

Biomass trajectories under different future catch scenarios

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Figure 1: Biomass trajectories associated with either the DAFF or SWG recommended TACs but for the resource as a whole. The trajectory under a zero future constant catch is also shown. The red dot shows the previous recovery target. Whereas results reported in this document assume the SWG’s recommendation for a TAC for 2016 to continue for subsequent seasons (SWG 1-step), the result shown below for the SWG also incorporates the SWG’s recommendation for a further decrease in the TAC to apply for the 2017 and subsequent seasons (SWG 2-step). The horizontal line corresponds to B2006. These projections assume a level of poaching equivalent to “Scenario 5” as previously agreed as the baseline poaching scenario by the SWG, and values are reported in Table 2.

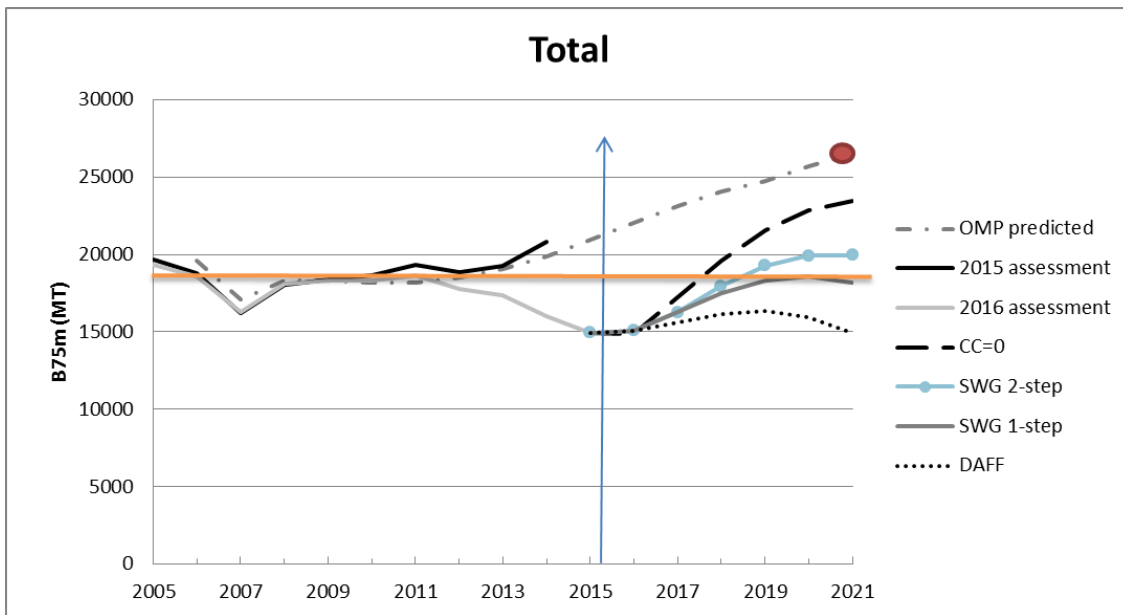


Table 1: Future catches associated with the various options shown in the above Figure 1. The final row gives the median of the B(21/06) value. Note the agreed target for the previous OMP was 1.37.

| | CC=0 (with poaching) | DAFF (with poaching) | SWG-1 step (with poaching) | SWG-2-step (with poaching) | |
|------------------------|-------------------------|---------------------------------------|---|--|------------|
| | CC=0 | CC=DAFF final decision for 2016 | SWG 2016 recommendation continued into future (CC) | SWG recommendation involving a two step recommendation | |
| | 2016-21 | 2016-21 | 2016-21 | 2016 | 2017-21 |
| A1+2 | 0 | 81 | 30 | 30 | 20 |
| A3+4 | 0 | 218 | 150 | 150 | 100 |
| A5+6 | 0 | 227 | 100 | 100 | 100 |
| A7 | 0 | 150 | 150 | 150 | 150 |
| A8+ | 0 | 1248 | 840 | 840 | 420 |
| Total | 0 | 1924 | 1270 | 1270 | 790 |
| Median B(21/06) | 1.26 | 0.84 | 0.98 | 1.07 | |

Table 2: Poaching values assumed for each super-area (as agreed upon by the SWG reference case scenario for future poaching .This is what has been termed called “Scenario 5” – see DAFF WCRL SWG (2016)). Values for 1990+ only are reported. Poaching for all areas is assumed to increase linearly from zero in 1950 to the values for 1990 reported below.

| | Total | A34 | A56 | A7 | A8+ |
|---------|--------------|------------|------------|-----------|------------|
| 1990 | 250 | 28 | 28 | 19 | 175 |
| 1991 | 264 | 30 | 30 | 20 | 185 |
| 1992 | 278 | 31 | 31 | 21 | 194 |
| 1993 | 292 | 33 | 33 | 22 | 204 |
| 1994 | 306 | 34 | 34 | 23 | 214 |
| 1995 | 319 | 36 | 36 | 24 | 224 |
| 1996 | 333 | 38 | 38 | 25 | 233 |
| 1997 | 347 | 39 | 39 | 26 | 243 |
| 1998 | 361 | 41 | 41 | 27 | 253 |
| 1999 | 375 | 42 | 42 | 28 | 263 |
| 2000 | 389 | 44 | 44 | 29 | 272 |
| 2001 | 403 | 45 | 45 | 30 | 282 |
| 2002 | 417 | 47 | 47 | 31 | 292 |
| 2003 | 431 | 48 | 48 | 32 | 301 |
| 2004 | 444 | 50 | 50 | 33 | 311 |
| 2005 | 458 | 52 | 52 | 34 | 321 |
| 2006 | 472 | 53 | 53 | 35 | 331 |
| 2007 | 486 | 55 | 55 | 36 | 340 |
| 2008 | 500 | 56 | 56 | 38 | 350 |
| 2009 | 561 | 46 | 46 | 31 | 438 |
| 2010 | 623 | 37 | 37 | 24 | 525 |
| 2011 | 684 | 27 | 27 | 18 | 613 |
| 2012 | 745 | 17 | 17 | 11 | 700 |
| 2013 | 988 | 21 | 21 | 14 | 933 |
| 2014 | 1232 | 24 | 24 | 16 | 1167 |
| 2015-21 | 1475 | 28 | 28 | 19 | 1400 |

References

DAFF WCRL SWG document. 2016. WCRL SWG agreements on WCRL poaching trends. DAFF document, FISHERIES/2016/JUL/SWG-WCRL23.

