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**PEW**  
ENVIRONMENT GROUP



**END OVERFISHING  
IN THE SOUTHEAST**

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January 15, 2010

Chairman Robert Shipp  
Gulf of Mexico Fishery Management Council  
2203 N. Lois Avenue, Suite 1100  
Tampa, FL 33607

**RE: Amendment 32 Scoping Comments**

Dear Chairman Shipp,

Thank you for the opportunity to comment on the range of issues and management alternatives relative to gag and red grouper in the Draft Scoping Document for Amendment 32 to the Reef Fish Fishery Management Plan. As stated in the draft scoping document, gag and red grouper are the two most important shallow-water grouper species in the Gulf of Mexico, particularly off the coast of Florida. Therefore, it is extremely important that conservation measures implemented for these two species prevent overfishing and lead to sustained recovery for years to come.

Recent stock assessment updates showed that both of these grouper populations have been dramatically reduced in recent years.<sup>1,2</sup> The gag update assessment determined that the population is severely overfished and is at less than half the level defined by the Council to be the management goal. Additionally, fishing mortality rates for gag are two and a half times greater than the rate defined by the Council as sufficient to maintain a healthy biomass. Management measures established through Amendment 32 need to not only end this overfishing, but enable recovery of the gag population in as short a time as possible.

The red grouper population also declined sharply in recent years but remains just above the overfished level. Management measures that allow for higher harvest levels in the recreational fishery were implemented in May of 2009. Revisions to management measures for this species must consider the current population level, the potential increase in harvest due to regulation changes in the recreational fishery, and potential effort shift from gag to red grouper.

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<sup>1</sup> SEDAR Update Assessment of Gulf of Mexico Gag, Report of the Assessment Workshop. Miami, Florida. March 30-April 2, 2009.

<sup>2</sup> SEDAR Update Assessment of Gulf of Mexico Red Grouper, Report of the Assessment Workshop. Miami, Florida. March 30-April 2, 2009

While the draft scoping document for Amendment 32 provides a fairly thorough evaluation of management issues for the gag and red grouper fisheries, we have several concerns that we urge the Council to address. Specifically,

- Management uncertainty should be explicitly accounted for in setting annual catch limits (ACLs), annual catch targets (ACTs), and accountability measures (AMs).
- Gag and red grouper need to be considered not only as single species for management, but as part of a multi-species fishery. Bycatch and discard mortality associated with the gag and red grouper fisheries along with the effects of previous and concurrent regulations should be more thoroughly addressed and fully accounted for in the setting and monitoring of the ACL and an ACT.

### **Management Uncertainty**

The Magnuson Stevens Fishery Conservation and Management Act (MSA) was significantly changed in 2006 to require setting ACLs for all managed species including measures to ensure accountability [16 U.S.C. § 1853(a)(15)]. Subsequently, the National Marine Fisheries Service published guidelines for National Standard 1 (NS1) to aid councils in complying with the MSA. According to the NS1 guidelines, ACLs should be established in coordination with accountability measures and can include ACTs to address management uncertainty and prevent overfishing [§600.310(g)]. Management uncertainty varies among fisheries and sectors within fisheries and should be addressed explicitly and systematically.

The NS1 guidelines further recommend establishing a mechanism to set ACL through a control rule that addresses the various degrees of management uncertainty [§600.310(f)]. Any established control rule for setting ACL or ACT should be consistent with other fishery management plans including the Generic ACL Amendment under development. The MSA does not allow the ACL to exceed fishing level recommendations of the Council's Scientific and Statistical Committee (SSC) [16 U.S.C. § 1852(h)(6)]. The most relevant fishing level recommendation to this requirement is the acceptable biological catch (ABC) [§600.310(b)(2)(v)(D)]. The ACL could be set equal to the ABC if an ACT and AMs are used to account for management uncertainty [§600.310(f)(5)].

For gag, the draft scoping document for Amendment 32 proposes to set  $ACL=ABC$  and ACT at the OY level (75% of  $F_{MSY}$ ) for both the recreational and commercial sectors. Setting the ACT by default at the OY level for both sectors is essentially assuming that there is the same degree of management uncertainty for both sectors. A suite of alternatives should be considered that capture various ways of accounting for differing management uncertainties across the sectors and fisheries. These alternatives could include the default 75% of  $F_{MSY}$  but also include incorporating control rules to set ACL and/or ACT differentiated by the varying management uncertainties.

For both gag and red grouper, the amendment should address how management uncertainty is being accounted for as explicitly as possible for each of the sectors. Management uncertainty includes the ability to maintain the catch at prescribed levels and accounts for catch estimation errors [§600.310(f)(6)(i)]. The level of management uncertainty should be determined and provide guidance in setting a buffer ( $ABC \leq ACL < ACT$ ). Due to the higher level of management

uncertainty in the gag recreational fishery compared to the commercial fishery, it would be expected that the buffer from ABC or ACL would be larger in the recreational fishery. Under this scenario, not adequately accounting for and explicitly addressing management uncertainty in setting an ACT may lead to landings that exceed the ACL more often than not. The ACL/ACT system, in conjunction with AMs, should be designed to prevent exceeding the ACL and overfishing [§600.310(f)(5)].

Accountability measures for both the gag and red grouper fisheries need to be sufficient to prevent overfishing by providing an incentive to keep landings within the established ACL. In situations where fisheries are under rebuilding plans, as in the case of gag, exceeding the ACL should trigger reductions in the ACL for the following year by the full amount of the overage and management measures adjusted accordingly [§600.310(g)(3)]. Monitoring of the commercial industry allows for an in-season closure of the grouper fishery as landing levels approach or exceed established catch levels. However, overages in the commercial fishery do occur, but generally the overages in the shallow-water grouper fishery haven't exceeded the quota by more than 5% in recent years. On the other hand, due to the constraints in recreational fishing data collection and monitoring, in-season closures may not be a viable accountability measure. Therefore, options for preventing and addressing overages through accountability measures should be comprehensive and consider each fishery and sector accordingly.

The Council should closely monitor both sectors of the gag fishery and establish a performance measure for the ACL/ACT/AM system. If the ACL is exceeded more than one time in four years, adjustments in this system should be made [§600.310(g)(3)]. In order to gauge actual mortality relative to the ACL, the application of AMs can be done by comparing average catch to the ACL over a single year or multiple years, such as a moving average over a three-year period [§600.310(g)(4)]. However, the rationale for basing AMs on multiple years should be explicit and consistent with other fisheries. Additionally, even though AMs may be based on a moving average of catch over multiple years, evaluation of the moving average must be conducted and AMs should be applied annually when necessary [§600.310(g)(4)].

## **Gag and Red Grouper Management Measures**

### *Single versus multi-species*

Due to the mortality reductions necessary to end overfishing and rebuild the gag population, significant changes to the overall management strategy may be necessary, particularly in the recreational sector and in the accounting for bycatch. Implementation of a new management strategy may provide an opportunity to explore the efficacy of alternative management options for gag, red grouper and perhaps other species. The list of potential alternatives for both gag and red grouper should be comprehensive and thoroughly analyzed. As management alternatives for gag and red grouper progresses, it is imperative to consider impacts on both of these species from each management regime.

The gag and red grouper fisheries should be considered a multi-species fishery and managed accordingly as much as possible. Gag and red grouper have similar life histories, occupy similar habitat and depths, and, to some degree, have overlapping fisheries. While gag tend to be more oriented towards hard bottom habitat, artificial reefs, and wrecks, red grouper tend to be

associated with rocky outcrops, crevices, and ledges but occasionally occur in similar habitat as gag.<sup>3,4</sup> The two species are generally found in the same depths, though red grouper may occupy slightly deeper water. Peak spawning activity for the two species occurs nearly concurrently during early spring with red grouper spawning over a longer time frame.<sup>5</sup> While red grouper do not tend to aggregate in large numbers to spawn, gag form large spawning aggregations, making them more susceptible to certain gear types.<sup>6</sup> For these and other related reasons, the marine reserves in the Gulf of Mexico were established to provide protection for not only gag but red grouper and other reef fish species.<sup>7</sup>

Due to the similar habitat and depth preference of gag and red grouper, overlap occurs in the fisheries, particularly in the recreational and commercial vertical line fishery.<sup>8</sup> For instance, gag and red grouper are often targeted and caught together in the recreational fishery, particularly during warmer months when red grouper landings become more prominent. Similarly, commercial bandit boats using vertical lines encounter red grouper while targeting gag. As anglers and commercial fishermen shift their effort towards red grouper following the pending gag regulations, encounters with gag could remain at high levels and there is a potential for high mortality associated with regulatory discards and bycatch.

#### *Bycatch*

Catch is defined in the NS1 guidelines as the total quantity of fish taken in all fisheries and includes fish,

*“retained for any purpose, as well as mortality of fish that are discarded”*  
[§600.310(f)(2)(i)].

Additional guidance specifies that,

*“all catch must be counted against OY, including that resulting from bycatch, scientific research, and all fishing activities”* [§600.310(e)(3)(v)(C)].

The ABC recommendations from the stock assessment panel and Scientific and Statistical Committee (SSC) for gag and red grouper did include bycatch, discards, and other known sources of mortality. It is not clear how these other sources of mortality are included in the ACL/ACT specification or how they are to be accounted for in the annual monitoring of catch levels against the ACL or ACT. However, since OY is the management goal, whether at the ACL or ACT level, all catch and sources of mortality should be included in the ACL/ACT

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<sup>3</sup> Amendment 21 to the Reef Fish Fishery Management Plan. August 2003. Gulf of Mexico Fishery Management Council. Tampa, Florida. p.124.

<sup>4</sup> Coleman et al. 1996. Reproductive styles of shallow-water grouper (Pisces:Serranidae) in the eastern Gulf of Mexico and the consequences of fishing spawning aggregations. *Environmental Biology of Fishes* 47:129-141.

<sup>5</sup> Ibid

<sup>6</sup> Koenig et al. 1996. Reproduction in gag (*Mycteroperca microlepis*) (Pisces: Serranidae) in the eastern Gulf of Mexico and the consequences of fishing spawning aggregations. P. 307-323. In F. Arreguin-Sánchez, J.L. Munroe, M.C. Balgos and D. Pauly (eds.). *Biology, fisheries and culture of tropical groupers and snappers*. ICLARM Conf. Proc. 48. 449 p.

<sup>7</sup> Ibid. Final Reef Fish Amendment 30B. October 2008. Gulf of Mexico Fishery Management Council. Tampa, Florida.

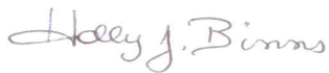
<sup>8</sup> Johnson et al. 1997. Magnitude and composition of undersized grouper bycatch. *Proceedings of the 49<sup>th</sup> Gulf and Caribbean Fisheries Institute*. p161-172,

system. Accounting for bycatch and discards should be explicitly addressed in the setting of the ACL and ACT and in subsequent monitoring of catch levels.

**Conclusion**

We are encouraged by the relatively thorough evaluation of the gag and red grouper management options in the scoping document. However, we urge the Council to add alternatives to the analysis that more fully and explicitly address management uncertainty and bycatch when setting ACLs and ACTs for red and gag grouper. Also, management of these fisheries should be considered in tandem as a multi-species fishery as management for one affects the other. The gag and red grouper populations have experienced significant decline in recent years, but the sooner measures are put in place to protect these species, the sooner we can begin to enjoy the benefits of abundant gag and red grouper populations. We look forward to working with you and the Council to ensure healthy fish populations that can provide jobs, fresh seafood and recreational opportunities for generations to come.

Sincerely,



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