OVERVIEW
Spiny Lobster Committee Meeting
December 6, 2010
Hilton New Bern/Riverfront
New Bern, North Carolina

The Spiny Lobster Committee need to: (A) approve minutes from the September 13, 2010 SAFMC Committee meeting; (B) receive presentations on the SEDAR Update stock assessment and SSC Subcommittee recommendations; (C) review, modify and approve Draft Spiny Lobster Amendment 10/DEIS for public hearings; and (D) provide guidance on public hearing locations and an AP meeting.

A. Approval of Minutes
The committee will review and approve the South Atlantic Committee minutes from September 13, 2010.

REQUIRED COMMITTEE ACTION:
1. Review and approve minutes.

B. SEDAR Update Stock Assessment & SSC Subcommittee Recommendations
The committee will receive a presentation on the Stock Assessment Update results (Attachment 1). Results about overfishing and overfished taken directly from the report are as follows:

Overfishing
“The existing overfishing definition is that fishing mortality rates should be no higher than the fishing mortality rate associated with a 20% static SPR (F20%). The fishing mortality rate corresponding to 20% static SPR was 0.45 per year for fully selected lobsters and this rate was similar to the 0.49 per year in SEDAR08. The full fishing mortality rate since 2005-06 has only exceeded 0.45 per year one time and that value was 0.46 per year and the fishing mortality rates on the fully selected lobsters was less than 0.45 per year for 11 out of the 25 fishing years included in the ICA analyses. The geometric mean for the fully selected fishing rate for the past three fishing years, 2007-08 through 2009-10, was 0.21 per year and the stock is considered to not be undergoing overfishing. However, these results illustrate a difficulty with a limit that is close to the long term average in that the limit will be exceeded frequently.”

Overfished
“The estimation of conservation and management benchmarks for whether the stock of spiny lobster is overfished in SE US cannot be done reliably using only the data from the stock assessment, alone. The reason for this is threefold:
1) Estimation of long term productivity measures such as maximum sustainable yield requires some understanding of the relationship of future recruitment levels with spawning stock biomass, i.e. the stock-recruitment relationship. In particular one needs to know the curvature of this relationship and at what stock levels recruitment declines. Unfortunately, in this assessment there are no indications of much variation in recruitment trends from the data. Therefore, we cannot estimate benchmarks such as spawning biomass at MSY (SSBmsy) or the fishing mortality rate that produces SSBmsy (Fmsy) directly from the data.

2) Even if we could estimate SSBmsy from the data, the question remains whether this is appropriate because cohorts of spiny lobster that recruit in the SE US partly come from other areas throughout the Caribbean (Hunt et al., 2009) and, indeed, SE US may contribute recruitment to other areas. Due to high connectivity between spiny lobsters inhabiting various areas in the Caribbean, self-recruitment is indeterminate; therefore, the SE US population may not be considered as a separate breeding population.

3) The degree of “leakage” of lobsters outside of the traditional fishery caused by migration, behavior, gear selection or some combination makes the estimates of fishing mortality rates and, subsequently, Fmsy, to be somewhat uncertain.

Note that by using F20% as a surrogate to Fmsy, the AW, following SEDAR08, is avoiding the debate on whether recruitment arises from within or without the SE US area. We only are assuming that there is a breeding population of spiny lobsters of which the lobsters in the SE US are part. Then if fishing occurs at Fmsy throughout the stock, including the SE US component, then it is expected that SSBmsy for the entire breeding stock would be achieved. While current management only controls the U.S. component of the fishery, a Fmsy strategy for this component would be consistent with overall MSY goals for the stock wherever it occurs. This discussion concurs with Amendment 6 of the spiny lobster FMP that states that MSY is unknown for this species.”

Status of Stock Declarations

“The fishing mortality rates on fully recruited spiny lobsters during the last ten years only have been less than F20% (i.e., 0.45 per year) in 2005-06 and from 2007-08 through 2009-10, when they ranged between 0.15 and 0.38 per year with associated static SPR of 23% -53%. In these years, especially in 2009-10, these values suggest that the U.S. fishery is not overfishing. However, the retrospective results from ICA model runs with various configurations call for cautions and prudent management options because fishing mortality rates were probably underestimated in recent years (the DeLury has the opposite retrospective bias).
As noted in Sections 6.3.2, a Caribbean-wide stock assessment is needed. This assessment would weigh various local, biological and technical interactions, and perhaps help better understand and determine the exploitation and stock conditions for the Caribbean spiny lobster.”

Table 6.3.2. Management benchmarks for the spiny lobster off SE US calculated using assumed (a) and estimated (b) maturity schedules.

### a

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Definition</th>
<th>Value from Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSST</td>
<td>Minimum Spawning Stock Threshold</td>
<td>Bmsy*(1-M) or 0.5Bmsy</td>
<td>1.150 x 10^12 eggs</td>
</tr>
<tr>
<td>MFMT</td>
<td>Maximum Fishing Mortality Threshold</td>
<td>Fmsy = F20%SPR</td>
<td>0.45 per year</td>
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<tr>
<td>MSY</td>
<td>Maximum Sustainable Yield</td>
<td>Yield @ F20%SPR</td>
<td>7,950,000 lb</td>
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<tr>
<td>BMSY</td>
<td>Biomass at MSY</td>
<td>Biomass @ F20%SPR</td>
<td>1.743 x 10^12 eggs</td>
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<td>FOY</td>
<td>Fishing Mortality at Optimum Yield</td>
<td>F30%SPR</td>
<td>0.31 per year</td>
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<tr>
<td>OY</td>
<td>Optimum Yield</td>
<td>Yield @ F30%SPR</td>
<td>6,940,000 lb</td>
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<tr>
<td></td>
<td>Fcurrent</td>
<td>GM 2007-2009</td>
<td>0.21 per year</td>
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<td></td>
<td>Fcurrent/F20%SPR</td>
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<td>0.47</td>
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<td>SSBcurrent</td>
<td>GM 2007-2009</td>
<td>2.240 x 10^12 eggs</td>
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<td></td>
<td>SSBcurrent/SSB F20%SPR</td>
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<td>1.29</td>
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### b

<table>
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<tr>
<th>Criterion</th>
<th>Description</th>
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<th>Value from Assessment</th>
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<tr>
<td>MSST</td>
<td>Minimum Spawning Stock Threshold</td>
<td>Bmsy*(1-M) or 0.5Bmsy</td>
<td>1.190 x 10^12 eggs</td>
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<td>MFMT</td>
<td>Maximum Fishing Mortality Threshold</td>
<td>Fmsy = F20%SPR</td>
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<td>MSY</td>
<td>Maximum Sustainable Yield</td>
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<td>8,020,000 lb</td>
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<tr>
<td>BMSY</td>
<td>Biomass at MSY</td>
<td>Biomass @ F20%SPR</td>
<td>1.603 x 10^12 eggs</td>
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<td>FOY</td>
<td>Fishing Mortality at Optimum Yield</td>
<td>F30%SPR</td>
<td>0.36 per year</td>
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<td>OY</td>
<td>Optimum Yield</td>
<td>Yield @ F30%SPR</td>
<td>7,260,000 lb</td>
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<tr>
<td></td>
<td>Fcurrent</td>
<td>GM 2007-2009</td>
<td>0.21 per year</td>
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<td>Fcurrent/F20%SPR</td>
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<td>0.39</td>
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<tr>
<td></td>
<td>SSBcurrent</td>
<td>GM 2007-2009</td>
<td>3.110 x 10^12 eggs</td>
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<td>SSBcurrent/SSB F20%SPR</td>
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<td>1.72</td>
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The committee will also receive a presentation on the SSC Subcommittee recommendations (Attachment 2: 2nd briefing book) from their November 18-19, 2010 meeting that will include Overfishing Level (OFL) and Allowable Biological Catch (ABC) specifications. The SSC Subcommittee is comprised of representatives from the Gulf Council’s SSC and the South Atlantic Council’s SSC. Recommendations from the SSC Subcommittee will be ratified by each Council’s SSC at their next meetings (South Atlantic SSC will meet in April 2011). A sufficiently broad range of alternatives will be taken to public hearing to ensure all likely outcomes from the final SSC review will be covered.
C. **Draft Spiny Lobster Amendment 10/DEIS**

Gregg Waugh, SAFMC Staff, will provide an overview of Amendment 10/DEIS (Attachment 3; 2nd briefing book) that has been prepared by the Interdisciplinary Planning Team (IPT). The Committee will review each action, make any necessary changes, choose preferred alternatives, and approve Amendment 10/DEIS for public hearings.

The Committee will also provide guidance to staff on public hearings. The Gulf Council has approved one public hearing in the Florida Keys at Marathon for spiny lobster; the intent would be to hold this as a joint public hearing. [Note: Public hearings on Joint Mackerel Amendment 18 will also be held in April and the Gulf Council has approved Key West and Marathon in the Keys; these will be joint SA/GM hearings.]

A joint Gulf/South Atlantic Spiny Lobster Committee meeting is being scheduled during the Gulf Council’s June 6-10, 2011 meeting at the Marriott Beachside in Key West. We are trying to hold this meeting on Wednesday, June 8th so that our committee members can stay at the hotel for the SAFMC meeting which runs June 13-17, 2011 at the same hotel. We are also scheduling a Joint Mackerel Committee on the same day. The intent is to resolve all differences in Spiny Lobster Amendment 10/DEIS and have each committee recommend approval for formal review. The Gulf Council will take action on June 9-10 and then the South Atlantic Council will take action during their meeting the following week. Spiny Lobster Amendment 10/FEIS must be approved at the June 2011 meeting so that NMFS can implement the ACLs/AMs prior to the end of the 2011 statutory deadline.

<table>
<thead>
<tr>
<th>GM Dates (April 2011)</th>
<th>CMP Am 18 Gulf Approved</th>
<th>SA Dates (April 2011) DRAFT</th>
<th>CMP Am 18 SAFMC Planned</th>
<th>Spiny Lobster Am 10 Gulf Approved</th>
<th>Spiny Lobster Am 10 SAFMC Planned</th>
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<tr>
<td>4/20</td>
<td>Key West, FL</td>
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<td>?</td>
<td>Maderia Beach, FL</td>
<td>4/18 Cape Canaveral, FL</td>
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<td>4/11 New Bern, NC</td>
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<tr>
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<td>?</td>
<td>Port Aranasas, TX</td>
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</tbody>
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Public hearings would be held from 5-7 pm?

The Committee will also provide guidance on when and where to hold a South Atlantic Spiny Lobster Advisory Panel meeting. One possibility would be to hold the AP meeting from 9 am – 4:30 pm on April 20th in Key West before the public hearing.
REQUIRED COMMITTEE ACTION:
1. Discuss all actions in Spiny Lobster Amendment 10/DEIS and modify as necessary.
2. Choose preferred alternatives for all actions.
3. Approve Spiny Lobster Amendment 10/DEIS for public hearings and DEIS review.
4. Provide guidance to staff on public hearings and AP meeting.

D. Planning/Timing for Joint Spiny Lobster Amendment 10/DEIS

Specific steps in 2010 and 2011:
A. √IPT meeting – 1/21/2010
B. √Draft Amendment prepared by SAFMC staff (Gregg Waugh) with assistance from
   NMFS staff (Susan Gerhart) and GMFMC staff (Carrie Simmons):
   a. GMFMC reviews and provides input:
      i. √February 1-4 and
      ii. √June 14-17 and
      iii. √October 25-28, 2010 – Gulf Council receives report on South Atlantic
           Council Actions
   b. √Joint Gulf/South Atlantic APs and Committees – June 7, 2010 from 8:30 am – 5
      pm
   c. √SAFMC reviews and provides input – June 7-11 and September 13-17, 2010
C. √NMFS determined an EIS is necessary due to coral ESA issues and prepares appropriate
   notices.
D. √IPT call on September 24, 2010
E. Document preparation schedule for Public Hearing Approval
   a. √Revised sections (except Action 4) sent to Gregg – by October 22, 2010
      Done 10/29/10.
   c. √Comments to authors – by November 5, 2010.
   d. √Revised sections sent to Gregg – by November 12, 2010; extended to 11/15/10.
   e. Revised document including Action 4 sent to IPT – by November 22, 2010.
   f. Comments and additions (especially Action 4) to Gregg – by November 24, 2010.
   g. Document revised and included in SAFMC 2nd Briefing Book – on November 29,
      2010.
G. Joint SAFMC/GMFMC SSC review – November 18-19, 2010
H. SSC provides OFL & ABC – November 18-19, 2010
I. Councils review Draft Amendment/DEIS and approve for public hearings –
   a. GMFMC – February 7-10, 2011 Gulfport, MS
   b. SAFMC – December 6-10, 2010 in New Bern, NC
J. Public Hearings – April 2011 (Note: Hearings will be Joint Mackerel & Spiny Lobster;
   Joint SA/GM hearings in Marathon & Key West).
K. Review public comments and provide final approval of Amendment 10 for formal review
   by SOC –
   a. GMFMC/SAFMC Spiny Lobster Committee – June 8? During Gulf meeting
   b. GMFMC – June 6-9, 2011 in Key West, FL
c. SAFMC – June 13-17, 2011 in Key West, FL
L. Send Spiny Lobster Amendment 10/EIS/Proposed rule for formal review – July 2011.
M. NMFS Declares Transmit Date as ________________/11.
N. Notice of Availability of Amendment 10 published ________________/11.
   a. Comments due no later than 5 pm EST on _____/11.
   b. Send to Council, AP & SSC
   c. Post to website; Fishery Bulletin will be posted to website.
   d. Amendment approved on ________/11.
N. Proposed Rule published ________________/11.
   a. Send to Council, AP & SSC
   b. Comments due by ____________/11.
O. Final Rule published by 12/31/11.
A. Send to Council, AP & SSC