full line; 10th percentile, dashed line) summary. Each pane represents the specific first-year increase scenario, and therein all four tuning year and maximum TAC change scenarios.

Trade-offs – Tuning year

Summary of trade-offs between stock rebuilding and catch performance for (1) tuning year, (2) maximum TAC change, and (3) TAC increase/no increase/1000 t increase in first year

(1) Tuning year – 2030 or 2035

Stock rebuilding

- 2030 leads to more rapid rebuilding than 2035

Catch performance

- 2030 tuning year means greater likelihood of lower average catches
- 2030 tuning increases up/down TAC behavior

Trade-offs – Max TAC change

(2) Maximum TAC change – 3000, 5000 t

Stock rebuilding

- 3000 t max leads to more rapid rebuilding by 2022

Catch performance

- 5000 t max leads to greater inter-annual variation in catch
- 5000 t max leads to higher likelihood of TAC increase followed by decrease in the first 2 and first 4 TAC decisions
- 5000 t max leads to higher average catch between 2012 – 2022

Trade-offs – TAC increase –Y/N

(3) TAC increase in first year of MP implementation (2012) – No/1000 t/Yes

Stock rebuilding

- Allowing TAC increase does not prevent MP meeting rebuilding target
- Allowing increase slows rate of biomass rebuilding during 2011-2022
- Allowing for a maximum 1000 t increase in 2012 yields similar, but slightly slower rebuilding than the no increase case

Trade-offs – TAC increase –Y/N

Catch performance

- No TAC increase reduces up/down TAC behavior from 2015-2021
- No increase reduces catch variation during 2013-2025
- No TAC increase generally leads to lower catches between 2012 - 2022
- A 1000 t max increase yields higher average catches than the no increase case but can also increase the probability of future (after 2015) TAC up/down behavior

Trade-offs – TAC increase –Y/N

Catch performance (cont.)

- Allowing the maximum TAC increase in the first year leads to higher max TAC decrease over the remainder of the evaluation period
- Allowing the maximum TAC increase leads to, on average, a 12% probability of a TAC decrease in 2015

Implied TACs

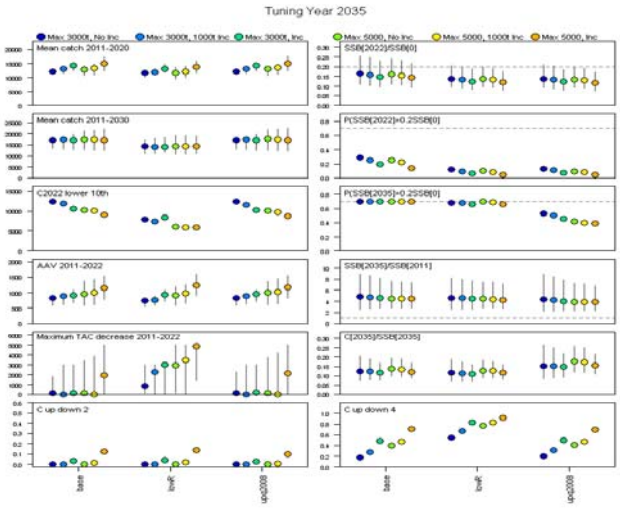
Implied TACs for 2012 to 2014 under the 12 variations of the Bali Procedure

Tuning Year	Max change	TAC inc	TAC
2030	3000	No	9449
2030	3000	1000t	10449
2030	3000	Yes	12449
2030	5000	No	9449
2030	5000	1000t	10449
2030	5000	Yes	12448
2035	3000	No	9449
2035	3000	1000t	10449
2035	3000	Yes	12449
2035	5000	No	9449
2035	5000	1000t	10449
2035	5000	Yes	13723

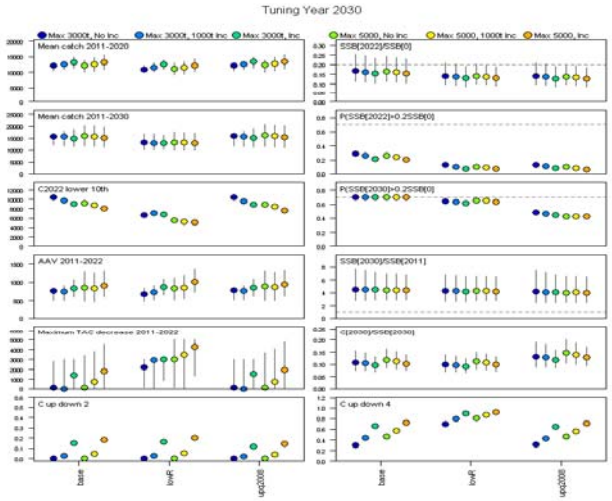
Implied TACs

Tuning year	Maximum TAC change (t)	Increase in initial TAC setting	Recommended TAC (t) for 2013-2015
2030	3000	Yes	12449
2030	5000	Yes	12448
2035	3000	Yes	12449
2035	3000	Yes	13723

Summary Statistics



Summary Statistics



END