Operational Stock Assessment TORs for Sept. 2019 Review
(Based on: 2011 Operational Assessment Process White Paper, and NEFSC edits. v.6/3/2019)

1. Update fishery-dependent data (landings, discards, catch-at-age, etc.) and fishery-independent data (research survey information) that had been used in the previous accepted assessment. Also, describe and present any new or revised data sets that are being used in the assessment[*].

2. a.) Estimate annual fishing mortality, recruitment, and stock size for the time series ("Plan A"). Include estimates of uncertainty, retrospective analyses (both historical and within-model), and bridge runs to sequentially document any changes from the previously accepted model to the updated model proposed for this peer review.

   b.) Prepare a "Plan B" assessment that would serve as an alternate approach to providing scientific advice to management. "Plan B" will be presented for peer review only if the "Plan A" assessment were to not pass review.

3. Update the values of biological reference points (BRPs) for this stock.

4. a.) Recommend what stock status appears to be based on comparison of assessment results to BRP estimates.

   b.) Include qualitative descriptions of stock status based on simple indicators/metrics (e.g., age- and size-structure, temporal trends in population size or recruitment indices, etc.).

5. Perform short-term (3-year) population projections. The projection results should include an estimate of the catch at F_{MSY} or at an F_{MSY} proxy (i.e. this catch represents the overfishing level, OFL) as well as its statistical distribution (i.e., probability density function).

6. Comment on research areas or data issues to consider that might lead to improvements when this stock is assessed again in the future.

[*] Major changes from the previous stock assessment require pre-approval by the Assessment Oversight Panel.