OM2.2\_MP2.1\_1000\_20

Date: 25-Jun-2020 16.21

SSB (Mt)

| **25%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 1.52 | 1.43 | 1.35 | 1.28 | 1.21 | 1.16 | 1.11 | 1.06 | 1.02 |
| MT | 1.95 | 1.65 | 1.41 | 1.22 | 1.08 | 0.97 | 0.89 | 0.82 | 0.76 |
| LT | 2.20 | 1.77 | 1.44 | 1.20 | 1.05 | 0.95 | 0.86 | 0.79 | 0.73 |

| **50%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 1.71 | 1.61 | 1.53 | 1.44 | 1.37 | 1.30 | 1.24 | 1.19 | 1.14 |
| MT | 2.22 | 1.90 | 1.63 | 1.42 | 1.24 | 1.10 | 1.01 | 0.93 | 0.87 |
| LT | 2.54 | 2.05 | 1.67 | 1.39 | 1.20 | 1.07 | 0.98 | 0.90 | 0.84 |

| **75%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 1.90 | 1.80 | 1.70 | 1.61 | 1.53 | 1.46 | 1.39 | 1.33 | 1.28 |
| MT | 2.56 | 2.22 | 1.92 | 1.68 | 1.49 | 1.32 | 1.19 | 1.09 | 1.01 |
| LT | 3.00 | 2.43 | 2.00 | 1.67 | 1.44 | 1.25 | 1.12 | 1.03 | 0.97 |

Yield (kt)

| **25%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 43 | 82 | 115 | 143 | 167 | 186 | 202 | 214 |
| MT | 0 | 52 | 88 | 111 | 125 | 129 | 129 | 129 | 127 |
| LT | 0 | 54 | 88 | 109 | 118 | 121 | 123 | 120 | 116 |

| **Median** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 51 | 96 | 135 | 167 | 195 | 219 | 238 | 253 |
| MT | 0 | 60 | 103 | 133 | 151 | 162 | 166 | 166 | 166 |
| LT | 0 | 66 | 107 | 133 | 146 | 153 | 155 | 155 | 152 |

| **75%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 60 | 113 | 157 | 194 | 226 | 252 | 274 | 292 |
| MT | 0 | 73 | 125 | 162 | 188 | 206 | 215 | 219 | 220 |
| LT | 0 | 81 | 131 | 163 | 184 | 195 | 200 | 202 | 200 |

IAV (kt)

| **25%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | NA | 0.23 | 0.22 | 0.22 | 0.21 | 0.22 | 0.22 | 0.23 | 0.23 |
| MT | NA | 0.23 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | 0.24 | 0.24 |
| LT | NA | 0.24 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 |

| **Median** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | NA | 0.33 | 0.32 | 0.31 | 0.30 | 0.29 | 0.29 | 0.29 | 0.30 |
| MT | NA | 0.31 | 0.30 | 0.30 | 0.30 | 0.31 | 0.31 | 0.32 | 0.32 |
| LT | NA | 0.30 | 0.30 | 0.30 | 0.31 | 0.32 | 0.33 | 0.33 | 0.33 |

| **75%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | NA | 0.44 | 0.42 | 0.41 | 0.40 | 0.4 | 0.40 | 0.40 | 0.39 |
| MT | NA | 0.39 | 0.39 | 0.39 | 0.39 | 0.4 | 0.41 | 0.42 | 0.43 |
| LT | NA | 0.38 | 0.38 | 0.38 | 0.39 | 0.4 | 0.41 | 0.42 | 0.42 |

FBar

| **25%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 0.022 | 0.045 | 0.067 | 0.088 | 0.109 | 0.129 | 0.148 | 0.165 |
| MT | 0 | 0.023 | 0.046 | 0.068 | 0.087 | 0.102 | 0.114 | 0.124 | 0.133 |
| LT | 0 | 0.023 | 0.046 | 0.068 | 0.086 | 0.100 | 0.112 | 0.120 | 0.127 |

| **Median** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 0.025 | 0.051 | 0.076 | 0.101 | 0.124 | 0.145 | 0.166 | 0.186 |
| MT | 0 | 0.026 | 0.051 | 0.076 | 0.097 | 0.115 | 0.130 | 0.143 | 0.154 |
| LT | 0 | 0.026 | 0.051 | 0.075 | 0.096 | 0.114 | 0.128 | 0.139 | 0.147 |

| **75%** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 0.029 | 0.058 | 0.087 | 0.114 | 0.140 | 0.164 | 0.188 | 0.208 |
| MT | 0 | 0.029 | 0.057 | 0.085 | 0.109 | 0.130 | 0.149 | 0.165 | 0.178 |
| LT | 0 | 0.029 | 0.057 | 0.084 | 0.108 | 0.128 | 0.144 | 0.159 | 0.172 |

Risk (Type3) to Blim (%)

| **mean** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 1.7 | 3.4 | 6.4 | 11.3 |
| MT | 0.0 | 0.0 | 0.0 | 0.5 | 2.5 | 8.1 | 19.0 | 31.7 | 43.9 |
| LT | 0.0 | 0.0 | 0.1 | 1.0 | 4.8 | 12.4 | 25.3 | 39.1 | 52.1 |

Risk (Type3) to Bpa (%)

| **mean** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 5.5 | 6.6 | 8.9 | 13.8 | 21.7 | 30.1 | 39.7 | 47.6 | 54.6 |
| MT | 0.1 | 0.8 | 5.7 | 20.3 | 40.6 | 58.2 | 71.9 | 82.1 | 88.1 |
| LT | 0.0 | 0.6 | 6.5 | 24.7 | 46.0 | 64.5 | 77.1 | 85.2 | 90.0 |

Extinction Risk (%)

| **mean** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Period/Ftgt** | **0** | **0.025** | **0.05** | **0.075** | **0.1** | **0.125** | **0.15** | **0.175** | **0.2** |
| ST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Settings used

| **class** | **desc** | **value** |
| --- | --- | --- |
| OM | code | OM2.2 |
| OM | desc | WGWIDE19 |
| OM | IM |  |
| OM | SRR | SRR.WG19.SegReg\_Blim.exterm |
| OM | RecAR | TRUE |
| OM | maxRecRes1 | 3 |
| OM | maxRecRes2 | -3 |
| OM | BioYrs1 | 2008 |
| OM | BioYrs2 | 2017 |
| OM | BioConst | FALSE |
| OM | SelYrs1 | 2008 |
| OM | SelYrs2 | 2017 |
| OM | SelConst | FALSE |
| OM | Obs |  |
| OM | refPts.Fpa | 0.074 |
| OM | refPts.Flim | 0.103 |
| OM | refPts.Fmsy | 0.074 |
| OM | refPts.Bpa | 1168272 |
| OM | refPts.Blim | 834480 |
| OM | refPts.MSYBtrigger | 1168272 |
| OM | refPts.Bloss | 761613 |
| OM | pBlim | 0.05 |
| MP | code | MP2.1 |
| MP | desc | ICESHCR |
| MP | xlab | ICES AR |
| MP | HCRName | ICES |
| MP | F\_target1 | 0 |
| MP | F\_target2 | 0.025 |
| MP | F\_target3 | 0.05 |
| MP | F\_target4 | 0.075 |
| MP | F\_target5 | 0.1 |
| MP | F\_target6 | 0.125 |
| MP | F\_target7 | 0.15 |
| MP | F\_target8 | 0.175 |
| MP | F\_target9 | 0.2 |
| MP | B\_trigger | MSYBtrigger |
| MP | minTAC |  |
| MP | maxTAC |  |
| MP | TAC\_IAV |  |
| MP | Obs.cvF | 0.3 |
| MP | Obs.phiF | 0.3 |
| MP | Obs.cvSSB | 0 |
| MP | Obs.phiSSB | 0 |
| OTHER | niters | 1000 |
| OTHER | nyr | 20 |
| OTHER | ST | 2021-2025 |
| OTHER | MT | 2026-2030 |
| OTHER | LT | 2031-2037 |
| OTHER | flstock file | WGWIDE19.RData |
| OTHER | flstock sim file | MSE\_WGWIDE19\_FLStocks\_15PG.RData |