CWG Review 1: Spring 2015

**Tier 1 Information:**

1. **Management Action**

   **S-97:** Maintain lobster mini season but reduce the bag limit to six lobsters per person per day to be consistent statewide, and require the review of educational materials and completion of an educational quiz in order to receive an annual license.

   This revised RMA is a combination of the following original RMAs:
   - S-97: Reduce lobster bag limit in SEFCRI region during mini season to reduce take during mini season and increase distribution (original title).
   - N-48: Alternate years of mini season (e.g. odd years allow mini season, even years no allowance) to change the population of lobsters so as to make this fishery more sustainable.
   - N-49: Eliminate lobster mini season to reduce damage to reef by overzealous divers.
   - N-55: Limit the number of lobsters allowed on mini season and number of lobster permits to reduce the take during this two-day period.

2. **Intended Result (Output/Outcome)**

   **What is the end product/result of this management action?**
   - The intended results from this management action are to reduce direct impacts to coral reefs from lobster mini season by reducing fishing effort on the reef and to simplify regulations with consistent bag limits. This would be implemented through an FWC regulatory change. The mini-season bag limit should be 6 lobsters per person per day throughout Florida.
   - It will reduce the impact from divers on coral and reef ecosystems and reduce time spent anchoring and re-anchoring as divers search for more lobsters to reach the bag limit.
   - This RMA should focus on habitat protection and reduction of habitat impacts.
   - If the requirement to take a quiz in order to get a license is not feasible, the recommendation would be to provide educational materials along with license that include info on:
     - Coral as living organisms
     - Illegal to disturb coral per FL CRPA of 2009
     - Size and bag limits

3. **Duration of Activity**

   **Is this a discrete action or a recurring activity? Explain.**
   - Changing the regulation is a discrete action, while the result of this discrete action is ongoing.
   - Enforcement would be recurring during every mini season.

4. **Justification**

   **What issue or problem will this management action address? Explain.**
   - This RMA will decrease damage to coral reef habitats from diving and boating activity associated with lobster mini season, and simplify regulations with consistent bag limits.
   - The two day lobster frenzy of multitudes of divers anchoring, grabbing and digging into the corals and associated structures would be more limited with this RMA.

5. **Potential Pros**

   **What are the potential advantages associated with this management action?**
   - Pros include reduced physical damage to coral reefs from diving and boating activity associated with lobster mini season and simplified regulations statewide.
6. **Potential Cons**

*What are the potential disadvantages associated with this management action?*

- The locations that advertise the higher limit might suffer from loss of tourism revenue.
- Resistance from FWC, diving and fishing communities, dive clubs, tour operators and dive shops could occur.
- Increased enforcement would be needed.

7. **Location**

*County/Counties: Miami-Dade, Broward, Palm Beach, Martin, Other?*

- Broward, Miami-Dade, Palm Beach, and Martin counties would be included, but this RMA would change regulations statewide.

*Relevant Habitats: Coral reef, seagrass, watershed, etc.?*

- Coral reefs and associated habitat for lobsters, hardbottom, artificial reefs, mangroves, nearshore habitats, offshore would be included.

*Specific Location: City, site name, coordinates, etc.?*

- N/A

8. **Extent**

*Area, number, etc.*

- The entire State of Florida.

9. **Is this action spatial in nature?**

- No.

Do you believe this management action could be informed by the Our Florida Reefs Marine Planner Decision Support Tool?

No

*If yes, you will proceed to the next section on Marine Planner Information.*

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**Marine Planner Information:**

N/A

**Tier 2 Information: (No Tier 2 Info from S-97)**

**WHY?**

1. **Strategic Goals & Objectives to be Achieved**

*Refer to the SEFCRI Coral Reef Management Goals and Objectives Reference Guide.*

- SEFCRI LAS FDOU Issue 1 Goal would increase compliance with Florida fishing regulations regarding seasonal closures, size limits, catch limits, gear restrictions and protected marine life.
- FDEP CRCP Coral Reef Ecosystem Conservation Goal F: Recommend and support new or strengthened local, state, and federal regulations and enforcement capacity to protect coral reefs. FL Priorities Goal D2: Reduce physical marine benthic impacts from recreational and commercial activities and marine debris. FDEP CRCP Coral Reef Ecosystem Conservation Obj 4: Reduce impacts from extractive and non-extractive recreational and commercial uses.

2. **Current Status**

*Is this activity currently underway, or are there planned actions related to this recommendation in southeast Florida? If so, what are they, and what is their status.*

- No.
3. Intended Benefits (Outcomes)

What potential environmental benefits or positive impacts might this management action have?
- Less direct impacts to the reefs during this 2 day event (i.e. anchor damage, fin kicking the reef by divers, flipping and breaking of corals, etc...) would result.
- Additionally, there would be reduced opportunity for misunderstanding and misinterpretation of regulations in all of Florida.

What potential social/economic benefits or positive impacts might this management action have?
- Some benefits may be more years to continue lobster mini season in the future and support for all industries that depend on an intact reef system.
- A lower bag limit would benefit the industry because more trips would be scheduled, and people would spend less overall time catching their limit so damage to the reef is diminished.

What is the likely duration of these benefits - short term or long-lasting? Explain.
- Benefits would be long-lasting.

4. Indirect Costs (Outcomes)

What potential negative environmental impacts might this action have?
- None.

What potential negative social/economic impacts might this action have?
- Some revenue reduction for dive industry may occur.

What is the likely duration of these negative impacts - short term or long-lasting? Explain.
- Negative impacts will be short term, because fisherman will realize that a week later they can collect lobsters for almost 8 months.

5. Risk

What is the threat of adverse environmental, social, or economic effects arising from not implementing this action?
- Without this RMA, continued impacts to reef from intense user pressure during this two day event will occur.
- The mini season bag limit was originally six in the SEFCRI region, but in 1992 it was increased to 12 to reduce pressure and impacts from this event to coral reefs in the Florida Keys. If the bag limits were once again equal, it would likely increase pressure in the Florida Keys National Marine Sanctuary.

6. Relevant Supporting Data

What existing science supports this recommendation? (Provide citations)

7. Information Gaps

What uncertainties or information gaps still exist?
- None.

WHEN?

8. Anticipated Timeframe for Implementation

How long will this recommendation take to implement?
- 0 - 2 years.

9. Linkage to Other Proposed Management Actions

Is this activity linked to other proposed management recommendations?
• No.

If so, which ones, and how are they linked? (e.g., is this activity a necessary step for other management actions to be completed?)

Does this activity conflict with other existing or proposed management actions?
   Note: all related actions have now been combined with S-97.

WHO?
10. Lead Agency or Organization for Implementation
   What agency or organization currently has/would have authority? Refer to the Agencies and Actions Reference Guide.
   • FWC would be the lead agency for implementation.

11. Other Agencies or Organizations
   Are there any other agencies or organizations that may also support implementation? Explain.
   • FDEP CRCP and NOAA could be involved as well.

12. Key Stakeholders
   Identify those stakeholders most greatly impacted by this management action, including those from whom you might expect a high level of support or opposition. Explain.
   • Diving, fishing, and tourism industries would be most affected by this RMA.

HOW?
13. Feasibility
   Is there appropriate political will to support this? Explain.
   • It is uncertain if this RMA is feasible.

   What are the potential technical challenges to implementing this action? Has it been done elsewhere?
   • This will definitely be a struggle to change the law because there are a lot of businesses that rely on mini season for income.
   • FWC might not want to make the limit change and people might argue that there is not enough data to support this change.

14. Legislative Considerations
   Does the recommendation conflict with or actively support existing local, state, or federal laws or regulations? Explain.
   • It would still support that we need regulations on lobster mini season.
   • It will be a change to a local/state law that FWC already has in place.

15. Permitting Requirements
   Will any permits be required to implement this action? Explain.
   • Yes, each person collecting lobsters would still need the lobster stamp on their Saltwater Fishing License.

16. Estimated Direct Costs
   Approximately how much will this action likely cost? (Consider one-time direct costs, annual costs, and staff time, including enforcement.)
   • It is unclear if any additional funding would be necessary. There are no anticipated increases in enforcement costs. The only costs associated would be with FWC staff time dedicated to rule change process, and outreach and education to the public on this rule change.
Will costs associated with this activity be one-time or recurring?
- This activity would be one-time to change the law, but enforcement would be ongoing.

If recurring, approximately how long will staff time and annual costs be necessary to implement the management action?
- 

17. Enforcement
Does this require enforcement effort?
- Yes.

Provide an explanation if available.
- It will be a change to a local/state law that FWC already has in place to enforce.

18. Potential Funding Sources
Identify potential funding organizations/grant opportunities, etc.
- 

19. Measurable Outcomes/Success Criteria/Milestones
How will the success of this recommendation be measured? How will you know when the intended result is achieved?
- We can measure the success by assessing changes in benthic habitat condition in region.

SEFCRI/TAC Targeted Questions:

1. TAC - Is the recommendation likely to achieve the intended result? Explain.
   Tier 1 – #2 (Intended Result - Output/Outcome)
   - S-97: The recommendation would achieve the intended result of reducing lobster harvest by recreational divers. The recommendation may achieve the result of reduced damage to coral reefs from recreational divers harvesting lobster.
   - N-48: The recommendation is unlikely to achieve a change in the lobster population status. The recommendation may reduce damage to reefs resulting from divers during mini season. The management action will not address reef damage because overturned corals will not recover in the intervening year. Instead, TAC Team #1 recommends requiring that all purchasers of a crawfish permit successfully complete an on-line course describing the importance of protecting reef habitat.
   - N-49: Elimination of the lobster mini season is likely to achieve the intended outcome of reduced reef damage by divers collecting lobster. It is unlikely to improve the status of the lobster population. The management action would not help the lobster population and is unlikely to minimize reef damage.
   - N-55: The recommendation to reduce lobster harvest to prevent damage to reef habitats is unlikely to result in the intended outcome. We do not recommend this MA. We recommend that the regulations that control lobstering be reviewed and updated based on the best available science. To achieve the goal of less habitat destruction, we recommend an online course describing reef habitat protection for all buyers of the crawfish permit. Similar comments can be applied to N-48, N-49, and S-97.

2. TAC - Is the recommendation sufficient to address the identified issue or problem? Explain.
   Tier 1 – #4 (Justification)
   - S-97: The recommendation is likely to be sufficient to address the identified issues. It may not be sufficient to reduce reef damage.
   - N-48: the source of the lobster population in Florida is not known. Based on the life history of spiny lobster, (e.g. how long the larvae are in the pre-settlement phase), Florida’s population of spiny lobster may be from
other jurisdictions. Therefore, the recommendation may have no effect on the Florida lobster population.

- N-49: The recommendation is sufficient to address the identified problem of reef damage from recreational harvesters during mini season. The RMA will likely result in increased conflicts between commercial and recreational harvesters on the opening days.
- N-55: The recommendation is not sufficient to address the identified problem of damage to reefs from recreational lobster fishers. Lobster harvest is already reduced for Monroe County where the state bag limit of 12 is reduced to 6 per person; however reef damage still occurs during mini season.

3. **TAC - Is the recommendation technically achievable from a science or management perspective? Explain.**

   **Tier 2 – #8 (Anticipated Timeframe for Implementation) and Tier 2 - #13 (Feasibility)**

   - S-97: The recommendation is technically feasible. Support for the recommendation may be politically challenging depending on how the recommendation is received by recreational lobster fishers.
   - Mini season was developed to reduce conflict with first few days of commercial season.
   - Mini season only accounts for 5% of catch – it doesn’t impact lobster so much, but more the reefs and humans because of irresponsible practices.
   - Address bad behavior via education. Recommend an online training course that would be required to get the lobster stamp.
   - Many suggestions on how to achieve desired intent of this RMA (see PDFs).
   - N-48: The recommendation could be achieved, but seems unlikely to garner the support needed to be implemented.
   - The TAC recommends combining all options (see S-97).
   - N-49: The recommendation is technically achievable from a scientific and management perspective. FWC has the purview to regulate this fishery.
   - N-55: The recommendation is not technically achievable, as proposed.

4. **SEFCRI Team, PPT & Other Advisors - Has this been done (by SEFCRI, other agencies or organizations in the SEFCRI region)? Explain.**

   **Tier 2 – #2 (Current Status)**

   - S-97: Management of lobster harvest has been conducted by FWC. Reduction of recreational lobster bag limit to 6 has been implemented in the Florida Keys. FWC could implement this bag limit state-wide.
   - N-48: Management of the lobster fishery is done by the FWC. This particular recommendation has not been tried previously.
   - N-49: The mini season has not been eliminated since it was begun as a measure to reduce conflicts and allocate access to lobster to recreational fishers before commercial fishermen get access to the resource. FWC manages the fishery.
   - N-55: It was already reduced once in the past before. FWC currently regulates and enforce lobster management actions to allocate lobster harvests between commercial and recreational fishers.

5. **SEFCRI Team, PPT & Other Advisors - Is this recommendation a research or monitoring project? (Recommendations should be turn-dirt management actions, not the step you take before a management action). Explain.**

   - This recommendation is a change in fisheries management, not research or monitoring.
   - No, but it requires research (to determine extent of damage to the reef).
   - The recommendation is not research or monitoring.

6. **SEFCRI Team, PPT & Other Advisors - If either of the following applies to this management action, provide feedback on which information submitted by the Community Working Groups may be more appropriate, or if entries should be merged. Explain.**

   a. There are different viewpoints for an individual management action (i.e. two working group members provided separate information, as indicated by a ’//’ marking between them).
   b. Information submitted for this and other draft management actions is sufficiently similar that they might
be considered the same.

- Several other RMAs have been proposed that address mini season reef damage. These should be evaluated and combined to create a more strategic approach to managing mini season and reducing reef damage.
- Several other RMAs have been proposed regarding lobster mini season. These recommendations should be evaluated and the strongest scientific case made for the best of the recommendation should be advanced. The recommendations with less scientific justification should be culled.

7. SEFCRI Team, PPT & Other Advisors - Non-agency Question: Is the recommendation technically achievable from your stakeholder perspective? If not, do you have suggestions that would allow this to become technically achievable from your stakeholder perspective? Explain.

Tier 1 - #5 (Potential Pros), Tier 1 - #6 (Potential Cons), Tier 2 - #3 (Intended Benefits), Tier 2 - #4 (Indirect Costs) and Tier 2 - #12 (Key Stakeholders)

- There are 2 main points: sustainability of lobster population and indirect effects of lobstering on the habitat.
  - Sustainability of lobster populations:
    - None of these suggestions are likely to have a significant effect on lobster population. 90% of lobsters get harvested yearly. Evidence points to the fact that larvae for FL lobster population comes from the Caribbean. Few lobsters spawned in FL stay here.
    - To justify limitations on mini season, we need to establish a better link between mini season anchoring and reefs (that it is significant relative to what happens year round).
    - Ghost traps. Estimated to kill more lobsters than what is harvested during the entirety of mini season. Mechanisms to deal with this include existing regulations to recover traps and fine fishermen for their loss. Lost trap recovery program – although this is relatively small and would require additional support.
  - N-48: No, it will not be supported by stakeholders, nor does the scientific evidence support it.
  - N-49: Possibly, but more quantifiable information on the damage caused by mini-season would need to be presented. There is evidence of the impact on lobsters, but not reefs to my knowledge.
  - N-55: Even with additional research it is unlikely that evidence will be available to support this action or the purported benefits.

8. SEFCRI Team, PPT & Other Advisors - Agency Question: Is the recommendation technically achievable from a management perspective? If not, do you have suggestions that would allow this to become technically achievable from your agency's management perspective? Explain.

Tier 2 – #10 (Lead Agency or Organization for Implementation) and Tier 2 - #11 (Other Agencies or Organizations)

- S-97: The recommendation is achievable from a management perspective. Support for the recommendation will depend on the science and documentation of actual coral reef damage resulting from recreational lobster harvesting activities.
- FWC: FWC is unlikely to support this.
- FWC: Mini season affects people not the lobster population, and was established to provide a special opportunity for recreational fishers and reduce congestion on the opening days of the lobster fishing season. Recreational fishermen during mini season usually harvest 5-7% of the annual harvest. Other groups in the fishery would harvest these lobsters (likely within two months) without mini season. Therefore, mini season has only a minor effect on the lobster population, and changes to mini season would not achieve the desired increased distribution of this recommendation.
- FWC claims that the lobster population is stable, but collateral damage must be considered with the magnitude of effort in those 48 hours. The 12 lobster bag limit was put into effect to detour lobster fisherman from congregating in the Keys for mini season. It seems reasonable to decrease bag limit to 6 in the SEFCRI region (in order to match that of the FL Keys and BNP) so that divers from down south don’t come north to overexploit the reefs up this way- not just lobsters but all of the associated damage to reefs from gear, careless divers, etc...
- N-48: The MA (alternating years for mini season) is technically feasible, but may not be the strongest proposal to result in the intended outcome. In fact, the MA does not seem to reflect the current understanding of spiny lobster population dynamics.
• N-49: The recommendation is technically achievable from an agency perspective. Support for the recommendation would be needed to be gathered in order to be enacted by management agencies.

• FWC: FWC is unlikely to support this.

• FWC: Eliminating mini season would just shift effort to the opening day of the regular season and would not likely have the desired effect of this recommendation. Outreach and education could be a more effective way to have a real positive impact.

• N-55: The recommendation of reducing or reallocating lobster harvest is technically achievable. The intended outcome of reducing reef damage may not be.

Comments from the Reviewers:

• S-97: The recommendation would achieve the intended result of reducing lobster harvest by recreational divers. The recommendation may achieve the result of reduced damage to coral reefs from recreational divers harvesting lobster.

• There are two main ideas at play here:
  o 1. Increase lobster population and
  o 2. Decrease damage caused to the reef by anchors and “frenzy” that occurs over mini-season.

• Mini season bag limits were implemented to encourage divers to ‘increase [their] distribution’ in the SEFCR region. Changes to the current bag limit would undo the intent of previous rule making.

• Bag limit changes would be an effective method to maintain catch distribution between recreational and commercial interests as the number of recreational fishermen increases.

• The management action (N-48) will not address reef damage because overturned corals will not recover in the intervening year. Instead, TAC Team #1 recommends requiring that all purchasers of a crawfish permit successfully complete an on-line course describing the importance of protecting reef habitat

• Evidence for damage to reefs from mini-season is only anecdotal. Need research to support the proposition that it is caused by the mini-season.

• The intended benefit of sustainability of the lobster population is unlikely to be affected by this MA because lobster larvae have been shown to be derived elsewhere in the Caribbean. Therefore, any “intended result” aimed at taking less lobsters to keep populations stable will not achieve the desired results because this is not currently an issue.

• Online training course would be designed to mitigate bad behavior. None of these MAs address bad behavior by people as the issue for the reef. This is the only option Team 1 was able to come up with to address this issue.

• N-49: Lobster fishing both recreational and commercial trap fishing has been implicated in reef damage. Eliminating mini season would reduce 2 days of the 8 month fishing season- that seems ineffectual. Closed fishing areas have been implemented in Pennekamp State park and closed trap areas have been implemented in federal waters. These closures need to be evaluated.

• Mini season was put in place because the opening of lobster season was causing conflicts between the recreational and commercial fishers that included the same "craze" described above, but with more boats and conflicts. Mini season separates the two sectors and actually reduces conflicts and on water incidents/accidents.

• RMAs are not research orientated, but may require research (to determine extent of damage to the reef)

• N-55: The MA does not consider the effects of the commercial harvest. Elimination or restriction of the recreational fishery is not likely to change the total lobster caught. The MA reallocates more lobster to the commercial fishery.

Questions from the Reviewers:

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**Questions from the CWGs back to the Reviewers:**

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