Title:

S-102: Develop and integrate more effective quality control procedures in the regulatory framework and triggers within permits for corrective action during coastal development projects to insure protection of marine habitat and species.

Background:

- This recommended management action relates to all projects, but specifically to reef and reef associated resources in the entire State of Florida.
- This recommended management action is being put forth because of a lack of effective compliance monitoring and corrective actions with respect to current and proposed projects. Triggers for timely adjustments of projects are agreed-upon and placed into permits, but there is a lack of a quality control process to sample work performed, assess the degree to which specifications are met, and detect anomalies and unexpected consequences as they occur. Without quality control procedures in place, substantial environmental damage can occur and will only be detected after the project completion.

Objective:

- The intended outcome of this action is to develop and establish a more effective quality control process within the regulatory framework that ensures enforceability of permit conditions, as well as having clearly defined triggers which allow for rapid (timely) adjustment of projects, such as ceasing operation. Quality control can include legal review of permits to ensure independent and agency-approved biological contractors, or agency on-site monitoring. Permits should integrate clear and actionable triggers for corrective action (such as ceasing operation) in permits when violations are reported (i.e. make sure there is a mechanism for rapid response and ceasing operations).
- Effective practices of quality control will make it more likely that planned environmental improvements will be achieved and damage and losses minimized. Effective practices that lead to improved reef health and less unavoidable damage will thereby benefit tourism, improve fishing and water sports, and allow intelligent port development, along with enhancement of economic growth.
- A blanket goal or objective of every project should be to prevent harm to the resources, since there will always be issues that you can't foresee. Coastal construction projects should be subject to quality control procedures which are feasible, measurable, timely, unbiased, realistic, and capable of providing feedback leading to remedial action. In essence, a good quality control procedure will ensure project mission attainment and achievement of contract goals. Design flaws and implementation problems can be detected quickly and the project modified or re-directed as needed. Once a project's quality control program is defined, performance data should be collected by a qualified third party and reported to all stakeholders. Issues such as excessive silting, partial mortality of benthic organisms, unexpected collateral damage due to blasting, and careless dumping of spoil would then be quickly identified and mitigated. A proper quality control program will sample progress periodically, compare results to specifications, and report any deviations. Corrective action, or project modification, can then take place in a timely manner.

Intended Benefits and/or Potential Adverse Effects:

- Benefits of implementation of this recommended management action include detecting a

project's problems early and avoiding or minimizing impacts to resources before damage occurs or becomes extensive through rapid response and corrective action.

- Some possible issues that may arise with implementation of this recommended management action include quality control procedures, which are a watchdog function and acts to insure that project design specifications and outcomes are in fact met. This inevitably creates a natural friction between contractors and clients, the latter typically government entities. Conflict over project goal attainment may be substantial, but is usually in the public interest while reducing a project's profitability for the contractor. Additional triggers for adapting project work or ceasing work will increase costs (but may actually reduce costs since mitigation may not be needed on the backend if there are no impacts.) Contract modifications may be necessary through adaptive management, and contract modifications can be complicated.
- If this recommended management action is not implemented there will be continued impacts to the reefs with no rapid response. The consequences of poor quality control include uncontrolled damage, waste of resources, legal and political conflict, and environmental degradation. Corporations, especially those controlled by foreign powers, tend to water-down quality control procedures in a drive for improved profitability and improved market share, as the BP disaster in the Gulf of Mexico amply demonstrated. Strong regulation, which is a type of quality control, has proven effective in protecting the environment.

Agencies/ Organizations:

- The lead agencies for implementation of this recommended management action would be all organizations that either perform or control projects.
- Other potential agencies or organizations who could be involved were not indicated within this recommended management action.
- The key stakeholders for this recommended management action would be taxpayers and their representatives, since poor quality wastes resources, which are always in short supply, and compromises successful goal attainment. Every section of society can be expected to support quality assurance programs, except for those who stand to profit in some way from poor quality and incomplete goal attainment. For example, Port of Miami has nothing to gain and business to lose in the improvement of Port Everglades, a nearby competitor. Theoretically, at the state level, Miami-Dade representatives might lobby for budget cuts to projects at Broward's Port Everglades, cuts which might reduce quality control activities and thus hamper project goal attainment and create errors and under-performance.
- No legislative considerations were identified.

Permitting/ Enforcement Requirements of RMA:

- There are no permitting requirements with this recommended management action, nor are there enforcement requirements.
- A measurable way to show success with this recommended management action is increased compliance with specific conditions and reduced impacts to resources.

Cost:

- The estimated direct cost of implementing this recommended management action is greater than $250,000 to support a minimum of two new Florida Department of Environmental

Protection staff for permit compliance. This cost is recurring annually because staff would permanent. This estimate also includes a vessel for site visits, gas and the necessary certifications to perform the work, including SCUBA certifications and field equipment.

- Funding may be acquired through a legislative budget request.

Time Frame & Extent:

- The anticipated timeframe for implementation of this recommended management action is 0 - 2 years.

Miscellaneous Info:

- This recommended management action is not linked to other recommended management actions.
- Uncertainties or information gaps were not identified for this recommended management action.
- Supporting and relevant data include ample proof of the effectiveness of good quality control in the manufacturing, service, and construction industries, where end products are highly visible and citizens are affected personally. In the marine environment, underwater activity is not readily visible, relatively few informed citizens are involved, merchant shipping and cruise lines are largely foreign-owned, and special interests pursue their own narrow objectives. Quality control is therefore not a high priority.

Goals/ Objectives to be achieved:

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

- Goals and Objectives were not identified within this recommended management action.