Title:

S-101: Create a training program based on existing Best Management Practices that will be required for coastal construction on-site project contractors to be implemented by January 1, 2020, as required in a coastal construction permit.

Background:

- This recommended management action relates to all relevant habitats including coral reefs, hardbottom, and seagrasses in the entire State of Florida.
- This recommended management action is being put forth because most coastal construction can negatively impact nearshore reefs and ecosystems, and our existing practices are detrimental to reef system health. This recommendation will reduce negative impacts from landscaping, coastal construction, and agriculture. While involuntary guidelines, rules, codes, and permits are imposed by the government, they can take significant time to update and are subject to politics and financial interests. A carefully constructed program similar to the popular Leadership in Energy & Environmental Design (LEED) could voluntarily enhance and increase smart/friendly construction via the power of certified green product marketing and financing.

Objective:

- The intent of this recommended management action is to lessen damage to southeast Florida coral reefs and improve water quality by increasing the number of coastal construction companies and/or professional individuals certified in project management "Best Management Practices" (BMPs). This would be achieved through increased compliance with permit conditions and increased awareness of coastal construction impacts to reef ecosystems. This action calls for voluntary compliance, which will benefit the environment through adherence to the latest and greatest methods. While it would initially be voluntary, certification could eventually be made mandatory by the state. In addition, the permittee and project sponsor can require contractors to complete the training process to be eligible bidders, who would then gain favorable consideration.
- The green industries best management practices is an example and could be used as a base point, as could the Florida Clean Marina Program or the Atlantic Coast Fish Habitat Partnership. Coastal construction companies should be involved from the start to help shape the program and develop the certification. This certification could be provided and updated annually, with annual refreshers highlighting lessons learned and adaptive best practices moving forward.
- Many contractors are from outside our region and unaware of local resources or the importance of the resources. There may be a disconnect between the company/personnel applying for the permit (those familiar with the resources) and those actually completing the construction. Educating the construction side may help raise resource awareness and reduce impacts. A program like this would educate project managers (for the contractor) on why the resources are valuable and must be protected. In turn, contractors would no longer be able to plead ignorance when caught committing a permit violation.

Intended Benefits and/or Potential Adverse Effects:

• Benefits of implementation of this recommended management action include having less negative impacts to reef and water quality from coastal construction. There would be an

- increase in the number of projects that meet the best/highest reef-friendly specifications with better trained companies and professionals. The preservation of the reef ecosystem has long-lasting socioeconomic benefits.
- Some anticipated negative impacts include: (1) difficult, costly, and time consuming to develop, design, and launch and (2) program may not be popular among construction companies and professionals or there might be pushback from the industry for a brief duration. However, this will better incorporate necessary safeguards upfront and may improve the economy of the project (i.e. it is expensive to clean up or mitigate an impact after the fact, when it could have been avoided upfront).
- The program may not positively address the issue (i.e. the only good coastal construction is no construction). Even if the program is implemented, adopting companies may find themselves underbid by non-adopting companies, assuming it will cost more to design and build "green" projects.
- The duration of the benefits of this recommended management action are recurring to provide instruction to the companies and professionals wishing to adopt it.
- If this recommended management action is not implemented decisions will be made by contractors based on bottom dollar without consideration of reef benefits. This will continue to be a big mistake with major impacts to the reef due to a lack of knowledge of existing resources. Also, the risk could be noncompliance from incomplete information or inability to understand specific conditions.

Agencies/ Organizations:

- The lead agency for implementation of this recommended management action would be the Florida Department of Environmental Protection (FDEP).
- Other potential agencies or organizations who could be involved include the United States Army Corps of Engineers, as well as local municipalities or counties that may only allow certified contractors to apply for permits.
- The key stakeholders for this recommended management action would be coastal construction companies, environmental consultants, and project sponsors, such as counties.
- The legislative considerations include the need for adoption of rule-making procedures if certification were to become mandatory.

Permitting/ Enforcement Requirements:

- There are no permitting requirements with this recommended management action.
- There are no enforcement requirements with this recommended management action.
- A measurable way to show success with this recommended management action is by the reduction in permit violations. There may be more project shut-downs because issues were detected in a timelier manner and addressed. There will also be reduced impacts to reefs and therefore there should be less after-the-fact mitigation required. Other measurable include an increase in green shorelines, dune creation as part of beach renourishment, increase of voluntarily use of "better" standards. These would demonstrate that the program did indeed increase awareness about better practices and coastal construction options and that they are being put in motion.
- Determining if this has reduced impacts to reef resources may be more difficult dependent on the projects and how the improvements may directly or indirectly improve water quality, shoreline stability, coral habitat etc.

Cost:

- The estimated direct cost of implementing this recommended management action, if developed by FDEP staff, may be minimal as it would be to secure facilities to host meetings and then produce the training materials, approximately \$10,000 \$30,000. The materials and annual meeting facilities would be a continuous cost, but this could be offset by a fee.
- Regardless if it's voluntary or mandatory, funding may be acquired through a fee that could be assessed to take the training.

Time Frame & Extent:

• The anticipated timeframe for implementation of this recommended management action is 3 - 5 years.

Miscellaneous Info:

- This recommended management action is not linked to any other recommended action.
- Uncertainties or information gaps with this recommended management action were not identified.
- Supporting and relevant data include the following:
 - Best Management Practices for Enhancement of Environmental Quality on Florida Golf Courses 2007, 2009. (2.1 MB) This 136 page book discusses possibilities for environmental stewardship and pollution prevention at golf courses. It supersedes and expands upon the 1995 BMP document. This new document was written by FDEP.
 - o Florida Friendly Guidance Models for Ordinances, Covenants, and Restrictions (598K) This manual, a joint Florida-Friendly Landscape document from FDEP and the University of Florida, was just released in January 2009. The book contains two ordinance models addressing nonpoint sources of pollution from landscapes, one of which is more comprehensive and includes water conservation and other issues, and one of which only addresses fertilizer application.
- Best management practices have already been developed for coastal construction under the Southeast Florida Coral Reef Initiative's Maritime Industry and Coastal Construction Impacts focus area Project 6. These could be used as a starting place. The construction industry was included in this development process.
- Currently, Tallahassee is looking at certification for turbidity monitoring and ways to reduce conflict of interest issues.

Goals/ Objectives to be achieved:

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

- FL Priorities: C1 Obj. 7 / FL Priorities C3 Obj. 4 / FL Priorities Goal C Obj. 5.
- SEFCRI LAS MICCI Issue 2 Goal / SEFCRI LAS MICCI Issue 4 Goal.