

Meeting Summary
Gulf of Mexico Fisheries Management Council
Ad Hoc Shrimp Effort Management Advisory Panel
Hilton Houston Hobby Airport
Houston, Texas
January 8-9, 2007

ATTENDANCE

Panel Members

Sal Versaggi, Chair	Bobby Devaney, Jr.	Vishwanie Maharaj
Thomas Schultz, Vice-Chair	Chris Dorsett	James Nance
Wilma Anderson	Denis Henderson	Patrick Riley
Vernon Bates	Philip Lara	Rick Wallace
Steve Borsage	Harley Londrie	John Williams

Others

Corky Perret, Council Representative
John Cole, LGL
Glenn Delaney
Assane Diagne, Council Staff
Benny Gallaway, LGL
Gary Graham, Texas Sea Grant
Rick Leard, Council Staff
Ralph Rayburn, Texas Sea Grant
Charlotte Schiaffo, Council Staff
Louis Stephenson

The Ad Hoc Shrimp Effort Management Advisory Panel met to discuss shrimp effort and red snapper bycatch management in the Gulf of Mexico. The meeting was held on January 8-9, 2007 at the Hilton Hobby Houston, Texas. Corky Perret was the Council representative.

Following the adoption of the agenda, panel members elected Sal Versaggi and Thomas Schultz as Chair and Vice-Chair, respectively. Panel members then discussed the Council's charge to the group which was:

“To develop management recommendations for the shrimp fishery to:

- a) Manage effort to reduce red snapper bycatch mortality in the shrimp fishery by 50% from the 2001-2003 base line in 2007, and
- b) Develop additional measures to reach the red snapper bycatch mortality reduction goals for the shrimp fishery established in the red snapper rebuilding plan.”

Figure 1, which illustrates juvenile red snapper mortality resulting from shrimp trawl, was used to support the panel’s discussions. Figure 1, which is attached to this report, also presents benchmark mortality values such as the 2001-2003 average and the 50% and 74% mortality reduction thresholds. Panel members noted that, based on the estimated F-value for 2005, red snapper mortality from shrimp trawl was below 50% of the baseline value (2001-2003 average). In response to questions related to shrimp effort estimates for 2006, Dr. Jin Nance indicated that preliminary estimates suggest an overall shrimp effort reduction of 10% in 2006. He further indicated that shrimp effort in the 10-30 fathoms zone was down by about 35% for the same period.

Concerning data availability, panel members indicated that, at this time, there are too many unknowns. Specifically, they indicated that the number of eligible permit holders that will apply for a moratorium permit, the current amount of latent effort in the fishery, the full impact of hurricanes Katrina and Rita on the fishery, the effect of new bycatch reduction devices, alternative bycatch reduction strategies and corresponding TAC in the directed fishery that the Council may select, are not presently known. Members indicated that, in light of the prevailing uncertainty, it is premature to consider any further reduction in shrimp trawl effort. Thus, panel members focused their attention on maintaining red snapper F-values below 50% of the 2001-2003 average. Subsequent discussions were supported by the Southern Shrimp Alliance’s (SSA) comments on the recent draft environmental impact statement related to the red snapper fishery and shrimp trawl bycatch management. Comments provided by the SSA are available in Appendix A. Motions made by the panel are listed below.

Whereas the charge of the Ad Hoc Shrimp Effort Management Advisory Panel is to develop management recommendations for the shrimp fishery to manage effort to reduce red snapper bycatch mortality by 50% from the 2001-2003 baseline period, the Panel makes the following recommendations to the Council

Motion 1: To endorse the Southern Shrimp Alliance comments on Action 5 of the Draft Environmental Impact Statement (DEIS) as the Panel’s position to maintain the 50 percent reduction in red snapper bycatch mortality from the 2001-2003 baseline period (see Comment 5, pages 5-7, Appendix A).

Motion passed unanimously.

Motion 2: To endorse the Southern Shrimp Alliance comments on Action 6 of the Draft Environmental Impact Statement (DEIS) as the Panel’s position regarding the establishment of a specific time-area closure management system as a mechanism to

maintain the 50 percent reduction in red snapper bycatch mortality from the 2001-2003 baseline period (see Comment 6, pages 10-14, Appendix A).

Motion passed unanimously.

Motion 3: To endorse the Southern Shrimp Alliance comments on Action 7 of the Draft Environmental Impact Statement (DEIS) as the Panel's position regarding the establishment of an annual shrimp effort assessment process to determine the length of the time-area closure necessary, if any, to maintain the 50 percent reduction in red snapper bycatch mortality from the 2001-2003 baseline period (see Comment 7, pages 14-18, Appendix A).

Motion passed unanimously.

Motion 4: To endorse the expanded use of government funded Electronic Logbooks to enhance the annual shrimp fishing effort assessment process.

Motion passed unanimously.

Motion 5: To endorse the Southern Shrimp Alliance comments on Action 5 of the Draft Environmental Impact Statement (DEIS) as the Panel's position to reject any linked scenario of equal proportion reduction of red snapper mortality (e.g. 74 percent) across all sources of mortality. (see Comment 5, pages 7-9, Appendix A)

Motion passed unanimously.

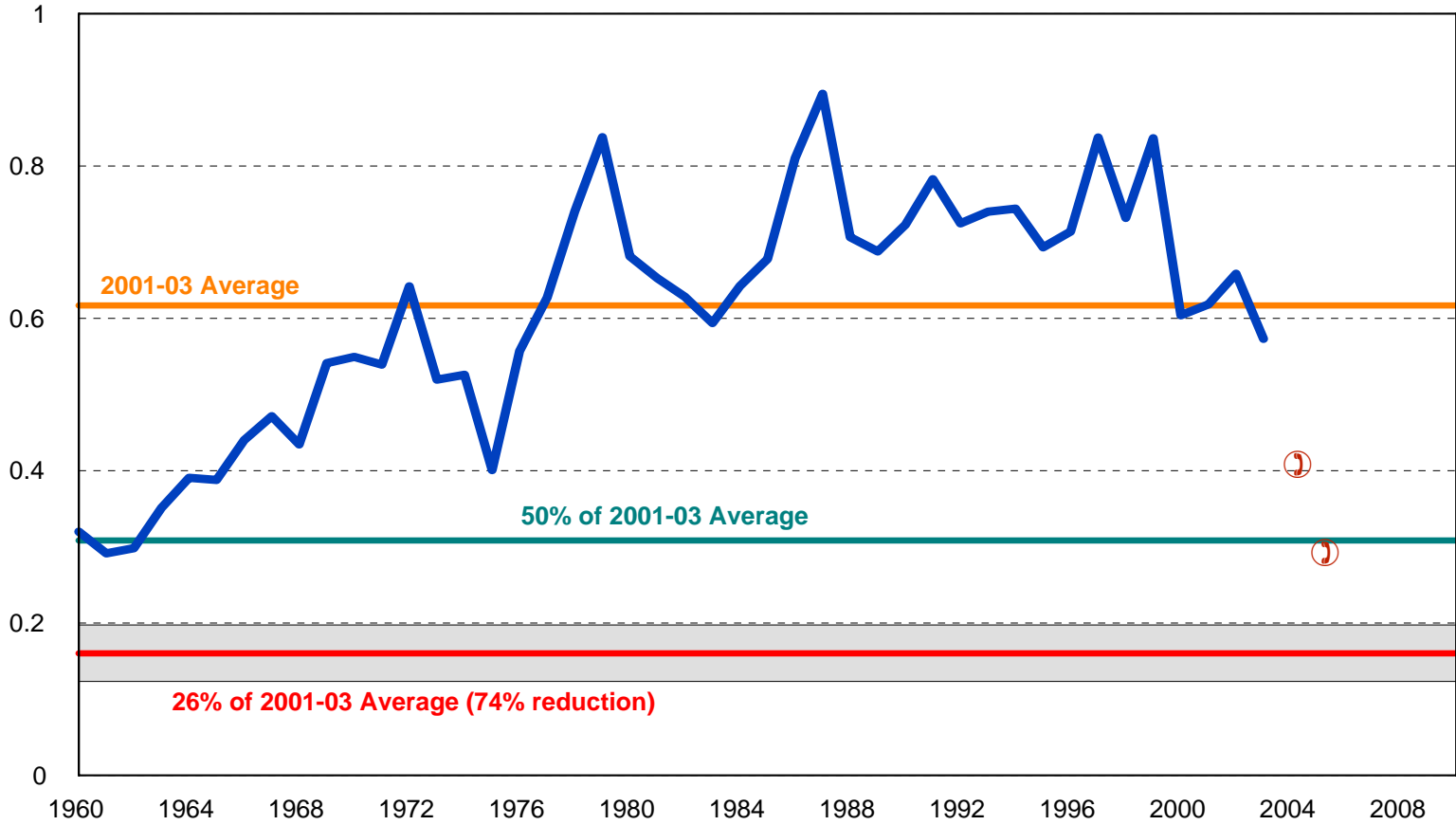
Motion 6: To reject the management actions and alternatives regarding shrimp effort reduction currently set forth in Amendment 27/14 and substitute the measures adopted in motions 1-4. Motion passed unanimously.

Motion 7: To reject those shrimp management actions and alternatives currently set forth in Amendment 15 that are inconsistent with, or in excess of, the measures adopted in motions 1-4.

Motion passed unanimously.

On behalf of the Council, Mr. Perret thanked panel members for their participation and expected future involvement in the process. Panel members reaffirmed their commitment to working on shrimp trawl bycatch issues and expressed the need to convene a follow-up meeting when additional data become available. The meeting was adjourned at 10:00 am.

Figure 1: Shrimp Trawl Bycatch F-values (Red Snapper) in the Gulf of Mexico



Data provided by NMFS, SERO, 2006

Appendix A

Southern Shrimp Alliance's Comments on

Draft Environmental Impact Statement to Evaluate Alternatives to Set Gulf of Mexico Red Snapper Total Allowable Catch and Reduce Bycatch in the Gulf of Mexico Directed and Shrimp Trawl Fisheries



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November 21, 2006

TO: Phil Steele
NOAA Fisheries Service
263 13th Avenue South
St. Petersburg, Florida 33701

RE: Comments on Draft Environmental Impact Statement to Evaluate Alternatives to Set Gulf of Mexico Red Snapper Total Allowable Catch and Reduce Bycatch in the Gulf of Mexico Directed and Shrimp Trawl Fisheries. Document: 0648-AT87

Comment 1: Action 1 -- Directed Red Snapper TAC DEIS Section 2.0: Management Alternatives, Action 1, page 13.

Recommendations:

- Select Preferred Alternative 3, Option b, Suboption i, to set the Total Allowable Catch (TAC) at 6.0 MP, and to establish a 2 fish bag limit, 15-inch minimum size limit, and a fishing season of May 15 – September 15, for the recreational directed red snapper fishery.
- Interim Rule: Consider a short-term phase-down of the TAC to the 6.0 MP target TAC in order to minimize adverse impacts on the directed fisheries.

Explanation:

- **Select Preferred Alternative 3, Option b, Suboption i, to set the Total Allowable Catch (TAC) at 6.0 MP, and to establish a 2 fish bag limit, 15-inch minimum size limit, and a fishing season of May 15 – September 15, for the recreational directed red snapper fishery.**

The 2005 stock assessment indicates that as part of a linked mortality reduction strategy a TAC of 7.0 MP would achieve the dual objectives of the current red snapper rebuilding plan to end overfishing by 2009/2010 and rebuild the stock to Bmsy (B26%SPR) within the rebuilding period (2032), provided that all sources of mortality, including directed and bycatch (discards and shrimp trawl), are reduced sufficiently from the 2001-2003 baseline period.

However, the DEIS clearly states that none of the options included in the DEIS will achieve the across the board bycatch (discard) mortality targets for the directed recreational fishery required under the linked strategy. In

fact, as stated in the DEIS, the Preferred Alternative to reduce the minimum size in the commercial fishery combined with the Preferred Alternative 3(b) (i) under this Action 1 for the recreational fishery is estimated to reduce the weight of dead discards in the directed fisheries to a total of 2.05 MP which is approximately 0.6 MP greater than the linked strategy target level.

Furthermore, by definition, the de-linked strategy set forth under Action 5, Preferred Alternative 2 (50% target bycatch mortality rate reduction from the 2001-2003 baseline) would not meet the linked strategy objective of a 74 percent across the board mortality rate reduction for all sources of mortality either.

Therefore, setting the target TAC at 6.0 MP is necessary to provide a 1.0 MP buffer to compensate for the fact that bycatch mortality reductions in both the directed red snapper and shrimp trawl fisheries will be less than the across the board targets assumed under the linked proportional reduction scenario discussed in the 2005 stock assessment. Failure to set the TAC at this target level and account for differences in the practicability of bycatch reduction in different fisheries would jeopardize achieving the rebuilding plan objectives of ending overfishing by 2009/2010 and rebuilding the stock to Bmsy within the specified timeframe.

In setting the TAC at 6.0 MP as the Preferred Alternative, the DEIS acknowledges that the linked approach of a proportional reduction in the fishing mortality rate across the board for all sources of mortality, particularly bycatch mortality, is not practicable or achievable without preventing the shrimp fishery from achieving OY and causing severe adverse impacts on all of the fisheries that would be unsupportable under the policies and provisions of the Magnuson-Stevens Act.

- **Interim Rule: Consider short-term phase-down of the TAC to minimize adverse impacts.**

The DEIS states that a constant catch TAC strategy for the directed fisheries is being considered for the next three to five years. Therefore, it may be possible to apply a short term (1-2 year) phased reduction strategy to reach the 6.0 MP target TAC by setting initial TACs at a higher level (e.g. 6.5 MP). This short-term phased reduction strategy has been a useful management tool in other fisheries as a means to minimize adverse impacts on fishermen and fishery dependent communities yet still achieve rebuilding goals. This strategy may require future TACs to be reduced to account for this phased reduction.

Comment 2: Action 2 -- For-hire Captain/Crew Bag Limit **DEIS Section 2.0: Management Alternatives, Action 2. page 26.**

Recommendations:

- Select and implement Preferred Alternative 2 to set the red snapper bag limit for captain(s) and crew of for-hire vessels at zero.

Explanation:

The Preferred Alternative is necessary to achieve the TAC and minimize adverse economic impacts on the recreational fisheries and dependent communities by allowing for a longer fishing season.

Comment 3: Action 3 – Commercial Size Limit **DEIS Section 2.0: Management Alternatives, Action 3. page 29.**

Recommendations:

- Select and implement Preferred Alternative 2 to reduce the minimum size limit for the commercial red snapper fishery to 13-inches TL.
- Consider reducing minimum size limit to 12-inches TL.

Explanation:

- **Select and implement Preferred Alternative 2 to reduce the minimum size limit for the commercial red snapper fishery to 13-inches TL.**

The DEIS confirms that because the post-release mortality rate for undersized fish in the directed commercial fishery is so high, substantial discard (bycatch) mortality can be converted to landings mortality through a reduction in the minimum size. The DEIS indicates that the preferred Alternative of 13-inches TL will reduce discard mortality by 50 percent from the current 15-inch TL size.

This is particularly true if the minimum size reduction is accompanied by a significant reduction in the TAC as set forth in the Action 1 Preferred Alternative 1 (6.0 MP TAC) so that a sufficient level of “escapement” of undersized fish is achieved. Otherwise, at continued excessively high levels of directed fishing mortality (e.g. 9.12 MP TAC), the only likely effect of a minimum size reduction would be a downward shift in the size frequency distribution of the red snapper population.

- **Consider reducing minimum size limit to 12-inches TL.**

While the DEIS indicates that the preferred Alternative of 13-inches TL will reduce discard mortality by 50 percent from the current 15-inch TL size, the DEIS also indicates that an additional 25% reduction in discard mortality could be achieved if the minimum size in the commercial fishery were further reduced to 12-inches TL. The DEIS indicates that a 12-inch TL minimum size would speed the rebuilding of the red snapper stock, and that losses in yield per recruit would be negligible as compared to larger minimum sizes.

The DEIS does not suggest there are any offsetting adverse biological or economic impacts to setting the minimum size at 12-inches TL. Therefore, if there is a reliable market for this size fish and the commercial fishery supports it, SSA urges consideration of a 12-inch TL minimum size in the commercial fishery. This would help achieve overall bycatch mortality reduction objectives and increase the effectiveness of the Preferred Alternative TAC reduction in achieving the red snapper overfishing and rebuilding goals.

Comment 4: Action 4 – Directed Fishery Gear Modifications. DEIS Section 2.0: Management Alternatives, Action 4. page 32.

Recommendations:

- Select and implement Preferred Alternative 2 to require the use of non-stainless steel circle hooks, venting tools and dehooking devices for both commercial and recreational fisheries, and consider expanding use to all reef fisheries.
- Initiate specific research to document post release mortality associated with different circle hook sizes and designs, and the use of venting tools.

Explanation:

- **Select and implement Preferred Alternative 2 to require the use of non-stainless steel circle hooks, venting tools and dehooking devices for both commercial and recreational fisheries, and consider expanding use to all reef fisheries.**

SSA strongly supports any reasonable and meaningful efforts to reduce post-release mortality in the directed recreational and commercial red snapper fishery. The Council received a great deal of public testimony at its August 2006 meeting confirming excessive levels of post-release mortality associated with these fisheries.

Indeed, as discussed under Action 3, the proposed reductions in the minimum sizes in the recreational and commercial fisheries, coupled with the Preferred Alternative TAC reduction under Action 1, should yield a significant reduction in discard mortality. This is particularly so in the commercial fishery where post release mortality rates are relatively high.

The additional measures proposed in this Action 4, however, pose a much less certain result. As the DEIS clearly acknowledges, there is insufficient scientific information documenting post release mortality rate reductions associated with the use of circle hooks, venting tools and dehooking devices. Such reductions, particularly associated with the use of corrodible circle hooks and dehooking devices, are intuitive since they have been proven effective as bycatch and bycatch mortality reduction measures in other hook-and-line fisheries. However, the use of venting tools to achieve significant post release mortality reduction appears to be far less certain. As the DEIS clearly states, at best these measures are “thought” or “believed” to be effective. It is clear a great deal more research into the effectiveness of these measures is necessary.

Nevertheless, as the DEIS confirms, the required use of circle hooks, venting tools and dehooking devices is not likely to impose any significant adverse economic impact on either the commercial or recreational fisheries. Therefore, SSA recommends that this requirement be applied to the directed fisheries and further considered for all reef fish fisheries, if appropriate.

- **Initiate specific research to document post release mortality associated with different circle hook sizes and designs, and the use of venting tools.**

Given the uncertainties, SSA further recommends a directed research program to document post release mortality reductions associated with various circle hook designs and sizes as well as venting tools, and a subsequent reevaluation of these measures based on the research results.

Comment 5: Action 5 – Bycatch Reduction Target for Shrimp Fishery DEIS Section 2.0: Management Alternatives, Action 5. page 39.

Recommendations:

- Final EIS: Select Preferred Alternative 2 to establish a bycatch mortality rate reduction target of 50 percent from the 2001-2003 baseline period.
- Final EIS: Reject Alternative 3, linked bycatch mortality reduction strategy.
- Interim Rule: Limit shrimp fishery management measures to implementation of Action 5, Preferred Alternative 2.

- Interim Rule: Do not include Actions 6 and 7. Consider as part of longer-term Council process.

Explanation:

- **Final EIS: Select Preferred Alternative 2 to establish a bycatch mortality rate reduction target of 50 percent from the 2001-2003 baseline period.**

As confirmed in the DEIS, the shrimp fishery has experienced unprecedented reductions in effort since the 2001-2003 baseline period. This effort reduction was 58 percent in 2005. The associated reduction in the red snapper bycatch mortality rate in 2005 was approximately 50 percent. As correctly noted in the DEIS, these reductions are a direct consequence of extremely low shrimp prices due to competition with imported shrimp products; the highest fuel prices in US history; and the busiest, most destructive hurricane season on record. These impacts are expected to continue for the foreseeable future.

Estimates of the magnitude of shrimp trawl bycatch mortality have changed based upon new data. In 1995, shrimp trawl bycatch was believed to account for 80 percent of the total mortality of juvenile red snapper, ages 0 and 1. We now know, based upon new data, that shrimp trawl bycatch mortality during the baseline period 2001-2003 was only 41 percent of the total mortality. In 2005, an impressive reduction has already occurred as compared to the baseline. Bycatch mortality has been reduced to only 26 percent of the total juvenile mortality.

For context, the view in 1995 was that only 7 out of every 100 juveniles were surviving to age 2, 68 were killed in shrimp trawls, and 25 were dying from natural causes. In the absence of any shrimp trawl bycatch mortality, about 58 out of every 100 fish would survive to age 2—huge recruitment gains were possible if bycatch mortality could be significantly reduced or eliminated.

While recruitment can be improved in conjunction with shrimp trawl bycatch reduction, new information describing natural mortality suggests that only 20 fish (not 58) out of 100 would survive to age 2 in the absence of any shrimp trawl bycatch. In the 2001-2003 baseline period, only 7 of every 100 juveniles were surviving to age 2, the same as in 1995. However, 59 of the 93 mortalities were dying from natural causes as compared to 34 dying in shrimp trawls. The reductions in shrimp trawl bycatch mortality achieved in 2005 correspond to 12 survivors out of 100 juveniles, an increase of about 71 percent as compared to the baseline period. A total of 68 of the 88 total mortalities were from natural causes, and 20 were due to shrimp trawls.

The SSA has expressed and reiterates here a sincere commitment to work cooperatively with NMFS and the Council to develop recommendations for appropriate measures to manage future shrimp fishing effort including specific measures to maintain a 50 percent reduction in the red snapper bycatch mortality rate from the 2001-2003 baseline period. However, this effort will require updated information on the status of the shrimp fishery in 2006/2007, including the results of Amendment 13 implementation regarding the number of active vessels in the fishery. This information will not be available until at least October 26, 2007.

This effort will also require the time and opportunity for industry participants to follow a deliberate process for considering updated information and developing thoughtful recommendations. SSA strongly suggests that providing for meaningful industry participation in this process will result in much smoother and more effective management of the shrimp fishery in the future.

Further, according to the most recent 2005 stock assessment and the DEIS, red snapper rebuilding trajectories are relatively insensitive during the short run (2007-2011) to decreases in shrimp bycatch mortality rates due to recent strong year classes. This biological reality justifies deferring long-term decisions on shrimp effort reductions to provide time for the shrimp industry to adjust to external forces and achieve a new economic equilibrium.

Finally, SSA notes that the 2005 SEDAR report acknowledged that the stock assessment did not incorporate or reflect a very important assumption regarding post-settlement density-dependent mortality of red snapper that is “critical for determining the impact of shrimp trawl bycatch”. In fact, post-settlement density dependent mortality may take many of the juvenile red snapper assumed to be saved through bycatch reduction measures. This would substantially alter current assumptions regarding the relative contributions of bycatch and directed fishery mortality as well as the management conclusions for these fisheries. This scientific uncertainty should be resolved before long-term decisions on bycatch reduction measures are made. This also supports moving up the next stock assessment to 2008 or earlier.

- **Final EIS: Reject Alternative 3, linked bycatch reduction strategy.**

SSA has serious concerns with the linked strategy of an equal (proportional) reduction across all sources of fishing mortality including directed recreational and commercial, closed season recreational, and shrimp trawl bycatch fisheries as suggested in the SEDAR 7 stock assessment. Instead, SSA strongly endorses the realistic approach taken in the DEIS by identifying the de-linked scenario under Action 5, Alternative 2 as the Preferred Alternative that would establish the bycatch mortality rate reduction target as 50 percent from the 2001-2003 baseline period. The “de-linked” approach suggested in Alternative 2 is a logical management strategy that is entirely consistent with important statutory requirements. In contrast, the linked strategy set forth under Alternative 3 presents some serious concerns regarding consistency with the Magnuson-Stevens Act as follows:

- **Alternative 3 would prevent shrimp fishery from achieving Optimum Yield.** National Standard 1 requires achieving, on a continuing basis, the optimum yield from the shrimp fishery. Optimum Yield in the shrimp fishery is defined as the Maximum Sustainable Yield. The “linked” strategy (Alternative 3) would require a reduction in bycatch mortality in the shrimp fishery of 74 percent to achieve a 26% SPR rebuilding goal for red snapper. This would require reducing shrimp effort to a level that would prevent the shrimp fishery from achieving its optimum yield. Until recently, the Gulf shrimp fishery has been consistently the most valuable fishery in the United States, and continues to be among the most valuable US fisheries today. Optimum Yield is defined to be that which will provide the greatest overall benefit to the Nation. The shrimp fishery provides enormous benefits to the Nation. The first objective cited in the original shrimp Fishery Management Plan (FMP) is to optimize the yield from shrimp recruited to the fishery.
- **Alternative 3 would subvert National Standard 1.** There is no statutory basis for applying such an extreme interpretation of the National Standard 9 bycatch reduction standard of “to the extent practicable” that it would subvert the National Standard 1 objective of achieving, on a continuing basis, the optimum yield from the shrimp fishery. In two years the shrimp industry has already achieved at least a 50 percent reduction in the red snapper bycatch mortality rate which certainly satisfies the “to the extent practicable” standard. The ability to achieve OY I the shrimp fishery should not be further compromised by the linked strategy proposed under Alternative 3.
- **Fair and equitable does not mean numerically equal.** National Standard 4 requires the allocation of fishing privileges to be fair and equitable. The rebuilding provisions of section 304(e)(4)(B) of the Magnuson-Stevens Act also require overfishing restrictions (and recovery benefits) to be fairly and equitably allocated among sectors of the fishery. This does not mean that fishing mortality rate reductions must be numerically equal for both directed and bycatch fisheries as proposed by the “linked” strategy under Alternative 3. The unique circumstances associated with each source of mortality must be considered individually and addressed according to biological and economic realities and the relevant policy objectives of the statute.
- **Alternative 3 is not fair and equitable.** On paper, the linked strategy requires an across the board reduction of all sources of mortality. However, the DEIS states that none of the preferred alternatives for the directed recreational fishery will achieve the bycatch (discard) mortality reduction targets of the linked strategy. The DEIS also states that bycatch reduction targets are also unlikely to be met for the closed season fishery. It is unclear if the directed fishery TAC or commercial fishery bycatch reduction measures

will achieve the “linked” target reduction either. Furthermore, the Preferred Alternative 3 under Action 1 (6.0 MP TAC, etc.) is tantamount to a de-linked strategy.

The shrimp industry had already achieved in 2005 a 50 percent reduction in the bycatch mortality rate from the 2001-2003 baseline period prior to publication the DEIS. This magnitude of bycatch mortality reduction in such a short period of time is unprecedented in US fisheries. It would not be fair and equitable to impose greater measures on the shrimp fishery to reduce bycatch mortality required under the linked strategy set forth in Alternative 3 given the de-linked mortality reduction strategy set forth in the Preferred Alternatives for the directed fisheries.

- **Alternative 3 is inconsistent with National Standard 8.** The linked strategy (Alternative 3) would impose catastrophic adverse economic impacts on the shrimp fishery and fishery dependent communities already struggling to recover from the 2005 hurricane season in the face of further declining shrimp prices and historically high fuel costs. Contrary to National Standard 8, the linked strategy would not provide for, but would actually prevent the sustained participation of shrimp fishing communities. It would also fail to minimize to the extent practicable economic impacts on such communities. The Council has identified 332 Gulf coastal communities as substantially dependent on the shrimp fishery.
- **Alternative 3 is inconsistent with National Standard 9.** National Standard 9 requires red snapper bycatch and bycatch mortality to be minimized to the extent practicable. The extensive DEIS bycatch practicability analysis concludes that the linked strategy (Alternative 3), which would require immediate additional measures to reduce shrimp fishing effort and bycatch mortality, is not feasible at this time and will not be feasible until at least after Amendment 13 is fully implemented. In other words, Alternative 3 is not practicable at this time, if ever.
- **Interim Rule: Limit shrimp fishery management measures to implementation of Action 5, Preferred Alternative 2.**

At this time, management action should be limited to establishing in the Interim Rule a reasonable, de-linked target for bycatch mortality reduction in the shrimp fishery. The Interim Rule should be implemented for 180 days and subsequently extended for an additional 180 days so that it is in effect for roughly one year. This will provide the opportunity during the Interim Rule period to secure the necessary updated information on the current status of the fishery, including the crucial implementation results of Amendment 13. It will also provide sufficient time for the industry to consider this information and develop thoughtful recommendations.

The Council has already committed itself to this process by establishing the Ad Hoc Shrimp Effort Working Group of scientists to analyze and evaluate current effort in the shrimp fishery as it relates to both optimizing shrimp harvests and bycatch reduction objectives. This Working Group is expected to issue its final report at the Council’s November 2006 meeting. The Council also established at its August 2006 meeting the Ad Hoc Shrimp Effort Advisory Panel. This Panel has yet to hold even its first meeting, but will likely consider both the Working Group report and the implementation results of Amendment 13 to make recommendations to the Council regarding the need for further shrimp effort management measures, if any. This important process needs both sufficient time and information to be effective.

- **Interim Rule: Do not include Actions 6 and 7. Consider as part of longer-term Council process.**

Consistent with the ongoing shrimp effort evaluation process, Actions 6 and 7 should be considered as part of the longer-term management process of FMP Amendments now before the Council. (Note: SSA has provided specific additional comments on Action 6 and 7 separately below.)

If implemented immediately, Actions 6 and 7 would preempt the ongoing and valuable Working Group, Advisory Panel and Amendment 13 implementation processes currently underway. This would undermine industry confidence in both this process and the commitment of the Agency to work cooperatively with the

industry. The shrimp industry is still struggling with hurricane recovery that is severely exacerbated by high fuel prices and shrimp prices that continue to decline. It is premature to adopt a definitive process for imposing harsh time-area restrictions on shrimp fishing that might not be necessary to achieve red snapper bycatch objectives and which may prevent achieving the objective of optimizing shrimp harvest.

As confirmed in the DEIS, shrimp fishing effort is expected to continue to decline from the 2005 level. The US Coast Guard has identified nearly 150 of the 2,666 vessels initially qualified under Amendment 13 that have not been salvaged since the 2005 hurricane season. Loss of these vessels may correspond to a 5-10 percent reduction in effort. As further noted in the DEIS, while the 2001-2003 baseline period assumes a 10-20 percent reduction in red snapper bycatch mortality attributable to the current use of the “Fisheye” BRD, the revised BRD certification criteria are expected to increase this reduction by at least another 10 percent. Therefore, it is estimated that there could be at least a 60 percent reduction in red snapper bycatch mortality from the 2001-2003 baseline period in fishing year 2006. As noted in the DEIS, fishing effort in 2007 is likely to remain at or below the 2005/2006 levels as shrimp prices have continued to fall.

Comment 6: Action 6 – Alternatives to Achieve Target Mortality Reduction in Shrimp Fishery. DEIS Section 2.0: Management Alternatives, Action 6. page 44.

Recommendations:

- Interim Rule: Implement Alternative 1, no action.
- Final EIS: Select Alternative 2, with recommended modifications, as the tentative Preferred Alternative. Reject Alternatives 3 and 4.
- Future: SSA intends to evaluate additional alternatives including those developed by the Ad Hoc Shrimp Effort Advisory Panel based on updated data and results of Shrimp Amendment 13 implementation, and may revise its recommendation for a preferred Alternative at that time.

Explanation:

• Interim Rule – Implement Alternative 1, no action.

As stated in the DEIS with respect to Alternative 1 (no action), “this alternative would be appropriate if the target level reduction of 50 percent in Action 5 is selected as preferred”. Action 5, Preferred Alternative 2 does, in fact, establish a 50% bycatch mortality rate reduction target. Fishing effort and the bycatch mortality rate in the shrimp fishery met this target in 2005. Therefore, Alternative 1, no action, is the appropriate action for the Interim Rule that will be implemented for approximately 1 year (fishing year 2007). Inclusion of any measures under Actions 6 or 7 in the Interim Rule would both preempt the Council’s Ad Hoc Shrimp Effort Advisory Panel process and be premature with respect to critical new information on the 2006 fishing year and the results of implementing Shrimp Amendment 13.

• Final EIS: Select Alternative 2, with recommended modifications, as the tentative Preferred Alternative. Reject Alternatives 3 and 4.

SSA is extremely wary of any future management strategy that includes time-area closures. Experience in the shrimp fishery and many other US fisheries has confirmed that once an area is closed to fishing for whatever purpose, it is rarely re-opened. There has been a substantial net progressive loss of access to productive fishing

grounds in the US, yet there is typically insufficient scientific research to determine if the original purposes and objectives of such time-area closures have been achieved and, therefore, whether such closures are still justified.

Another concern is that the annual distribution of both shrimp and juvenile red snapper is not static. Therefore, a static time-area closure may not reflect the current biological reality or achieve its objectives in any given year. For example, in some years shrimp distribution and production may be concentrated in the 10-30 fathom zone. Consequently, a permanent or annual red snapper bycatch closure in that zone might substantially prevent the shrimp fishery from achieving its OY in that year. The shrimp fishery is in a precarious economic condition and cannot sustain additional restrictions on its ability to optimize shrimp harvest.

Given these concerns, SSA strongly recommends that the Ad Hoc Shrimp Effort Advisory Panel be given the most up to date information on fishing effort and bycatch mortality, including data on fishing year 2006 and the final results of implementing the Shrimp Amendment 13 permit moratorium. As the DEIS "Bycatch Practicability Analysis" correctly concludes, it is not feasible to consider implementing additional measures to manage shrimp fishing effort until the results of Shrimp Amendment 13 implementation are known. Only then will it be possible to achieve a sufficiently accurate estimate of total fishing effort in the shrimp fishery as it truly exists today.

The Advisory Panel should be provided adequate time and the opportunity to consider this information and develop specific recommendations for future shrimp effort management. These may include measures other than time-area closures; they may include alternative time-area closures; and they might even include the same time-area closures included in the DEIS. In any case, this process of giving the affected industry an opportunity to provide thoughtful and informed recommendations is crucial to the smooth and effective management of the shrimp fishery in the future

Mitigating SSA's general concerns about time-area closures is that Action 7, Alternative 2 contemplates an annual process for reviewing bycatch mortality in the fishery relative to the 50% mortality rate reduction target, and for evaluating the potential need for a time-area closure implemented under this Action 6 in any given year. Under Action 7, SSA has proposed a Shrimp Effort Management Process as a recommended modification to Alternative 2. This Process includes an annual procedure for adjusting the duration of a closure (if one is needed) in order to achieve and maintain the 50% mortality reduction target in the fishery. This represents a crucial modification to the duration of the closure proposed under Alternative 2 of this Action 6 under which the duration of the closure would remain the same each year (tied to Texas Closure duration).

Therefore, within the limited scope of closure alternatives proposed under Action 6, SSA tentatively recommends that Alternative 2, (as modified to conform to the Shrimp Effort Management Process recommended under Action 7 (closure duration)), be identified as the Preferred Alternative. Based on an informal survey of fishermen in the area, SSA has concluded that implementing a closure in the 10-30 fathom zone of statistical areas 13-17, during the same time the Texas Closure is in effect for statistical areas 18-21, would be the most practicable alternative for the fishery among the three proposed in the DEIS. As noted in the DEIS, there is a substantial area of continental shelf inside of the 10 fathom depth contour with good shrimp production where the existing fishery could continue during the closure period proposed under Alternative 2.

Further, as cited in the DEIS, research conducted by Gallaway and others confirms there is a sharp delineation of juvenile red snapper bycatch at the 10 fathom curve and there is a relatively high proportion of age 1 red snapper in the 10-30 fathom zone in statistical areas 13-17 during this time period. This closure would allow a large number of age 1 fish to move off the shrimp grounds and onto areas of high relief that comprise their sub-adult habitat. This approach is consistent with the management priority to protect age 1 over age 0 given that the natural mortality rate of age 0 fish is so much greater than age 1. Thus, Alternative 2 would achieve the optimal balance of objectives; providing the most effective protection for juvenile (age 1) red snapper while providing a practicable and reasonable opportunity for the shrimp fishery to achieve its OY.

SSA has incorporated this modified Alternative into its recommendations under Action 7 which sets forth a specific process for annual evaluation and potential closure implementation. The following clarifications of this recommended closure and implementation process are critical.

- The recommended closure (Alternative 2, as modified) is not intended to be used for the purpose of reducing effort or the bycatch mortality rate more than is necessary to achieve the 50 percent mortality reduction target under Action 5, Preferred Alternative 2. Instead it is strictly intended to provide a tool that can be used if and when action is determined (through the Action 7 annual effort review process) to be necessary to ensure the 50 percent mortality reduction target is maintained. SSA believes this is the correct interpretation and the Agency's intent of Action 6 Alternative 2, and it is certainly the SSA's intent with respect to this recommendation.
- Consistent with the Shrimp Effort Management Process recommended by SSA under Action 7, the duration of the closure would not necessarily be the full 60 days of the Texas Closure. Instead, the duration of the closure would reflect the actual effort reduction necessary to bring effort down (or up) to the target effort level. As explained under Action 7, the target effort level will be established as a proxy for the 50 percent bycatch mortality rate reduction target under Action 5, Preferred Alternative 2. Stated another way, the closure duration would be only that which is necessary to ensure that the 50 percent bycatch mortality rate reduction target under Action 5, Preferred Alternative 2 is maintained on an annual basis. This is a critical modification to the proposed Alternative 2 under this Action 6.
- The following hypothetical scenarios are presented simply to help illustrate how this process might work:
 - In 2007, there would be no closure under the anticipated Interim Rule.
 - If in 2008, the annual review finds that actual effort in 2007 met the effort target, then there would be no closure again in 2008.
 - If in 2009 the annual review finds that actual effort in 2008 exceeded the effort target, then there would be a closure in the 2009 fishing season. The closure would occur in the 10-30 fathom zone off Louisiana (statistical areas 13- 17) and it would start on the first day of the Texas Closure. The duration would be only as long as necessary to bring effort down to the effort target level and thereby achieve the mortality reduction target.
 - If in 2010 the annual review indicated that in 2009 the actual effort was below the effort target, then the duration of the closure in 2010 would be reduced by the appropriate number of days to bring effort up to the target. If the reverse were true, then the duration of the closure would be increased by the appropriate number of days to reach the target.

SSA also recommends that the closures proposed under Alternatives 3 and 4 be rejected. These do not achieve an optimal balance of the combined objectives of reducing red snapper bycatch to the extent practicable while optimizing shrimp harvest. Based on SSA's review, the geographic scope of the proposed areas (Statistical areas 10-21 or 13-21) would impose greater negative economic and logistical impacts on the shrimp fishery than Alternative 2, and would not be as practicable. Statistical areas 10-12 account for a relatively small portion of bycatch mortality (11 percent) and so a closure there would not justify the adverse impacts on important shrimp production in that area. Similarly, the closure of statistical areas 19-21 would achieve little protection for age 1 red snapper and would not justify the adverse economic impact on the brown shrimp fishery. Finally, based on information in the scientific literature published by Gallaway et al. and others noted in the DEIS, the timing of the proposed spring and fall closures under Alternatives 3 and 4, respectively, would not optimize the protection of age 1 juvenile red snapper.

SSA stresses that its recommendations under this Action to potentially implement a modified version of the time-area closure strategy set forth under Alternative 2 is tentative and preliminary in that it is based on the limited scope of alternatives set forth in this DEIS and the current understanding of shrimp fishing effort and bycatch data available at this time. SSA remains concerned about the potential negative implications of a time-area closure strategy in general. SSA intends to fully review and evaluate this recommendation with the Ad Hoc Shrimp Effort Advisory Panel in the context of the Ad Hoc Shrimp Effort Working Group report, updated information on the 2006 fishing year, and the results of implementation of Shrimp Amendment 13. SSA retains the right to revise or reject this recommendation as a result of this further evaluation process.

Comment 7: Action 7 – Framework Procedure.

DEIS Section 2.0: Management Alternatives, Action 7, page 53.

Recommendations:

- Interim Rule: Implement Alternative 1, no action—do not establish a formal Framework process at this time.
- Final EIS: Modify Preferred Alternative 2 to establish an annual administrative process to achieve a 50 percent bycatch mortality rate reduction target set forth in Action 5, Preferred Alternative 2, by (tentatively) using the depth/area closure set forth in Action 6, Alternative 2, if action is required.

Explanation:

- **Interim Rule: Implement Alternative 1, no action—do not establish a framework.**

Consistent with DEIS Action 5, Preferred Alternative 2, that would establish a 50 percent mortality rate reduction target for the shrimp fishery, and the fact that the shrimp fishery achieved this target in 2005, there is no need to establish a formal annual process to evaluate and manage shrimp effort during the near term (1 year) duration of the Interim Rule. In fact, implementing a formal Framework process in the near term would preempt the critical Ad Hoc Shrimp Effort Working Group, Ad Hoc Shrimp Effort Advisory Panel, and Shrimp Amendment 13 implementation processes now underway.

A longer-term Shrimp Effort Management Process for the annual evaluation and management of shrimp fishing effort relative to the mortality reduction target is outlined below. SSA recommends this Process for inclusion in the Final EIS as an alternative for consideration under future Council or NMFS action after conclusion of the Interim Rule. SSA also intends to present this alternative Process to the Ad Hoc Shrimp Effort Advisory Panel for their consideration and possible revision. Recommendations made by the Advisory Panel on this Process or any other measure should be incorporated into the future Council management process.

- **Final EIS: Modify Preferred Alternative 2 to establish an annual administrative process to achieve 50 percent bycatch mortality rate reduction target set forth in Action 5, Preferred Alternative 2 by (tentatively) using Action 6, Alternative 2, if action is required.**

The following Proposed Shrimp Effort Management Process is intended to be consistent with the basic thrust and purpose of Preferred Alternative 2, but with important differences:

- This process can be established and authorized by the Council through a one-time Framework Adjustment or Plan Amendment. It would not require the Council to take action every year.
- This process recognizes that it would not be feasible to assess shrimp fishing effort relative to the 50 percent mortality rate reduction target with sufficient confidence during the same fishing year.
- Even if some preliminary effort information were provided to the Council—presumably late in the fishing year-- it would be extremely difficult for the Council to complete and implement an effective Framework action to establish or adjust a time-area closure to manage shrimp fishing effort within the same fishing year. Such a process would require an excessive investment of Council time, staff and

money; would likely produce unreliable and highly controversial results; and would come very late in the fishing year making its effectiveness questionable.

- Instead, the following Proposed Shrimp Effort Management Process includes an annual determination by a scientific Shrimp Effort Assessment Team of the actual shrimp fishing effort from the previous fishing year. This Team would determine if the actual effort in the fishery achieved a target level of shrimp fishing effort in the 10-30 fathom zone in the western Gulf (statistical areas 13-21). This effort target would serve as a proxy for the 50 percent target bycatch mortality rate reduction target (Action 5, Preferred Alternative 2). An example of this proxy might be the 2005 level of shrimp fishing effort in the 10-30 fathom zone in the western Gulf statistical areas 13-21.
- This Team would also determine the duration, if any, of a depth/area closure for the current fishing year that is necessary to achieve the 50 percent bycatch mortality reduction target (effort target proxy). The specifics of this closure (if needed) are set forth in Action 6, Alternative 2, except that the duration of the closure would not necessarily be 60 days, but would reflect the Shrimp Effort Assessment Team's determination.
- In the future, the Team would also adjust the effort target (proxy) and closure duration to reflect any new scientific information that documents additional bycatch reduction achieved by newly certified BRDs above the 2001-2003 baseline.
- Finally, the Regional Administrator is given authority to establish by regulation the duration of the closure, if any, through an administrative action not requiring additional Council action.

Notwithstanding this recommendation, SSA reiterates its concerns regarding the use of any time-area closure strategy for managing shrimp fishing effort to achieve a target mortality rate reduction such as set forth in this recommendation. As previously indicated, SSA's recommendation under Action 6 and this Action 7 to use the time-area closure proposed under Action 6, Alternative 2 is tentative and preliminary, and may be substantially revised as a consequence of reviewing new information on shrimp fishing effort and additional alternatives developed through the Ad Hoc Shrimp Effort Advisory Panel.

Proposed Shrimp Effort Management Process

- 1) Establish the red snapper bycatch performance target for the shrimp fishery as a 50% bycatch mortality rate reduction from the 2001-2003 baseline period. (DEIS Action 5, Preferred Alternative 2).
- 2) Establish a Shrimp Effort Assessment Team (SEAT) of no more than five scientists appointed by the Regional Administrator consistent with those presently involved in the annual effort estimation process. At least 2 appointees should be nominees of the shrimp industry.
- 3) The SEAT establishes a proxy for the 50% mortality rate reduction target in units of shrimp fishing effort. This proxy becomes the "annual effort target" for the shrimp fishery and a threshold for determining what if any effort management action is justified. This effort target may be adjusted in the future to reflect new scientific information on bycatch reduction achieved by newly certified Bycatch Reduction Devices (see 9 below).
- 4) No later than April 1st of each year, the SEAT determines the total "actual effort" in 10-30 fathom zone in statistical areas 13-21 that occurred in the previous fishing year. The SEAT compares the "actual effort" in the previous year to the "annual effort target" (2005 proxy) to determine the amount of effort overage or underage-- or if the target was met.
- 5) The SEAT calculates a standardized "daily effort rate" specifically for the May 15 – July 15 period in the 10-30 fathom zone in statistical areas 13-17. This is the depth/area described in Action 6, Alternative 2.
- 6) No later than April 1st of each year, the SEAT also calculates the duration of the closure for the current fishing year, if any, by applying the standardized "daily effort rate" to the amount of effort overage or underage in the previous fishing year. This will determine the total number of closure days necessary to raise or lower fishing effort

to achieve the “annual effort target”. The SEAT sets the current year closure duration by adjusting the previous year’s closure duration up or down by the appropriate number of days to account for the actual effort overage or underage—or it maintains status quo if the target was met. Sample scenarios:

- If there was no closure in previous year, and actual effort (previous year) was equal to or below the annual effort target, then there would be no closure in current year.
- If there was no closure in previous year, and actual effort was above the target, then current year closure duration would equal the number of days necessary to account for the actual effort overage based on the assumed daily effort rate.
- If there was a closure in previous year, and actual effort was about equal to the target, then the current year closure duration would remain the same as the previous year closure.
- If there was a closure in previous year, and actual effort was below the target, then the current year closure duration would be reduced by the number of days necessary to raise effort up to the target by applying the assumed daily effort rate.
- If there was a closure in previous year, and actual effort was above the target, then the current year closure duration would be increased by the number of days necessary to bring effort down to the target by applying the assumed daily effort rate.

7) No later than April 1st of each year, the SEAT also evaluates available scientific information that documents bycatch reduction achieved by new Bycatch Reduction Devices (BRDs) certified according to the new criteria adopted in 2006. The SEAT adjusts the “annual effort target” and associated closure duration, as appropriate, to reflect any increase in bycatch reduction achieved by new BRDs as compared to the bycatch reduction achieved by old BRDs during the 2001-2003 baseline period. Any adjustments to the “annual effort target” and closure duration to reflect improved BRD performance must still achieve the target bycatch mortality rate reduction of 50 percent from the 2001-2003 baseline period.

8) The Regional Administrator publishes in the Federal Register within 10 days (April 10th of each year) the determinations made by the Shrimp Effort Assessment Team. This would become an annual administrative action by the Regional Administrator authorized by a one-time Council Framework or Plan Amendment. The closure, if any, begins on first day of Texas Closure (May 15). This timeframe is necessary to provide industry with approximately 1 month advanced notice whether a closure will occur and the duration of the closure.