

Summary table of results. The following table is a comparison of performance metrics to help understand the pros and cons of each apportionment type.

Row 1: 'Mean SSB/B40', is the mean across replicates and areas of the percent of terminal year Spawning Stock Biomass (SSB) to B40 estimated by the terminal year estimation model for each apportionment type. Values closer to 100 are better.

Rows 2-3: 'Apportionment match to SSB' (and also for total biomass) gives the mean absolute percent difference between SSB proportions by area (using OM data) and the proportions of ABC each area would receive under the respective apportionment methods. Higher values indicates the apportionment method more closely matches the true population biomass in each area.

Row 4: The values in the 'ABC Stability' performance metric are the percentage of replicates, years, and areas where the ABC changes by less than 20% from one year to the next. Higher values indicate more stability.

Rows 5-10: The values in the 'ABC Stability' performance metric are the percentage of replicates and years where the ABC changes by less than 20% from one year to the next for that area. Higher values indicate more stability.

Row 11: "Mean ABC' is the mean ABC (in kilotons) across replicates and areas (for 'all areas').

Rows 12-17: The percent ABC apportioned to each area under each apportionment type. Higher percentage means more of the total ABC is apportioned to that area.

Rows 18-23: The 'Mean value of catch', as a percent across areas for each apportionment type. For a given apportionment type, a higher value indicates more value received from catches (due to price/lb and size of fish caught) to that area compared to areas with a lower percent value.

| Row | Sustainability | Equal | Fixed | Equilib | NPFMC | Exp survey wt | Exp fish wt | Non-Exp NPFMC | Partially fixed | Age based | Term-LLsurv |
|----------------------|--|-------|-------|---------|-------|---------------|-------------|---------------|-----------------|-----------|-------------|
| 1 | Mean SSB/B ₄₀ (%) | 94.0 | 96.8 | 95.3 | 96.4 | 96.9 | 96.4 | 97.0 | 95.8 | 94.8 | 96.9 |
| 2 | Apportionment match to SSB (%) | 41.8 | 69.0 | 71.3 | 83.4 | 89.4 | 69.8 | 83.7 | 77.3 | 52.0 | 89.1 |
| 3 | Apportionment match to total biomass (%) | 31.9 | 51.1 | 54.0 | 62.5 | 66.6 | 54.4 | 62.2 | 58.4 | 40.2 | 67.0 |
| ABC Stability | | | | | | | | | | | |
| 4 | Percent of years and replicates where ABC changes by less than 20% (all areas) | 86.4 | 90.6 | 91.8 | 90.4 | 90.5 | 89.1 | 90 | 91.2 | 88 | 85.8 |
| 5 | BS - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 83.9 | 84.1 | 83.1 | 87.6 | 88.2 | 78.2 | 75.1 |
| 6 | AI - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 85.5 | 85.5 | 84.0 | 87.6 | 84.4 | 85.3 | 77.9 |
| 7 | WG - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 86.3 | 87.2 | 84.9 | 85.8 | 82.0 | 82.2 | 84.2 |
| 8 | CG - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 87.1 | 87.1 | 85.9 | 87.0 | 87.4 | 85.7 | 85.9 |
| 9 | WY - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 87.2 | 87.3 | 89.9 | 87.0 | 83.6 | 88.1 | 86.0 |
| 10 | EY - % Percent ABC changes by less than 20% | 82.3 | 86.9 | 87.4 | 87.5 | 87.1 | 90.3 | 87.4 | 84.2 | 89.7 | 85.1 |

| Row | Value/Other | Equal | Fixed | Equilib | NPFMC | Exp survey wt | Exp fish wt | Non- Exp NPFMC | Partially fixed | Age based | Term- LLsurv |
|-----|--------------------------------------|-------|-------|---------|-------|------------------|-------------|----------------------|--------------------|--------------|-----------------|
| 11 | Mean ABC (kt) - all areas | 17.29 | 17.69 | 17.34 | 17.40 | 17.39 | 17.76 | 17.66 | 17.40 | 17.31 | 17.32 |
| 12 | Mean ABC (% by area) - BS | 16.7 | 10.0 | 9.2 | 8.1 | 6.9 | 10.4 | 8.1 | 10.0 | 12.5 | 6.9 |
| 13 | Mean ABC (% by area) - AI | 16.7 | 13.0 | 13.7 | 9.4 | 10.0 | 8.1 | 9.3 | 10.0 | 16.7 | 10.0 |
| 14 | Mean ABC (% by area) - WG | 16.7 | 11.0 | 13.1 | 13.9 | 11.8 | 18.1 | 13.8 | 13.5 | 14.3 | 11.8 |
| 15 | Mean ABC (% by area) - CG | 16.7 | 34.0 | 26.8 | 29.6 | 31.2 | 26.4 | 29.6 | 28.6 | 16.9 | 31.2 |
| 16 | Mean ABC (% by area) - WY | 16.7 | 11.0 | 13.8 | 14.1 | 14.6 | 13.1 | 14.2 | 13.7 | 18.5 | 14.6 |
| 17 | Mean ABC (% by area) - EY | 16.7 | 21.0 | 23.4 | 24.9 | 25.5 | 23.8 | 25.1 | 24.2 | 21.1 | 25.5 |
| 18 | Mean value of catch (% by area) - BS | 11.0 | 9.0 | 8.8 | 8.5 | 8.1 | 9.2 | 8.5 | 9.0 | 9.8 | 8.1 |
| 19 | Mean value of catch (% by area) - AI | 10.5 | 9.4 | 9.6 | 8.3 | 8.5 | 7.9 | 8.3 | 8.5 | 10.5 | 8.5 |
| 20 | Mean value of catch (% by area) - WG | 12.6 | 10.8 | 11.5 | 11.7 | 11.1 | 13.1 | 11.7 | 11.6 | 11.9 | 11.1 |
| 21 | Mean value of catch (% by area) - CG | 29.8 | 35.1 | 32.9 | 33.8 | 34.3 | 32.7 | 33.7 | 33.5 | 29.9 | 34.3 |
| 22 | Mean value of catch (% by area) - WY | 13.9 | 12.1 | 13.0 | 13.1 | 13.2 | 12.8 | 13.1 | 12.9 | 14.5 | 13.2 |
| 23 | Mean value of catch (% by area) - EY | 22.2 | 23.5 | 24.2 | 24.7 | 24.8 | 24.3 | 24.7 | 24.5 | 23.5 | 24.8 |