

Appendix A: Alternatives the Council considered but eliminated from detailed study, and a brief discussion of the reasons for their elimination.

This section describes alternatives to the proposed actions that the Council considered in developing this document, but decided not to pursue. The description of each alternative is followed by a summary statement of why it was eliminated from more detailed summary.

Rebuilding Strategy Alternatives for Snowy Grouper

Rejected Alternative 1. Implement a snowy grouper rebuilding strategy that would set F at 0.1.

Rationale for elimination: SEDAR provided a F_{MSY} value of 0.05. Setting a rebuilding strategy where the allowed F is higher than F_{MSY} would allow overfishing to continue.

Rejected Alternative 2. Implement a rebuilding strategy for snowy grouper that would maintain a constant TAC level at 185,188 lbs whole weight.

Rationale for elimination: This alternative would not end overfishing until 2028. The Council feels this is too risky due to the poor status of the snowy grouper stock and life history characteristics that make it vulnerable to overfishing.

Rejected Alternatives 3a/3b. Implement a rebuilding strategy for snowy grouper that would maintain a constant fishing mortality rate. The TAC for 2009 of Rejected Alternative 3a and 3b would be 111,963 and 104,914 lbs whole weight, respectively.

Rationale for elimination: These alternatives would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Rejected Alternatives 4a/4b. Implement a rebuilding strategy for snowy grouper that would maintain a constant fishing mortality rate following a fishing mortality rate that increases through the early years of rebuilding (2006-2009). The TAC for 2009 of Rejected Alternative 4a and 4b would be 101,596 and 117,769 lbs whole weight, respectively.

Rationale for elimination: These alternatives would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Rebuilding Strategy Alternatives for Red Porgy

Rejected Alternative 5. Implement a modified F rebuilding strategy for red porgy allows for high catch rates in 2005-2010 followed by a decreased in the allowable catch after 2010.

Rationale for elimination:

Rejected Alternative 5 allows for high catch rates in 2005-2010 followed by a decreased in the allowable catch after 2010. The Council is concerned about the implementation of a rebuilding strategy that modifies F after 2010 and reduces landings during the later years of rebuilding plan when fishermen would be seeing an increase in abundance. The Council anticipates fishermen would complain that they were restricted on catching red porgy when they are seeing large increases of them in their catch. The Council is also concerned about the potential for high discard rates as the stock rebuilds. The Council prefers an approach that gradually increases the allowable catch.

Rejected Alternative 6. Implement a modified F rebuilding strategy for red porgy that would reduce the take of red porgy from current levels during 2005-2010 followed by a substantial increase in the allowable catch during 2011-2017.

Rationale for elimination:

Rejected Alternative 6 would further reduce the current take of red porgy during 2005-2010 followed by a substantial large increase in the allowable catch during 2011-2017. The Council is concerned that the stock is already rebuilding and discard rate is already very high and likely to increase as the stock rebuilds. A decrease in the allowable catch from current levels would substantially increase the number of dead discards. The Council prefers an approach that gradually increases the allowable catch from current levels.

Rejected Alternatives 7a/7b. Implement a rebuilding strategy for red porgy that would maintain a constant fishing mortality rate following a fishing mortality rate that increases through the early years of rebuilding (2006-2009). The TAC for 2009 of Rejected Alternative 7a and 7b would be 412,999 and 429,019 lbs whole weight, respectively.

Rationale for elimination: These alternatives would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Rebuilding Strategy Alternatives for Black Sea Bass

Rejected Alternative 8. Implement a combination modified F/constant F rebuilding strategy for black sea bass. Project fishing in 2004 at current landings, in 2005 at 80% of current, and in 2006 at 70% of current. Then implement a modified maximum constant F for 2007–2016 that achieves rebuilding.

Rejected Alternative 9: Implement a combination modified F/constant landings rebuilding strategy for black sea bass. Project fishing in 2004 at current landings, in 2005 at 80% of current, and in 2006 at 70% of current. Then find the maximum constant landings rate for 2007–2016 that achieves rebuilding.

Rejected Alternative 10. Implement a modified F rebuilding strategy for black sea bass. Project fishing in 2004 at current landings, in 2005 at 80% of current, in 2006 at 70% of current, and in 2007–2009 at $F = F_{MSY}$. Then find the maximum constant landings rate for 2010–2016 that achieves rebuilding, under the constraint $F_y \leq F_{MSY}$ in every year y .

Rationale for elimination: Since regulations in Snapper Grouper FMP Amendment 13C were not implemented until October 23, 2006, this is not a reasonable alternative.

Rejected Alternative 11. Implement a combination modified F/constant F rebuilding strategy for black sea bass. Project fishing in 2004 and 2005 at current landings, and in 2006 at 70% of current. Then find the modified maximum constant F for 2007–2016 that achieves rebuilding.

Rejected Alternative 12. Implement a combination modified F/constant landings rebuilding strategy for black sea bass. Project fishing in 2004 and 2005 at current landings, and in 2006 at 70% current landings then constant landings ($F \leq F_{MSY}$) that achieves rebuilding to B_{MSY} in 2017. $F_{msy} = 0.43$.

Rationale for elimination: The Council's Alternative 10 is very similar to Rejected Alternatives 5 and 6. Furthermore, this is not a reasonable alternative as a 30% reduction in landings in 2006 might not be realized if there is a delay in the implementation of regulations.

Rejected Alternative 13. Implement a modified F rebuilding strategy for black sea bass. Project fishing in 2004 and 2005 at current landings. Then find the modified maximum constant F for 2006–2016 that achieves rebuilding. Hold landings at 55% of the current landings in 2006-2008.

Rationale for elimination: The Council's Alternative 8 is similar to Rejected Alternative 13. Also, a 45% reduction in landings in 2006 might not be realized if there is a delay in the implementation of regulations.

Rejected Alternative 14. Implement a rebuilding strategy for black sea bass that would maintain a constant TAC level at 1,159,631 lbs whole weight.

Rationale for elimination: This alternative would not end overfishing until 2011. The Council feels this is too risky.

Rejected Alternatives 15a/15b. Implement a rebuilding strategy for black sea bass that would maintain a constant fishing mortality rate of 0.29. The TAC for 2009 of Rejected Alternative 15a and 15b would be 921,532 and 647,424 lbs whole weight, respectively.

Rationale for elimination: These alternatives would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Rejected Alternatives 16a/16b. Implement a rebuilding strategy for black sea bass that would maintain a fishing mortality rate equal to F_{MSY} followed by a fishing mortality rate $\leq F_{MSY}$. The TAC for 2009 of Rejected Alternative 16a and 16b would be 1,157,426 and 912,713 lbs whole weight, respectively.

Rationale for elimination: These alternatives would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Rejected Alternatives 17a/17b. Implement a rebuilding strategy for black sea bass that would modify the fishing mortality rate in the early years of rebuilding (2006-2009). The TAC for 2009 would be 912,713 lbs whole weight.

Rationale for elimination: This alternative would not reduce TAC by an estimation of discards. The SSC has stated that failure to quantify and incorporate all sources of bycatch mortality diminishes the ability to meet management objectives (October 2005 SSC Report to Council).

Underage Alternatives

Rejected Alternatives 18. Account for underages in a given year by allowing the amount of the underage (up to 20% of the commercial quota) to be applied to the commercial allowable harvest the following year. An underage is defined as the difference between the commercial landings and the allowable commercial harvest in a given year. An underage cannot be applied to any other year beyond the subsequent year.

Rationale for elimination: The Council is concerned that it would be difficult to apply an underage to the following year's allowable catch considering when final landings are received, the length of time to implement a management change, and the need for an SSC to review. Also, an underage could be due to poor recruitment; a raise in TAC the following year could significantly impede rebuilding. In general, the Council felt that

since many species are in an overfished condition, it is best to “bank” any portion of the TAC not caught.