













**Responses to public comments submitted through [sedar36comments@safmc.net](mailto:sedar36comments@safmc.net) email address. Submitted comments were broken into broad topics for purposes of panel response.**

### **Comparison of regional differences in MRIP age/length data**

During the first assessment webinar, a data provider from the headboat survey noted that the spread in distribution of length compositions by region from MRFSS/MRIP and the headboat survey were similar. Sample sizes in the MRFSS/MRIP data are not sufficiently large to do a meaningful comparison of growth curves by region or state. Table 10 in SEDAR36-WP01 shows the number of snowy grouper lengths measured by state through MRFSS/MRIP. Figure 6 in SEDAR36-WP06 shows comparisons of the length compositions from MRFSS/MRIP by state. Sample sizes of recreational age data (MRFSS/MRIP and headboat combined) by state are found in Table 4 in SEDAR36-WP06. The assessment panel noted the limited biological samples available from the recreational fleet and included a research recommendation in the assessment report to increase the number of age samples from the general recreational fishery (MRIP) with more complete spatial coverage.

### **Effect of 2012 recreational ACL overages on the assessment**

The assessment model does not explicitly track quotas, or whether those quotas are met. It doesn't need to. Essentially, the assessment model estimates the fishing mortality rate that provides the observed level of landings, conditional on the predicted abundance at age. To the assessment, it doesn't matter if the observed landings were above or below a quota. It is true that an estimate of "overfishing" can be driven primarily by one sector, and that managers can consider such information when devising regulations. However, that type of analysis should be part of a management strategy evaluation, and is beyond the scope and terms of reference of a stock assessment.

In the SEDAR 36 assessment, the estimated fishing rate exceeded MFMT (maximum fishing mortality threshold - represented by  $F_{msy}$ ) for most of the assessment period (1974-2012), but only once in the last six years. This occurred in 2012, when the recreational fleet exceeded its quota. However, the terminal  $F$  estimate is based on a three-year geometric mean ( $F_{current} = F_{2010-2012}$ ).  $F_{current}$  is below  $F_{msy}$  in the base run and the median of the MCB uncertainty analysis indicating that overfishing is not occurring.

### **How are environmental influences factored into stock assessments?**

Stock assessment models do not ignore environmental effects on fish populations. They model fluctuations in recruitment, which may be caused by the environment or other factors. In addition, environmental effects (e.g., temperature) can be taken into account when developing indices of abundance. For snowy grouper, this was done for the MARMAP indices (see SEDAR36-WP02 for more details). It is true, however, that there is a lot of room for







