



**Marine Consulting and Research**

P.O. Box 320599, Cocoa Beach, Florida 32932, USA  
Ph. +1 321 613-2528, [jhearin@asr-america.com](mailto:jhearin@asr-america.com)  
[www.asr-america.com](http://www.asr-america.com)

October 13, 2008

**ASR America Comments Regarding Brevard County**  
**MPASR Feasibility Study: Interim Report 3**

**Section 1.0 Introduction:**

Please change the description from "sandbags" to Geotextile Sand Filled Containers

**Section 2.2 Limestone Rock:**

We do not believe that it will be possible to achieve the design tolerances required for a MPASR using limestone boulders which are massive enough to remain stable during extreme wave conditions.

Mitigation reefs built in deep water encounter significantly less wave forces than a MPASR built in the breaker zone. Materials which may be suitable for mitigation reefs are not necessarily suitable for a MPASR. The unique requirements of MPASR necessitate an innovative approach to reef construction. In order to incorporate amenities such as surfing, the tolerances of the reef have to be small. Large humps and hollows in the reef will deform the wave face and greatly reduce the quality of the waves. Therefore a construction method is required that minimizes costs, while ensuring accurate reproduction of the structure.

The effectiveness of the reef for surfing enhancement will be significantly diminished if the reef loses 20% of its material every five years.

**Section 2.3 Concrete Rubble:**

We do not believe that it will be possible to achieve the design tolerances required for a MPASR using concrete rubble which is massive enough to remain stable during extreme wave conditions.

Mitigation reefs built in deep water encounter significantly less wave forces than a MPASR built in the breaker zone. Materials which may be suitable for mitigation reefs are not necessarily suitable for a MPASR. The unique requirements of MPASR necessitate an innovative approach to reef construction. In order to incorporate amenities such as surfing, the tolerances of the reef have to be small. Large humps and hollows in the reef will deform the wave face and greatly reduce the quality of the waves. Therefore a construction method is required that minimizes costs, while ensuring accurate reproduction of the structure.

The effectiveness of the reef for surfing enhancement will be significantly diminished if the reef loses 20% of its material every five years.



**Section 2.5 Geotextile Sand Filled Containers:**

Significant sections of our report dealing with the construction requirements of MPASR, including accuracy and safety, have been omitted from Interim Report #3. Please include our entire report so that Brevard County may benefit from all of our experience and recommendations.

**Section 3.0 Conclusion:**

The design life of the Geotextile Sand Filled Containers is 40+ years when deployed underwater (protected from UV light).

We look forward to discussing these issues and the rest of the feasibility study with the contractors and Brevard County.

Sincerely,

A handwritten signature in black ink that reads 'John M. Hearin'.

John Hearin  
President  
ASR America