

SNAPPER GROUPER AMENDMENT 17 DISCUSSION PAPER

Annual Catch Limits and Accountability Measures

Prepared by Rick DeVictor and Jack McGovern

May 11, 2008

I. Need for Action

Revisions to the Magnuson-Stevens Act in 2006 require that by 2010, Fishery Management Plans (FMPs) for fisheries determined by the Secretary to be subject to overfishing must establish a mechanism for specifying annual catch limits (ACLs) at a level that prevents overfishing and does not exceed the recommendations of the respective Council's Scientific and Statistical Committee (SSC) or other established peer review processes. These FMPs also are required to establish within this time frame measures to ensure accountability. Accountability measures are management controls that ensure that the ACLs are not exceeded; examples include corrective measures if overages occur and implementation of an in-season monitoring program. By 2011, FMPs for all other fisheries, except fisheries for species with annual life cycles, must meet these requirements (See Appendix A for excerpts from the Magnuson-Stevens Act concerning these requirements).

Amendment 17 will specify ACLs and accountability measures for the following species undergoing overfishing (the use of species groupings will be considered) and two species recently assessed. The amendment will also include management measures to limit catch to equal to or below the Annual Catch Target (ACT). See Appendices B and C for detailed assessment information and a summarization of the SEDAR process, respectively. (Note: Red snapper is being addressed in Amendment 18.)

SEDAR-assessed stocks undergoing overfishing

- (1) Black sea bass (overfishing expected to end in 2009)
- (2) Gag (undergoing overfishing)
- (3) Golden tilefish (overfishing expected to have ended in 2007)
- (4) Snowy grouper (overfishing expected to end in 2009)
- (5) Vermilion snapper (undergoing overfishing)

Non SEDAR-assessed stocks undergoing overfishing

- (6) Black grouper (undergoing overfishing)
- (7) Red grouper (undergoing overfishing)
- (8) Speckled hind (undergoing overfishing)
- (9) Warsaw grouper (undergoing overfishing)

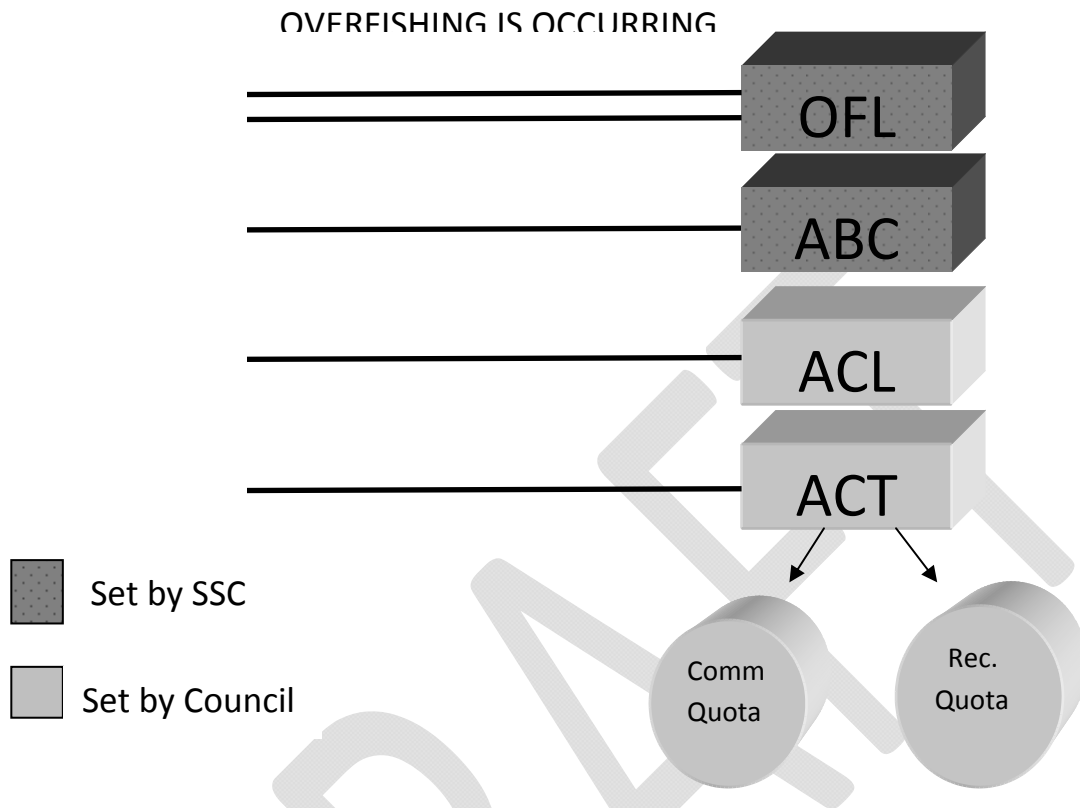
Recently SEDAR-assessed species

- (10) Greater amberjack (assessment results to be presented to Council and SSC in June 2008)
- (11) Mutton snapper (assessment results to be presented to Council and SSC in June 2008)

Two species groupings under consideration

- (1) Shallow water snapper grouper management unit (includes gag, black grouper, red grouper, scamp, red hind, rock hind, yellowmouth grouper, tiger grouper, yellowfin grouper, graysby, and coney)
- (2) Deepwater snapper grouper management unit (includes snowy grouper, yellowedge grouper, warsaw grouper, speckled hind, misty grouper, queen snapper, blueline tilefish, and golden tilefish)

II. OFLs, ABCs, ACLs & ACTs Defined
 (see Appendix E for an alternative approach)



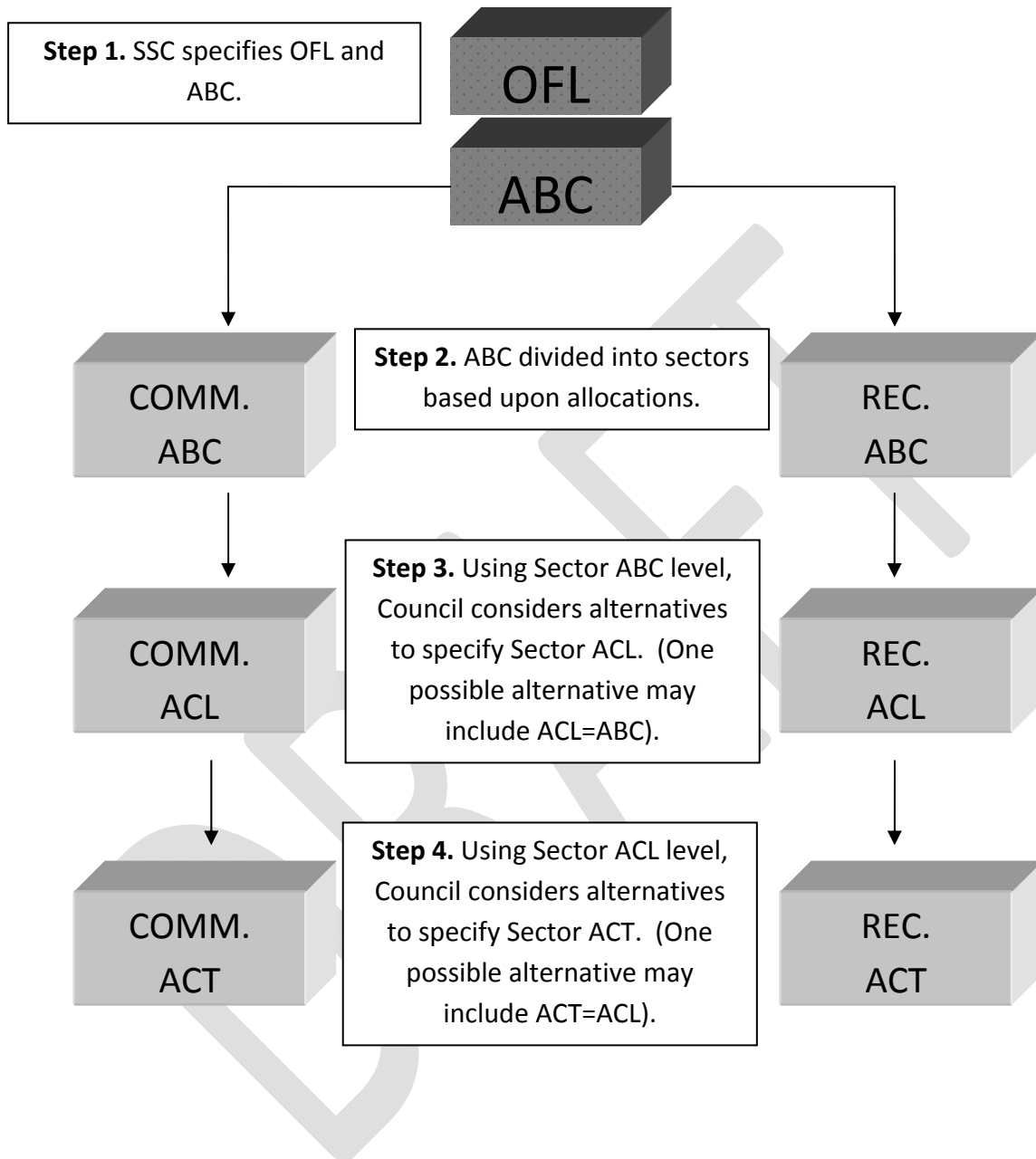
OFL: The Overfishing Level as specified by the SSC in pounds or numbers of fish that would result in overfishing if exceeded. The yield at F_{MSY} may be considered as a possible level. In the past, this limit has been specified as a rate (MFMT or F_{MSY} as a proxy). These rates have typically had a 50 percent probability of preventing overfishing.

ABC: The Accceptable Biological Catch in pounds that the SSC is required to provide the Council. This could equal the OFL, though the SSC may want to set lower under certain circumstances (e.g., for data-poor species). $ABC \leq OFL$

ACL: The Annual Catch Limit as specified by the Council in pounds or numbers of fish set below the OFL and ABC to ensure that overfishing is not occurring. Catch includes landings and dead discards. This acts as the trigger for certain accountability measures. $ACL \leq ABC$

ACT: The Annual Catch Target as specified by the Council in pounds or numbers of fish. The yield at F_{OY} may be considered as a possible level. The commercial quotas and recreational allocations are specified from this number using the allocations determined by the Council. This acts as the trigger for certain accountability measures. $ACT \leq ACL$

III. Process used to specify OFL, ABC, ACL, and ACT.



IV. Alternatives For The Council's Consideration

Note: The Council must decide whether ACLs and ACTs are developed for each species or species units.

Annual Catch Limits (ACLs)

Alternative 1 (no action). Do not specify ACLs for snapper grouper stocks undergoing overfishing and for greater amberjack and mutton snapper.

Alternative 2. Establish a Commercial Sector ACL for snapper grouper species undergoing overfishing and greater amberjack and mutton snapper.

Sub-alternative 2A. The Commercial Sector ACL is equivalent to the commercial sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 2B. The Commercial Sector ACL = 95% of the commercial sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 2C. The Commercial Sector ACL = 90% of the commercial sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 2D. The Commercial Sector ACL = 85% of the commercial sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 2E. The Commercial Sector ACL = the midpoint between the commercial sector's portion of ABC and the yield at F_{OY} . If the yield at F_{OY} is not available, use the Commercial Sector ACT.

Sub-alternative 2F. Set the Commercial Sector ACL according to the data levels of a stock. For species assessed under SEDAR, the ACL=95% of the ABC specified for the stock or stock complex by the Council's SSC. For species that have not been assessed under SEDAR and with the average annual landings from 2000-2007 of less than 5,000 lbs, the ACL=80% of the ABC specified for the stock or stock complex by the Council's SSC. For all other species, the ACL=90% of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3. Establish a Recreational Sector ACL for snapper grouper species undergoing overfishing and greater amberjack and mutton snapper.

Sub-alternative 3A. The Recreational Sector ACL is equivalent to the recreational sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 3B. The Recreational Sector ACL = 90% of the recreational sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 3C. The Recreational Sector ACL = 80% of the recreational sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 3D. The Recreational Sector ACL = 70% of the recreational sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 3E. The Recreational Sector ACL = 50% of the recreational sector's portion of the ABC specified for the stock or stock complex by the Council's SSC.

Sub-alternative 3F. The Commercial Sector ACL = the midpoint between the commercial sector's portion of ABC and the yield at F_{OY} . If the yield at F_{OY} is not available, use the Recreational Sector ACT.

Sub-alternative 3G. Set the Recreational Sector ACL according to the data levels of a stock. For species assessed under SEDAR, the ACL=95% of the ABC specified for the stock or stock complex by the Council's SSC. For species that have not been assessed under SEDAR and with the average annual landings from 2000-2007 of less than 5,000 lbs, the ACL=80% of the ABC specified for the stock or stock complex by the Council's SSC. For all other species, the ACL=90% of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 4. Others?

Annual Catch Target (ACT)

Alternative 1 (no action). Do not specify ACTs for snapper grouper species undergoing overfishing and greater amberjack and mutton snapper.

Alternative 2. Establish a Commercial Sector ACT for snapper grouper species undergoing overfishing and greater amberjack and mutton snapper.

Alternative 2A. The Commercial Sector ACT is equivalent to the commercial portion of the ACL.

Alternative 2B. The Commercial Sector ACT = the commercial sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Commercial Sector ACT is 95% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 2C. The Commercial Sector ACT = the commercial sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Commercial Sector ACT is 90% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 2D. The Commercial Sector ACT = the commercial sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Commercial Sector ACT is 85% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 2E. The Commercial Sector ACT is 95% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 2F. The Commercial Sector ACT is 90% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 2G. The Commercial Sector ACT is 85% of the commercial portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3. Establish a Recreational Sector ACT for snapper grouper species undergoing overfishing and greater amberjack and mutton snapper.

Alternative 3A. The Recreational Sector ACT is equivalent to the Recreational portion of the ACL.

Alternative 3B. The Recreational Sector ACT = the recreational sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Recreational Sector ACT is 95% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3C. The Recreational Sector ACT = the recreational sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Recreational Sector ACT is 90% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3D. The Recreational Sector ACT = the recreational sector's yield at F_{OY} for the stock. If the yield at F_{OY} is not available, the Recreational Sector ACT is 85% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3E. The Recreational Sector ACT is 90% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3F. The Recreational Sector ACT is 80% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3G. The Recreational Sector ACT is 70% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 3H. The Recreational Sector ACT is 50% of the recreational portion of the ABC specified for the stock or stock complex by the Council's SSC.

Alternative 4. Others?

Accountability Measures (AMs)

Accountability Measures for the Commercial Sector

Alternative 1. Do not implement Accountability Measures for the commercial sector for species undergoing overfishing and greater amberjack and mutton snapper.

Alternative 2. Implement Accountability Measures for the commercial sector for species undergoing overfishing and greater amberjack and mutton snapper. The AM would not vary depending on stock status.

Sub-alternative 2A. If the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage.

Sub-alternative 2B. If the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to recover the overage from the prior fishing year.

Alternative 3. Implement Accountability Measures for the commercial sector for species undergoing overfishing and greater amberjack and mutton snapper. The AM would vary depending on stock status.

Sub-alternative 3A. If the species is overfished or not overfished and the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the species is overfished and the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage. If the species is not overfished and the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to recover the overage from the prior fishing year.

Alternative 4. Others?

Accountability Measures for the Recreational Sector

Alternative 1. Do not implement Accountability Measures for the recreational sector for species undergoing overfishing and greater amberjack and mutton snapper.

Alternative 2. Implement Accountability Measures for species undergoing overfishing and greater amberjack and mutton snapper. The AM would not vary depending on stock status.

Sub-alternative 2A. Do not implement AMs if the sector ACT is projected to be met. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to ensure landings do not exceed the sector ACT for the following fishing year.

Sub-alternative 2B. Do not implement AMs if the sector ACT is projected to be met. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage.

Sub-alternative 2C. If the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to recover the overage from the prior fishing year.

Sub-alternative 2D. If the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the sector ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage.

Alternative 3. Implement Accountability Measures for the recreational sector for species undergoing overfishing and greater amberjack and mutton snapper. The AM would vary depending on stock status.

Sub-alternative 3A. Do not implement AMs if the sector ACT is projected to be met. If the species is overfished and the ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage. If not overfished and the ACL is exceeded,

Conservative

the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to ensure landings do not exceed the sector ACT for the following fishing year.

Sub-alternative 3B. If the sector ACT is projected to be met, prohibit the harvest and retention of species or species group. If the species is overfished and the ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the sector ACT in the following year by the amount of the overage. If not overfished and the ACL is exceeded, the Assistant Administrator shall publish a notice to reduce the length of the following fishing year by the amount necessary to ensure landings do not exceed the sector ACT for the following fishing year.

Alternative 4. Compare ACL in Alternatives 2 and 3 with recreational landings over a range of years. For 2010, use only 2010 landings. For 2011, use the average landings of 2010 and 2011. For 2012 and beyond, use three year running average.

Alternative 5. Others?

Appendix A. MSFCMA Requirements Pertaining to ACLs and the Council's SSC.

Four excerpts from the MSFCMA that pertain to ACLs.

1. Sec. 303 Contents of Fishery Management Plans

95-354, 99-659, 101-627, 104-297

- (a) REQUIRED PROVISIONS-Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, shall-
- (15) establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.

2. P.L. 109-479, sec. 104(b), MSA § 303 note

EFFECTIVE DATES; APPLICATION TO CERTAIN SPECIES.-The amendment made by subsection (a)(10)-

- (1) Shall, unless otherwise provided for under an international agreement in which the United States participates, take effect-
- (A) In fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing; and
- (B) In fishing year 2011 for all other fisheries; and
- (2) Shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species; and
- (3) Shall not limit or otherwise affect the requirements of Section 301(a)(1) or 304(e) of the Magnuson-Stevens fishery Conservation and Management Act (16 U.S.C. 1851(a)(1) or 1854(e), respectively).

3. 101-627, 109-479

(g) COMMITTEES AND ADVISORY PANELS-

Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices.

4. 95-354, 97-453, 101-627

(h) FUNCTIONS.—Each Council shall, in accordance with the provisions of this Act—
109-479

(6) develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g);

Appendix B. Assessment Information for the Species in Amendment 17.

Species	Source & Year Completed	Data Thru	Date SSC Approved	Overfishing?	Overfished?
Black grouper*	N/A	N/A	N/A	Yes	Unknown
Black sea bass	SEDAR Assessment Update #1 (2005)	2004	Need to fill in	Yes	Yes
Gag	SEDAR 10 (2007)	2004	June 2007	Yes	No
Golden tilefish	SEDAR 4 (2004)	2002	Need to fill in	Yes	No
Red grouper*	N/A	N/A	N/A	Yes	Unknown
Snowy grouper	SEDAR 4 (2004)	2002	Need to fill in	Yes	Yes
Speckled hind*	N/A	N/A	N/A	Yes	Unknown
Vermilion snapper	SEDAR Assessment Update #3 (2007)	2006	June 2007	Yes	Unknown
Warsaw grouper*	N/A	N/A	N/A	Yes	Unknown

* SEDAR assessment has not been completed for stock.

Appendix C. A Description of the SEDAR Process.

Need to fill in.

DRAFT

Appendix D. An Example Illustrating Applications of ACL and Accountability Measure Alternatives for Black Sea Bass

The following represents an example of how the ACL and related parameters could be appointed including the actions required under certain accountability measure scenarios.

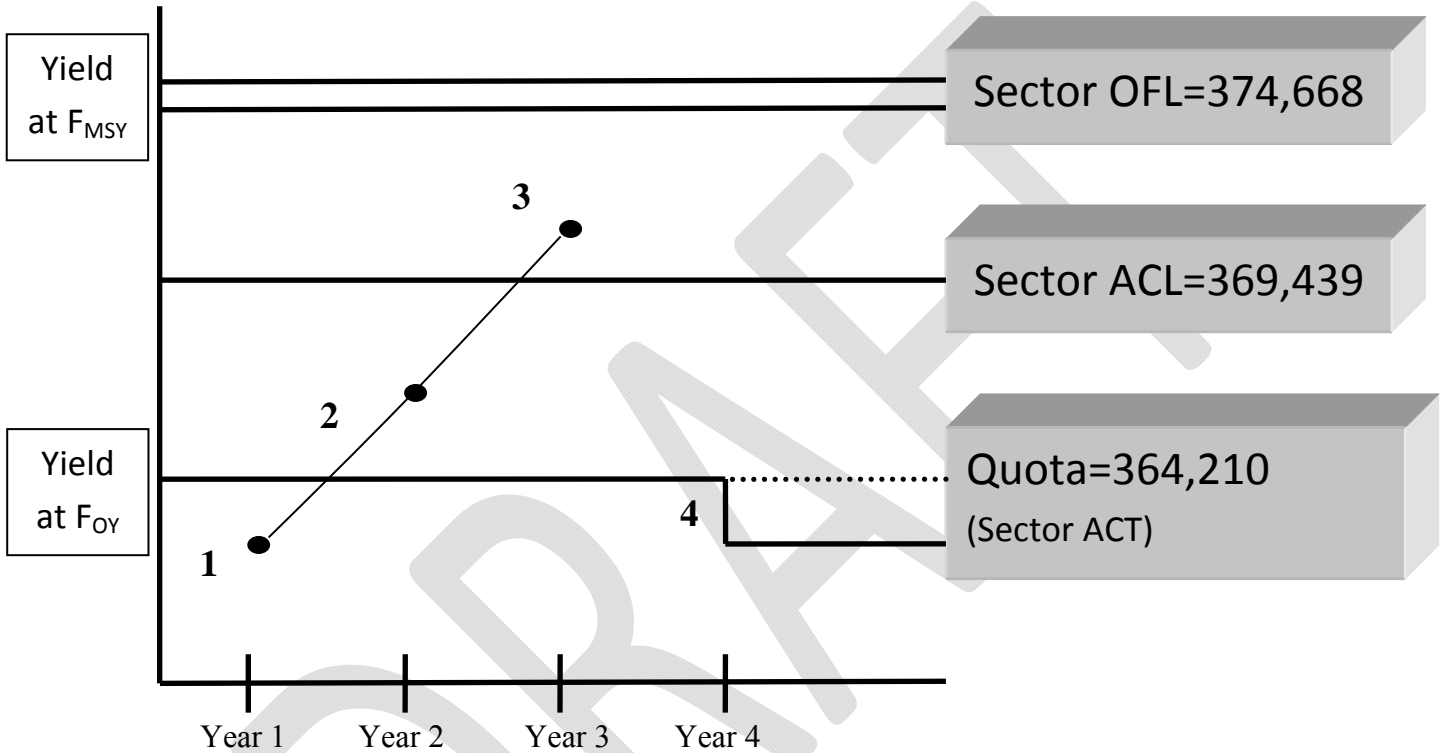
Black Sea Bass	
OFL (Yield at F_{MSY})	871,321 lbs ww
ABC (assuming $ABC=OFL$)	871,321
ACL	
Alt. 2 (ACL=ABC)	871,321
Alt. 3 (90% of ABC)	784,189
Alt. 4 (80% of ABC)	697,057
Alt. 5 (midpoint between the ABC and the yield at F_{OY})	859,161
Alt. 6 (varies by data available for stock)	827,755
ACT	
Alt. 2 (ACT=ACL)	See above for range of values
Alt. 3 (ACT=yield at F_{OY}; if not available, ACT=65% of the ABC)	847,000
Alt. 4 (ACT=yield at F_{OY}; if not available, ACT=75% of the ABC)	847,000
Alt. 5 (ACT=yield at F_{OY}; if not available, ACT=85% of the ABC)	847,000

Commercial (43% allocation)	
OFL	374,668 lbs ww
ABC	374,668
ACL	
Alt. 2	374,668
Alt. 3	337,201
Alt. 4	299,735
Alt. 5	369,439
Alt. 6	355,935
ACT	
Alt. 2	See above for range of values
Alt. 3	364,210
Alt. 4	364,210
Alt. 5	364,210

Recreational (57% allocation)	
OFL	496,653 lbs ww
ABC	496,653
ACL	
Alt. 2	496,653
Alt. 3	446,988
Alt. 4	397,322
Alt. 5	489,722
Alt. 6	471,820
ACT	
Alt. 2	See above for range of values
Alt. 3	482,790
Alt. 4	482,790
Alt. 5	482,790

Example 1. The following represents the scenario under Commercial Accountability Measure Alternative 2A.

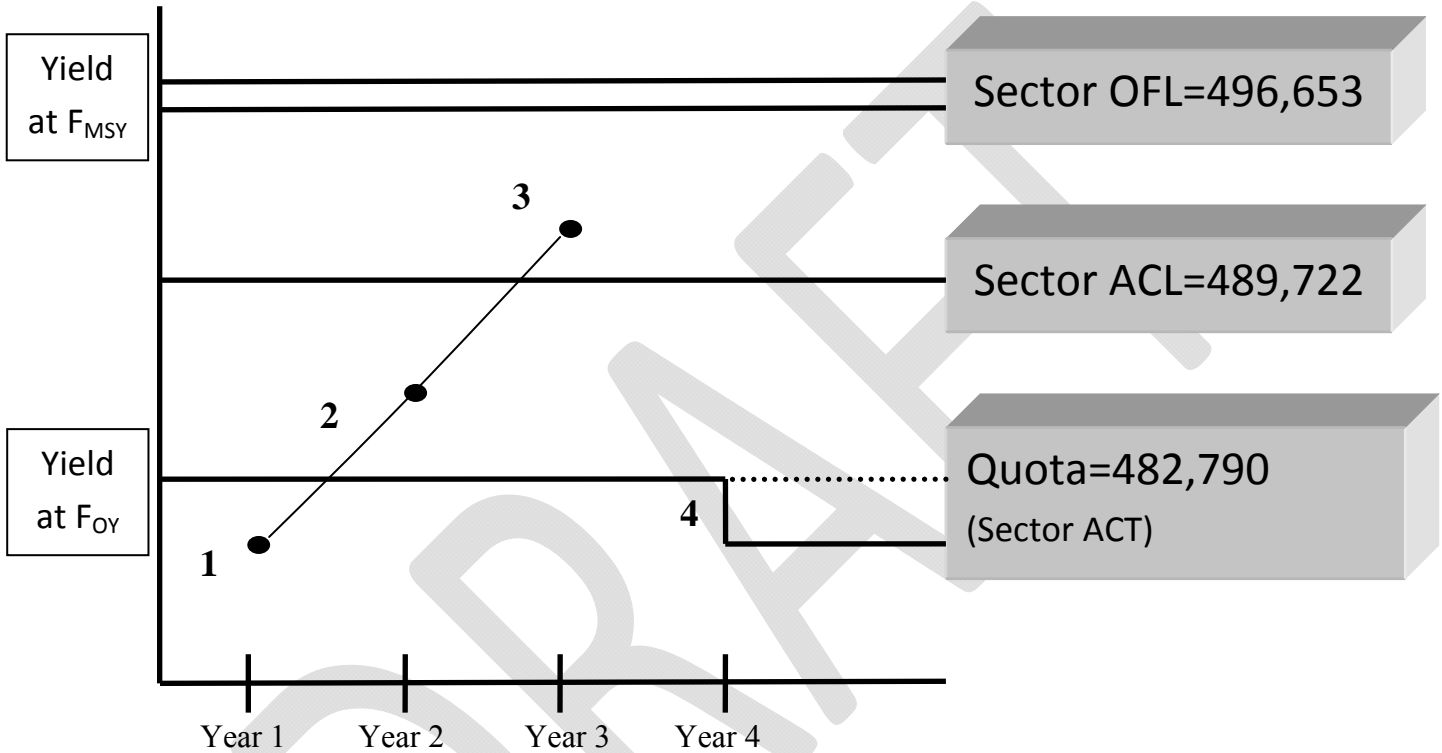
COMMERCIAL



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; prohibit harvest and retention once quota expected to be met.
- 3** Landings > quota and sector ACL. Prohibit harvest and retention once quota expected to be met. Reduce the quota in Year 4 by the amount landings exceeded the sector ACL in Year 3.
- 4** The quota in Year 4 is reduced by the amount landings exceeded the sector ACL in Year 3.

Example 2. The following represents the scenario under Recreational Accountability Measure Alternative 2B.

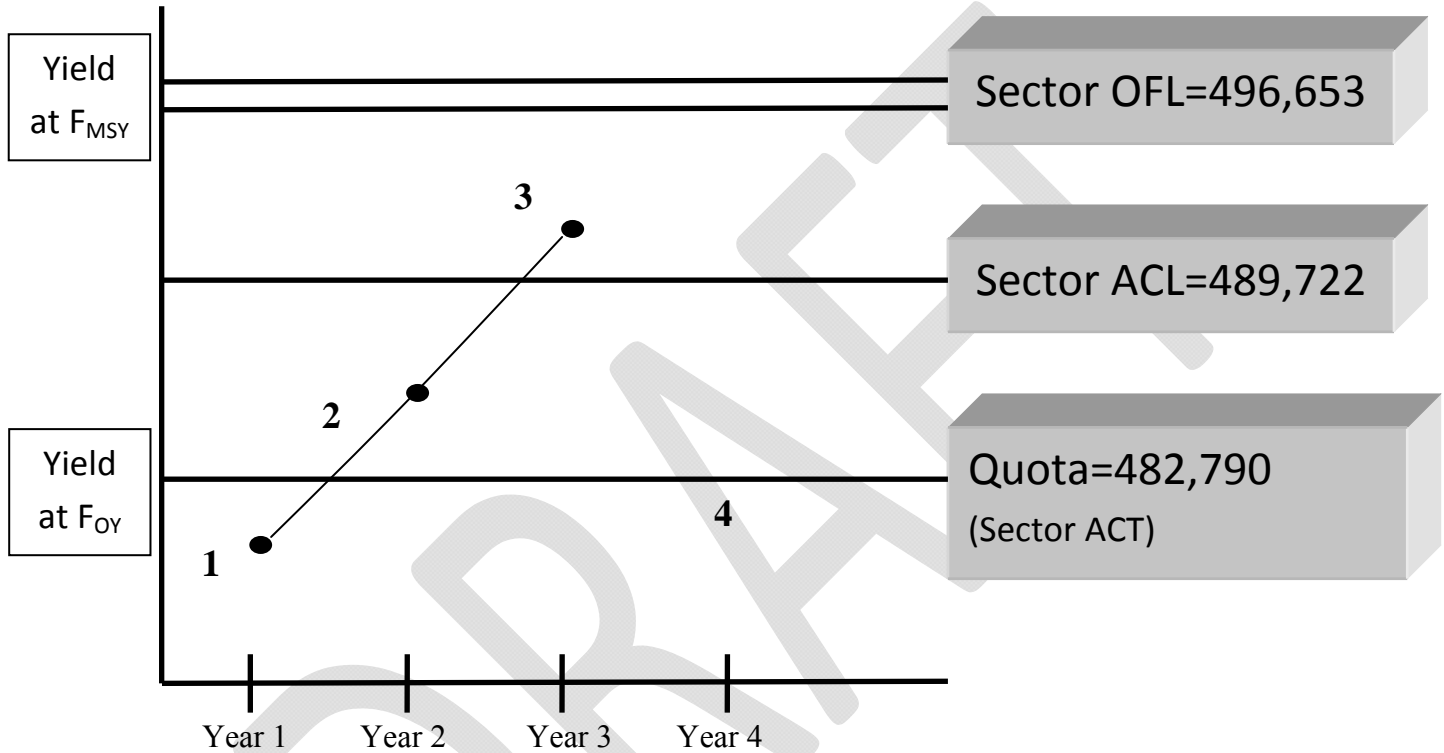
RECREATIONAL



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; prohibit harvest and retention once quota expected to be met.
- 3** Landings > quota and sector ACL. Prohibit harvest and retention once quota expected to be met. Reduce the quota in Year 4 by the amount landings exceeded the sector ACL in Year 3.
- 4** The quota in Year 4 is reduced by the amount landings exceeded the sector ACL in Year 3.

Example 3. The following represents the scenario under Recreational Accountability Measure Alternative 2A.

RECREATIONAL



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; no action required.
- 3** Landings > quota and sector ACL. Since landings have exceeded the sector ACL, the Assistant Administrator would issue a notice reducing the length of the fishing season in the following year in order to ensure landings do not exceed ACT in following year.
- 4** The season is shortened in Year 4. The recreational quota is not reduced.

Appendix E. An Alternative Approach to How OFLs, ABCs, ACLs & ACTs Are Defined

**SNAPPER GROUPER AMENDMENT 17 DISCUSSION PAPER:
APPENDIX E**

Annual Catch Limits and Accountability Measures

Prepared by Gregg T. Waugh
May 19, 2008

1.0 NEED FOR ACTION

Revisions to the Magnuson-Stevens Act in 2006 require that by 2010, Fishery Management Plans (FMPs) for fisheries determined by the Secretary to be subject to overfishing must establish a mechanism for specifying annual catch limits (ACLs) at a level that prevents overfishing and does not exceed the recommendations of the respective Council's Scientific and Statistical Committee (SSC) or other established peer review processes. These FMPs also are required to establish within this time frame measures to ensure accountability. Accountability measures are management controls that ensure that the ACLs are not exceeded; examples include corrective measures if overages occur and implementation of an in-season monitoring program. By 2011, FMPs for all other fisheries, except fisheries for species with annual life cycles, must meet these requirements.

Amendment 17 will specify Annual Catch Limits (ACLs) and Accountability Measures (AMs) for the following species undergoing overfishing (the use of species groupings will be considered). In addition, management measures necessary to keep the catch below the Annual Catch Target (ACTs) will be specified.

SEDAR Assessed Species:

- (1) Black sea bass (overfishing expected to end in 2009)
- (2) Vermilion snapper (undergoing overfishing)
- (3) Gag (undergoing overfishing)
- (4) Snowy grouper (overfishing expected to end in 2009)
- (5) Golden tilefish (overfishing expected to have ended in 2007)
- (6) Red snapper (assessment results to be presented to Council in June 2008); currently being addressed in Amendment 18 but may be moved back to Amendment 17.

Non-SEDAR Assessed Species:

- (1) Black grouper (undergoing overfishing)
- (2) Red grouper (undergoing overfishing)
- (3) Speckled hind (undergoing overfishing)
- (4) Warsaw grouper (undergoing overfishing)

Potential Species Groupings:

- (1) Shallow water snapper grouper management unit (includes gag, black grouper, red grouper, scamp, red hind, rock hind, yellowmouth grouper, tiger grouper, yellowfin grouper, graysby, and coney)
- (2) Deepwater snapper grouper management unit (includes snowy grouper, yellowedge grouper, warsaw grouper, speckled hind, misty grouper, queen snapper, blueline tilefish, and golden tilefish)

2.0 MSFCMA REQUIREMENTS PERTAINING TO ACLS AND THE COUNCIL’S SSC

2.1 Sec. 303 Contents of Fishery Management Plans

[Note: See page 76 of blue MSA document.]

95-354, 99-659, 101-627, 104-297

- (b) REQUIRED PROVISIONS-Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, shall-
 - (15) establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.

2.2 P.L. 109-479, sec. 104(b), MSA § 303 note

[Note: See page 79 of blue MSA document.]

EFFECTIVE DATES; APPLICATION TO CERTAIN SPECIES.-The amendment made by subsection (a)(10)¹⁶--

- (4) Shall, unless otherwise provided for under an international agreement in which the United States participates, take effect-
 - (C) In fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing; and
 - (D) In fishing year 2011 for all other fisheries; and
- (5) Shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species; and
- (6) Shall not limit or otherwise affect the requirements of Section 301(a)(1) or 304(e) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1851(a)(1) or 1854(e), respectively).

2.3 Section 302 (g)(1)(B)

[Note: See page 66 of blue MSA document.]

101-627, 109-479

(g) COMMITTEES AND ADVISORY PANELS. –

(1)(B) Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices.

2.4 Section 302 (h)(6)

[Note: See page 68 of blue MSA document.]

95-354, 97-453, 101-627

(h) FUNCTIONS.—Each Council shall, in accordance with the provisions of this Act—
109-479

(6) develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g);

2.5 Impacts to Council Process/Actions

The net result of these four items is the following:

1. **Scientific & Statistical Committee (SSC) sets the Overfishing Level (OFL) and Acceptable Biological Catch (ABC).** These terms are not included in the definitions section of the Magnuson-Stevens Act.
2. It appears the ABC may be an old carry over and may actually cause some confusion. The Council and SSC cannot define ABC in terms of Optimum Yield (OY) as has been done in the past (e.g., mackerel management). The SSC is charged with providing recommended levels of fishing that prevent overfishing. The rate is Maximum Fishing Mortality Threshold (MFMT) and the harvest quantity is the OFL in numbers or pounds. Therefore, one could conclude, the SSC sets OFL and by definition the range of ABC is from the OFL to zero. This range is important because the top end is based on the probability level the SSC thinks is appropriate and zero is based on a 100% probability level.
3. **From SEDAR 5:** The SAMFC's stated objective is to select a TAC for Atlantic king mackerel that has a median probability of achieving its management target, OY, defined as the yield associated with a fishing mortality rate of $F_{40\%SPR}$. Therefore, the MSAP recommends ABC for 2005/06 as the median estimate of catch at $F_{40\%SPR}$, which is 5.8 million pounds (20th - 80th percentile range = 4.5 –

7.7 million pounds) (Figure 25). Yields above 5.8 million pounds would exceed 50% probability of future $F > F_{40\%SPR}$, conditional on projection assumptions.

- a. **Overfishing Level** – SSC is to provide a quantity of fish associated with 50% probability and range of 20% and 80% probability (status quo). In addition, the SSC must determine the level of probability for their use such that their OFL ensures overfishing will not occur. It is expected that this level will be at a 90%, 95%, or 99% probability level and as such, the SEDAR assessment should provide values based on these probability levels in addition to the 50% (20%-80%) (status quo). **SSC DECISION NEEDED: What probability level will they use? Should it differ by whether the species has a SEDAR assessment versus those without?**
 - b. **Acceptable Biological Catch** – the overfishing level will be the top end of the ABC. The SSC could specify a range based on some level of probability, or they could specify the ABC as ranging from the Overfishing Level to zero, or they could simply specify ABC as a point value. It is expected that they will choose the range from the OFL to zero as this is more conservative and provides more assurance that overfishing will not occur. **SSC DECISION NEEDED: How will ABC be specified?**
4. The Council sets the **Annual Catch Limit (ACL)** not to exceed the Overfishing Level provided by the SSC.
 5. **Allocations.** The ACL must then be divided between sectors (e.g., commercial, for-hire, and private recreational). The Council has specified interim allocations and will continue to do so until allocations are specified on a permanent basis. The Council’s Comprehensive Allocation Amendment is considering allocations on a more permanent basis; preliminary recommendations are to allocate for three sectors: commercial, for-hire, and private recreational.
 6. **Accountability Measures.** Accountability Measures (AMs) are not included in the definitions section of the Magnuson-Stevens Act. It has been argued by some that the revisions to the Act also changed accountability in terms of data and quota monitoring. That is, the changes specified by reauthorization require more data/monitoring and more timely data/monitoring. Others have argued that this is not the case or that improvements cannot be made due to a lack of adequate financial resources. At the March 2008 meeting, the Council approved the following motion that removes any improvements to data/monitoring from Amendment 17:

MOTION #13: The Council voted to remove the measures under Section 2.2.2.3 from Amendment 17.

2.2.2.3 Measures to Monitor Progress of a Fishery and Reduce Chance of Exceeding ACL

Alternative 1 (no action). Do not change methods to monitor commercial and recreational landings.

Alternative 2. Commercial sector – track landings using logbooks, dealer reports & trip tickets; close fishery when quota projected to be met; incorporate PQBM.

Alternative 3. Recreational sector – track landings using MRFSS & Headboat; change regulations and/or close fishery when allocation projected to be met; incorporate PQBM.

Alternative 4. Improve recreational catch data – for-hire logbooks; private recreational logbooks.

Alternative 5. Improve biological sampling – specify numbers of sample by species to be collected and analyzed with deadlines based on SEDAR assessment schedule.

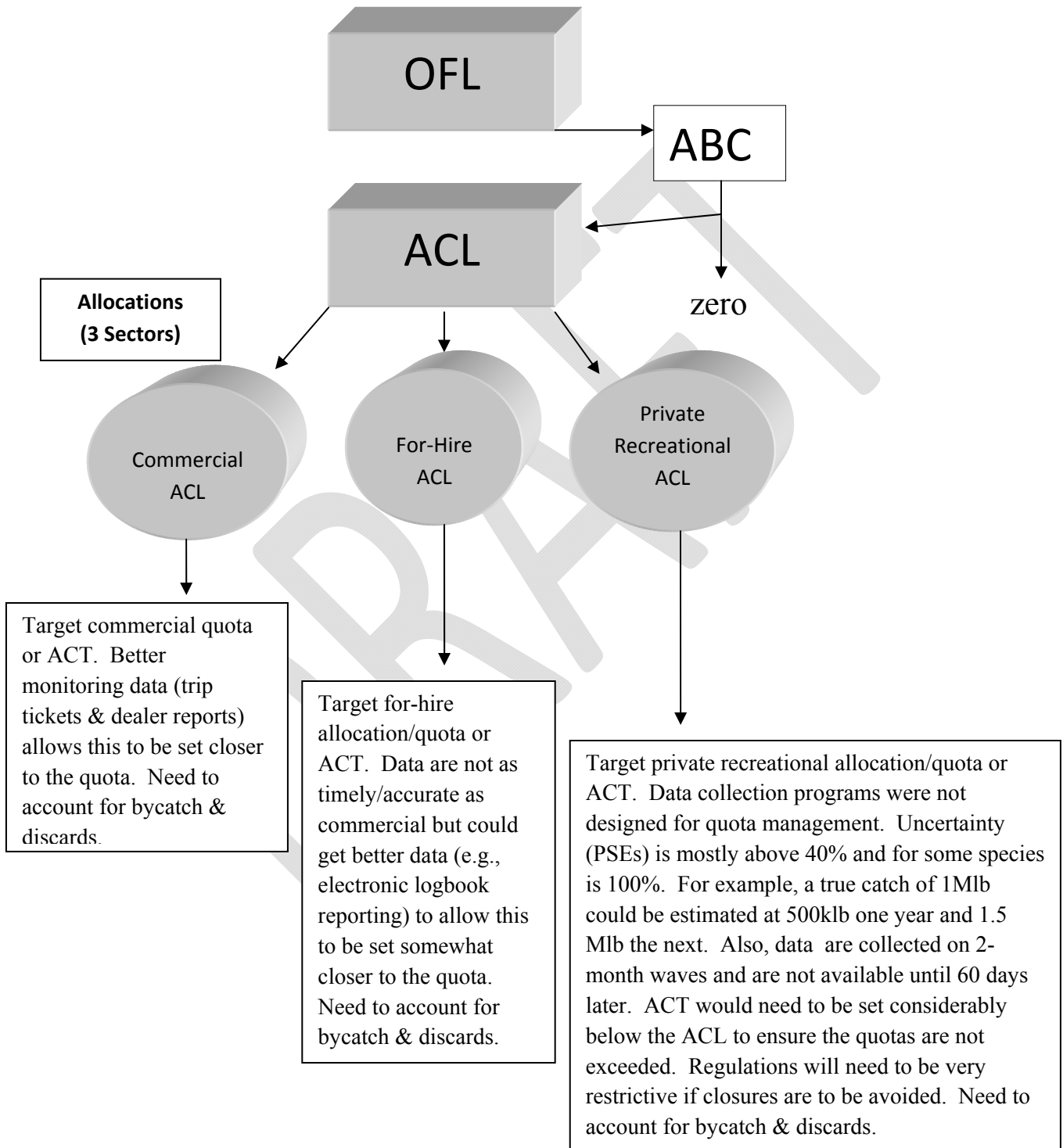
Alternative 6. Improve bycatch data – fully implement ACCSP.

Alternative 7. Improve fishery independent surveys.

Alternative 8. Others?

3.0 OFLs, ABCs, ACLs

OVERFISHING IS OCCURRING IF TOTAL HARVEST (LANDED + DISCARDS/BYCATCH) IS GREATER THAN OFL IN TERMS OF NUMBERS OR POUNDS OF FISH



OFL: The overfishing level as specified by the SSC. The rate is Maximum Fishing Mortality Threshold (MFMT) and the harvest quantity is the OFL in pounds or numbers of fish that would result in overfishing if exceeded. In the past, this has been specified as a rate (MFMT or F_{MSY} or $F_{30\%SPR}$ as a proxy). These rates have historically had a 50 percent probability of preventing overfishing. The SSC will be developing the appropriate probability level for their use to meet the new MSA requirements.

ABC: The acceptable biological catch (ABC). It appears the ABC may be an old carry over and may actually cause some confusion. The Council and SSC cannot define ABC in terms of Optimum Yield (OY) as has been done in the past (e.g., mackerel management). The SSC is charged with providing recommended levels of fishing that prevent overfishing. The rate is Maximum Fishing Mortality Threshold (MFMT) and the harvest quantity is the OFL in numbers or pounds. Therefore, one could conclude, the SSC sets OFL and by definition the range of ABC is from the OFL to zero. This range is important because the top end is based on the probability level the SSC thinks is appropriate and zero is based on a 100% probability level.

ACL: The annual catch limit as specified by the Council in pounds or numbers of fish set within the ABC range to ensure that overfishing is not occurring. Catch includes landings and dead discards.

QUOTAS/ALLOCATIONS: The ACL must then be divided among the sectors. The South Atlantic Council's Allocation Committee is recommending three sectors: commercial, for-hire, and private recreational. The Comprehensive Allocation Amendment will specify the allocations for use in Amendment 17 onwards. Application of the relevant allocations yields sector-specific ACLs. (Note: The Allocation Committee is recommending a fourth allocation for "conservation". If this is approved by the Council, it will have to be added as a sector.)

ACT: The annual catch target as specified by the Council in pounds or numbers of fish. This term is not included in the Magnuson-Stevens Act although preliminary indications are that it will be included in the proposed guidelines. The publication date for the proposed rule for the guidelines is unknown.

The Council needs to take into consideration the ability of NMFS to track quotas/allocations and close the fishery in time to prevent exceeding the sector-specific portions of the ACL. The degree to which a target is established below the sector-specific portion of the ACL will be smaller for the commercial sector and larger for the for-hire and even larger for the private recreational sector. Given the Council's decision at the March 2008 to not consider any changes to data/monitoring programs, the for-hire

and private recreational sectors will need to be set quite a bit below their respective targets to ensure catches do not exceed the targets.

The Council can take into account data uncertainty and stock vulnerability to overfishing in determining how low to set the ACT. This would be an appropriate place to address precautionary management.

4.0 ALTERNATIVES FOR THE COUNCIL'S CONSIDERATION

Note: The Council must decide whether ACLs and target quotas/allocations or ACTs are developed for each species or species units. This will also depend on what is received from the Scientific and Statistical Committee. If species-specific Overfishing Levels are provided by the SSC, the Council would most likely propose species-specific ACLs.

4.1 Annual Catch Limits (ACLs)

Alternative 1 (no action). Do not specify ACLs for snapper grouper stocks undergoing overfishing.

Alternative 2. The ACL is equivalent to the ABC specified (assumes only point estimate for ABC provided) for the stock or stock complex by the Council's SSC.

Alternative 3. The ACL is some percent reduction from the ABC specified (assumes only point estimate for ABC provided) for the stock or stock complex by the Council's SSC.

Alternative 4. The ACL is set at some level (Council to specify) within the ABC range specified for the stock or stock complex by the Council's SSC.

Alternative 5. Others?

4.2 Allocations

The Council needs to determine where the allocation (interim or permanent) formulas are applied. This discussion assumes the allocations are applied to the ACL.

Alternative 1 (no action). Do not specify allocations for snapper grouper stocks undergoing overfishing.

Alternative 2. Use interim allocations until these become permanent through the Comprehensive Amendment and apply the allocations to the ACL.

Alternative 3. Others??

4.3 Target Quota/Allocation or Annual Catch Target (ACT)

Alternative 1 (no action). Do not specify target quotas/allocations or ACTs for snapper grouper stocks undergoing overfishing.

Alternative 2. The target quotas/allocations or ACT is equivalent to the ACL.

Alternative 3. The **commercial** target quotas or ACT = 90% or 95% (Council to specify) of the sector-specific ACL specified by the Council for the stock or stock complex.

Alternative 4. The **for-hire** target quotas/allocations or ACT = 80%, 85%, or 90% (Council to specify) of the sector-specific ACL specified by the Council for the stock or stock complex.

Alternative 5. The **private recreational** target quotas/allocations or ACT = 50%, 55%, 60%, 65%, or 70% (Council to specify) of the sector-specific ACL specified by the Council for the stock or stock complex.

Alternative 6. Alternatives 3, 4, & 5 with the percentage determined on a fishery by fishery basis to account for different levels of data and uncertainty.

Alternative 7. Others???

4.4 Accountability Measures (AMs)

4.4.1 4.4.1 Data/Monitoring

At the March 2008 meeting, the Snapper Grouper Committee approved a motion removing the following item from Amendment 17. This means it would not even be included in Appendix A:

2.2.2.3 Measures to Monitor Progress of a Fishery and Reduce Chance of Exceeding ACL

Alternative 1 (no action) (Preferred). Do not change methods to monitor commercial and recreational landings.

Alternative 2. Commercial sector – track landings using logbooks, dealer reports & trip tickets;

close fishery when quota projected to be met; incorporate PQBM.

Alternative 3. Recreational sector – track landings using MRFSS & Headboat; change regulations and/or close fishery when allocation projected to be met; incorporate PQBM.

Alternative 4. Improve recreational catch data – for-hire logbooks; private recreational logbooks.

Alternative 5. Improve biological sampling – specify numbers of sample by species to be collected and analyzed with deadlines based on SEDAR assessment schedule.

Alternative 6. Improve bycatch data – fully implement ACCSP.

Alternative 7. Improve fishery independent surveys.

Alternative 8. Others?

4.4.2 4.4.2 Overages/Underages

Alternative 1 (no action). Do not address overages/underages.

Alternative 2. If a sector exceeds its sector-specific portion of the ACL, it is deducted from the target quota/allocation/ACT for the following year. (Note: The Council would need to develop a table showing what regulations to implement for a given percentage reduction in the quota/allocation/ACT similar to the table developed in Amendment 16 for vermilion snapper.)

Alternative 3. If a sector does not reach its sector-specific portion of the ACL, no change is made to the target quota/allocation/ACT for the following year.

Alternative 4. Others?

Table 1. Examples of OFLs, ACLs, Sector-Specific Targets Quotas/Allocations, Allocations, and Reductions/Increases in Catches.

SEDAR Assessed Species	Last year of data	MSY at equilibrium	Fmsy	F/Fmsy	OY at equilibrium (yield at 75% Fmsy)	75%Fmsy	MSST	SSBmsy	SSB/SSBmsy	Yield at Fmsy (lbs ww; gag = gw)	OFL (Best Case) = Yield at Fmsy	ABC
Snowy grouper	2002	313,056 lbs ww	0.05	3.08	303,871 lbs ww	0.0375	3,498,735 lbs ww	4,664,980 lbs ww	0.18	102,960	102,960	
Golden tilefish	2002	336,425 lbs ww	0.043	1.53	326,554 lbs ww	0.03225	1,454,063 lbs ww	1,938,750 lbs ww	0.95	336,425	336,425	
Black sea bass	2004	2,777,825 lbs ww	0.43	6.15	2,742,551 lbs ww	0.3225	10,511,633 lbs ww	15,017,000 lbs ww	0.27	847,000	847,000	
Gag	2004	1,238,000 lbs gw	0.237	1.309	1,217,000 lbs gutted weight	0.17775	6,816,000 lbs gw	7,925,000 lbs gw	0.942	903,000	903,000	
Vermilion snapper	2006	unknown	0.355	2.05	unknown	0.26625	Unknown	Unknown	Unk	789,602	789,602	

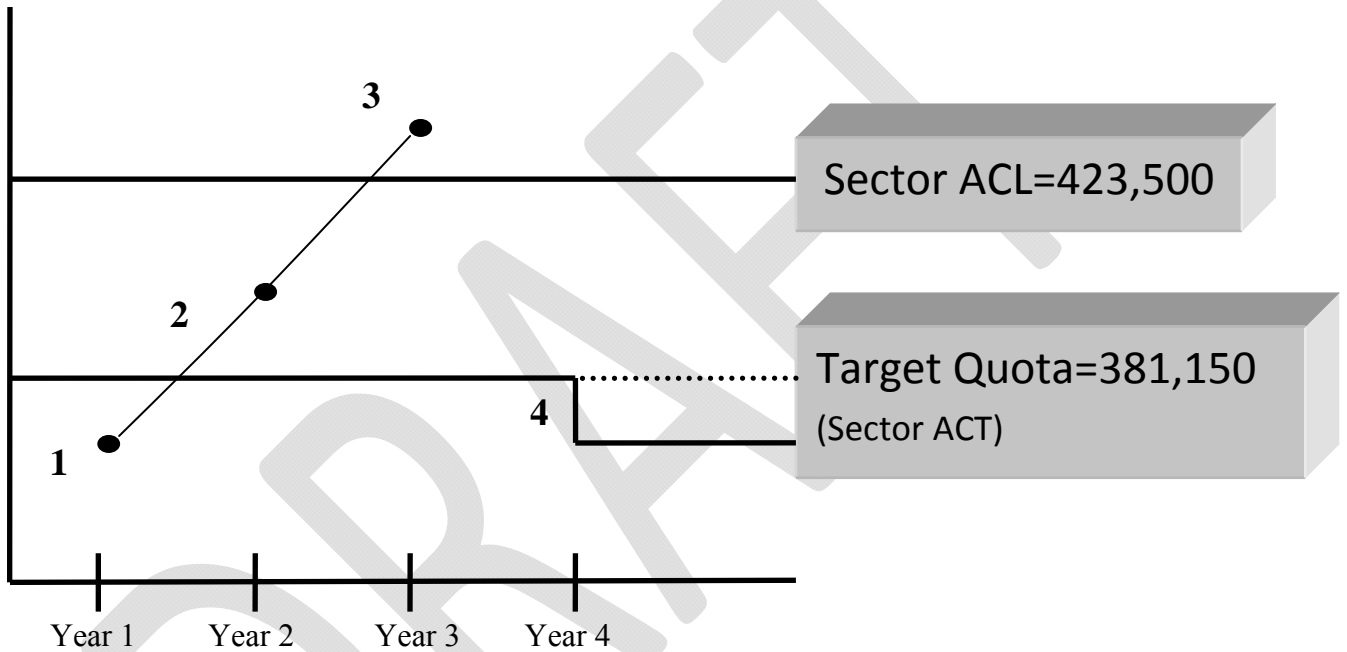
SEDAR Assessed Species	ACL (Best Case) = OFL	Com Quota (50%)	For-Hire Quota (16%)	Private Rec Quota (34%)	Com Target Quota (90%)	For-Hire Target Quota (80%)	Private Rec Target Quota (60%)	Com Catch 2007	For-Hire Catch 2006	Private Rec Catch 2007	Com Red.	For-Hire Red.	Private Rec Red/Inc
Snowy grouper	102,960	51,480	16,474	35,006	46,332	13,179	21,004	135,589	25,376	1,850	66%	48%	-1035%
Golden tilefish	336,425	168,213	53,828	114,385	151,391	43,062	68,631	330,667	222,315	11,347	54%	81%	-505%
Black sea bass	847,000	423,500	135,520	287,980	381,150	108,416	172,788	514,570	262,272	574,479	26%	59%	70%
Gag	903,000	451,500	144,480	307,020	406,350	115,584	184,212	547,743	162,243	410,638	26%	29%	55%
Vermilion snapper	789,602	394,801	126,336	268,465	355,321	101,069	161,079	833,220	511,975	246,973	57%	80%	35%

Note: Allocation values come from 1986-2005 data by sector for all species combined; this is used as an example only. Council must specify actual allocations to be used.

Note: Entries called yield at Fmsy should match the output from the SEDAR assessments; another column should be added to address adjustments to that yield due to PQBM.

The following represents the scenario under Commercial Accountability Measure Overage/Underage Alternative 2 for black sea bass.

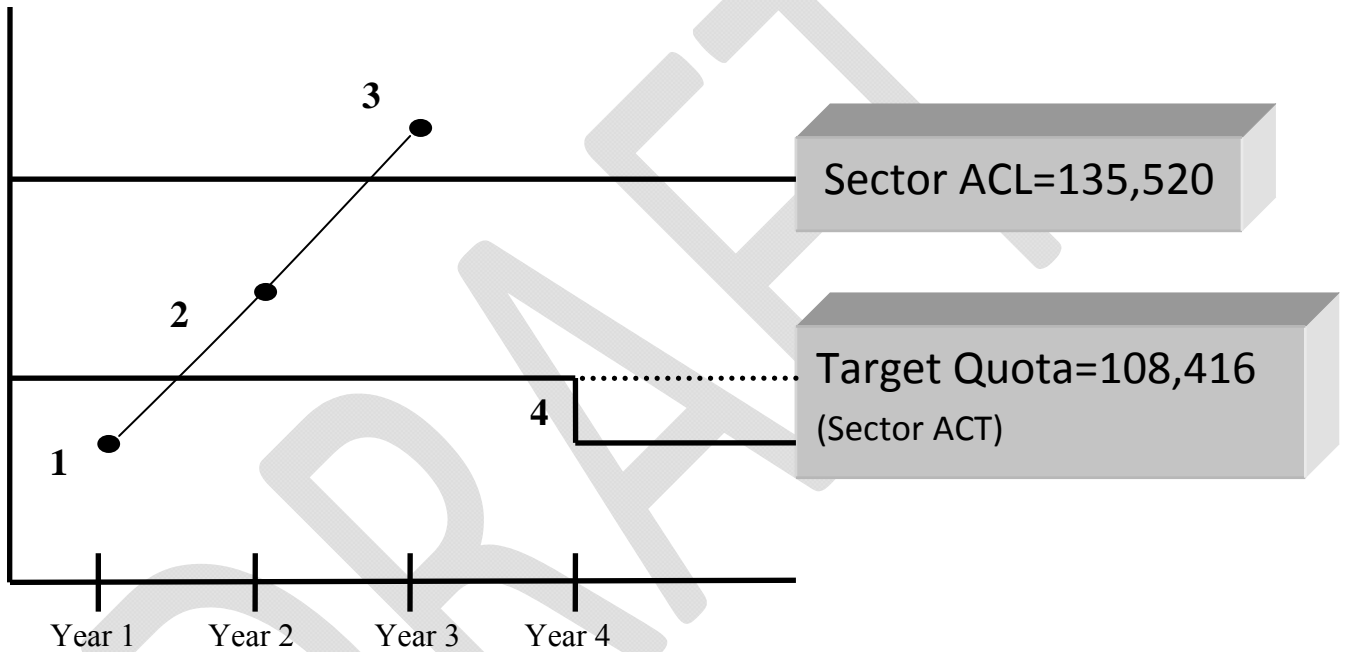
COMMERCIAL BLACK SEA BASS



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; prohibit harvest and retention once quota expected to be met.
- 3** Landings > quota and sector ACL. Prohibit harvest and retention once quota expected to be met. Reduce the quota in Year 4 by the amount landings exceeded the sector ACL in Year 3.
- 4** The quota in Year 4 is reduced by the amount landings exceeded the sector ACL in Year 3.

The following represents the scenario under For-Hire Accountability Measure Overage/Underage Alternative 2 for black sea bass.

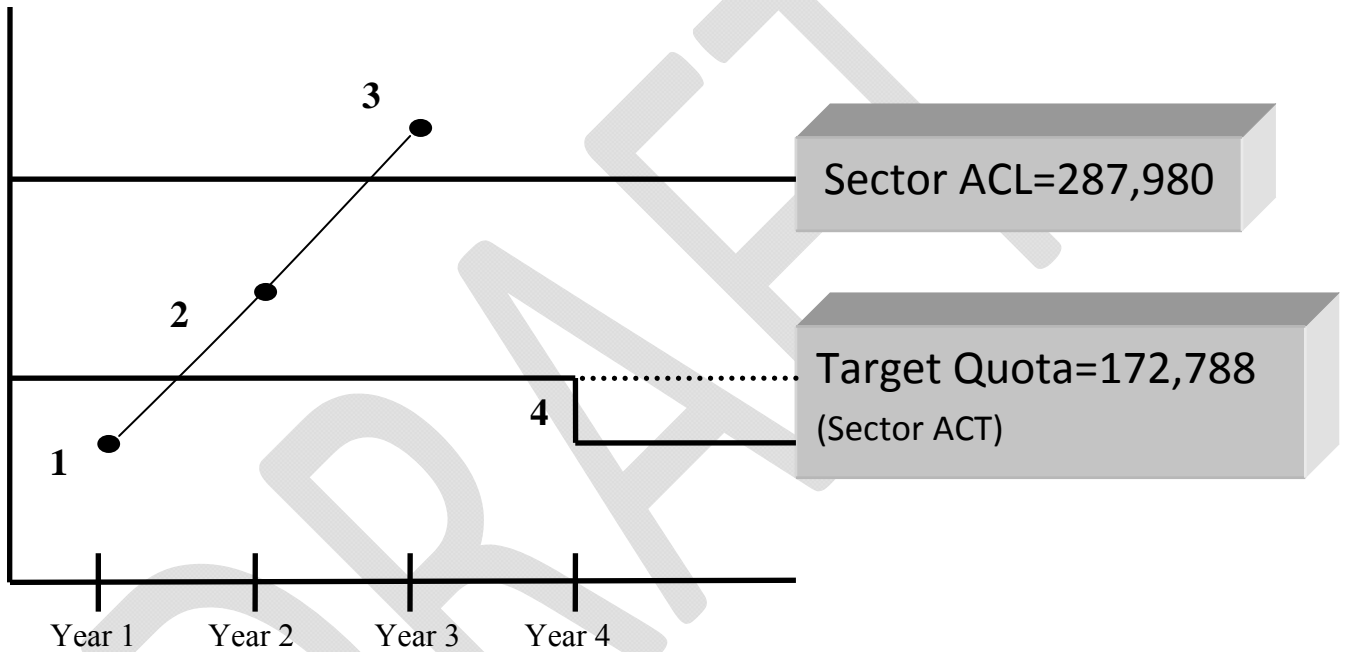
FOR-HIRE BLACK SEA BASS



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; prohibit harvest and retention once quota expected to be met.
- 3** Landings > quota and sector ACL. Prohibit harvest and retention once quota expected to be met. Reduce the quota in Year 4 by the amount landings exceeded the sector ACL in Year 3.
- 4** The quota in Year 4 is reduced by the amount landings exceeded the sector ACL in Year 3.

The following represents the scenario under Recreational Accountability Measure Overage/Underage Alternative 2 for black sea bass.

RECREATIONAL BLACK SEA BASS



- 1** Landings < quota and sector ACL; no action required.
- 2** Landings > quota; prohibit harvest and retention once quota expected to be met.
- 3** Landings > quota and sector ACL. Prohibit harvest and retention once quota expected to be met. Reduce the quota in Year 4 by the amount landings exceeded the sector ACL in Year 3.
- 4** The quota in Year 4 is reduced by the amount landings exceeded the sector ACL in Year 3.