National Parks Conservation Association®
Protecting Our National Parks for Future Generations®

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June 28, 2010

Superintendent Mark Lewis
Biscayne National Park
9700 SW 328th Street
Homestead, Florida 33033

Re: Coral Reef Restoration Plan Draft Programmatic Environmental Impact Statement

Dear Superintendent Lewis:

On behalf of the National Parks Conservation Association (NPCA), I am pleased to submit comments for the Biscayne National Park Coral Reef Restoration Plan Draft Programmatic Environmental Impact Statement (EIS).

NPCA is a leading voice in protecting and enhancing our National Park System for present and future generations. NPCA is a nonprofit, nonpartisan, parks advocacy organization with more than 340,000 members, 19,000 here in Florida.

Biscayne National Park (BNP) was established as a national monument in 1968 and then elevated to national park status in 1980 "in order to preserve and protect [its natural resources] for the education, inspiration, recreation, and enjoyment of present and future generations." BNP is the largest marine park within the National Park System. It includes part of the third-longest coral reef system in the world, the longest stretch of mangrove forest remaining on Florida's eastern seaboard, and is primary habitat for many endangered species, including the West Indian manatee. BNP protects a truly unique marine environment that plays a critical role in the larger Florida coral reef ecosystem and the larger Everglades watershed.

NPCA has serious concerns about the current and future health of Biscayne National Park. NPCA supports the efforts of Biscayne National Park to take any and all corrective action to improve the health of the park and its visitors' experience. NPCA recognizes the Coral Reef Restoration Plan EIS, along with the Fisheries Management Plan, the Mooring Buoy Marker Plan, and the General Management Plan--which includes marine reserves and zoning, are steps that could have benefits for the larger ecosystem, the park's plants and wildlife, and park visitors. It is absolutely critical this Coral Reef Restoration Plan (CRRP) work in concert with the park's other management plans to take the necessary proactive measures to reverse the park's currently impaired coral reef ecosystem and work toward providing a more complete and improved visitor experience.

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A strong sense of shared stewardship for the park's natural and cultural resources will be vital to the success and implementation of any of these planning processes. Current users and supporters of the park must work together with park managers to insure the development and implementation of these planning measures improves the park's natural and cultural resources and overall visitor experience.

Biscayne National Park Conditions

The combined negative effects of overfishing, boat groundings, climate change, pollution, and uneducated park users contribute to the serious decline of BNP health and are endangering the park's critically important coral reef ecosystem. The unique natural and cultural resources of BNP must be protected at a level consistent with the rest of America's national parks. The park's Coral Reef Restoration Plan must include well thought out restoration measures to achieve that high level of protection.

In January 2006 NPCA released its State of the Parks resource assessment for Biscayne National Park. The report reveals BNP's natural and cultural resources are in "poor" condition (the park's natural resources scored just 58 out of a possible 100 and its cultural resources scored 48 out of a possible 100) and that the park needs greater funding and staffing to protect and restore Biscayne's natural freshwater flows, coral reefs, and historic treasures. BNP's ecosystems and cultural resources are national treasures and play an important role in the south Florida region. The park's natural resources suffer from inadequate freshwater flows, boat groundings and prop scaring, overfishing, and external development pressures, while BNP's cultural resources suffer from illegal relic hunting and poaching as well as a lack of staff to inspect and document each of the archaeological treasures.

Results from coral reef monitoring from around the world indicate dramatic declines in coral reef health. BNP's coral reefs, part of the Florida Keys Reef Tract, are part of that worldwide decline. Decades of damage from boat groundings, propeller damage, accumulation of debris, and improper anchoring practices have left the park's corals in desperate need of restoration. Through this CRRP, the park has an opportunity to codify restoration procedures and help protect its reefs for future generations. According to the CRRP, "Many vessel groundings occur annually in BNP, causing injuries to submerged park resources." In addition, there is agreement that fishery resources within the park are extremely stressed and require special attention. Thus it is critical the CRRP provide BNP managers with appropriate tools to help ensure wise restoration projects are effectively undertaken to improve the conservation and health of the park's coral reef ecosystem.

If successful, the CRRP could be replicated for needed seagrass restoration techniques in the park. Established seagrass beds are found in more than 40 percent of the park's waters and where about 90 percent of reported vessel groundings within BNP occur. Codifying seagrass restoration actions would also be beneficial to restoring the health of the park's natural resources.

Biscayne National Park Resource Protection

Coral Reef Restoration activities in Biscayne National Park are supported by the National Park Service Organic Act, which requires management of BNP to conserve natural resources ". . . by such means as will leave them unimpaired for the enjoyment of future generations." The legislative history of the Organic Act suggests that the "overriding purpose of the Organic Act was to preserve 'nature as it exists.'" While a fundamental purpose of national parks is also to provide for the use

and enjoyment of park resources and values, Congress has mandated that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation must predominate. Given the well documented current state of BNP's natural and cultural resources, park managers should use their authority under the Organic Act to manage the park's resources so that those resources are not impaired. Where resource impairment has been documented, park managers must take appropriate action to eliminate the impairment as soon as possible. Specifically when it comes to the management of BNP's coral reef ecosystems and resources, the Secretary of the Interior "has an absolute duty, which is not to be compromised, to fulfill the mandate of the Organic Act to take whatever actions and seek whatever relief as will safeguard the units of the national park system."

NPCA's Preferred Alternative for the Coral Reef Restoration Plan

In general NPCA supports Alternative 2, a programmatic CRRP that would provide BNP coral reef managers with a "toolbox" of restoration methods that have had their impacts evaluated programmatically. NPCA supports the intent of the CRRP that will "streamline the process to use funds more efficiently and sooner" and that the amount of time to develop EAs for grounding events can be dramatically reduced with the programmatic approach described in Alternative 2. NPCA supports the CRRP goal: "coral reef restoration actions in BNP is to create a stable, self-sustaining reef environment of similar topography and surface complexity to that which existed prior to injury, such that natural recovery processes, enhanced through mitigation, if needed, will lead to a fully functioning coral reef community with near natural complexity, structure, and make-up of organisms."

NPCA's comments regarding some of the 11 coral reef restoration actions in Alternative 2 are as follows:

1. No Active Restoration/No Monitoring
   NPCA understands those circumstances when funding is not available for restoration or when safety or other considerations make site visits impossible. However, NPCA strongly supports the park, via the CRRP, aggressively pursuing restoration for the majority of those coral reefs and seagrass meadows that are damaged by boat groundings and other impacts, as well as the maximization of other ongoing park restoration efforts (i.e. Coral Reef Nursery).

2. Monitoring Only
   NPCA supports rigorous long-term monitoring of restoration areas in park waters trying to recover from groundings and external disturbances.

3. Reattach Biota
   NPCA strongly supports reattaching biota as a restoration action of immediate action following groundings or other injurious events to the park's coral reefs. NPCA agrees with the "as quickly as possible" component of the CRRP which states "the purpose and need for this PEIS addresses the need to prepare a comprehensive restoration plan (such as the toolbox) to enable the NPS to respond to injuries as quickly as possible." In many cases the difference between an immediate restoration response measured in hours vs. one of days/weeks/months or even years can be the difference between a damaged reef healing itself vs. a damaged reef never fully recovering even with the best intentions of a

well considered restoration plan. In table S-2 *Summary of Environmental Consequences of the Alternatives for Threatened and Endangered Species*--Elkhorn and Staghorn coral seem to support this need for quick action given that "potential direct impacts include damage to dislodged corals that are not immediately salvaged from the injury site."

Director's Order 14, *Resource Damage, Assessment and Restoration: Preventing and Minimizing Injury and the Threat of Injury to Park Resources* (7.1.1), provides BNP the authority to act quickly following a grounding or other injury event to the park's coral reefs. "When feasible and appropriate, the superintendent should use internal ONPS funds and/or emergency funds to take response and/or emergency restoration actions when an incident occurs which either injures or threatens to injure park system resources, in order to prevent or minimize the injury, or threat of injury. In addition, the *Damage Assessment Restoration Handbook*, which focuses on the authority provided specifically to NPS under the Park System Resource Protection Act of 1990, states in the park's response actions "park staff should make every attempt to accurately document the resource injuries prior to undertaking other response actions.... the first consideration should be the protection of the Park System resources i.e. if waiting will place resources at risk of continued or increased harm, then immediate response may be advisable...Overall, prompt response may help reduce the extent of injury and the scale and cost of restoration later in the process."

NPCA has reviewed the CRRP recommendations for reattaching biota as a tool. As currently written we are concerned about the transplanting of coral from nearby sources. The CRRP states, after a reef injury "transplanting coral species present before grounding from nearby sources to the site" will be employed if the material may not be available from onsite. The CRRP goes on to explain that "reattaching biota is a restoration action that includes locating a source of biotal material onsite and/or offsite... If biota are unavailable for onsite reattachment, transplantation may rely on offsite sources of biotal material."

NPCA has concerns that this "tool" of reattaching biota includes taking healthy coral from within the park to repopulate damaged areas of reef that are also in the park. This action is reminiscent of the common expression "robbing Peter to pay Paul" and may create more problems than solutions. Removing healthy park coral decreases both abundance and diversity at the host site. In addition, it is likely that some of the transplanted reef will die either during transit or after relocation, thus increasing the negative impacts of this action. It is also possible for this type of transplanting to complicate the monitoring efforts of determining the actual recovery rates of corals at the grounding site. Other negative issues identified with this method are identified in the CRRP as the corals of opportunity (transplants) may out-compete the original corals at the grounding site. This along with deviations in genetic composition from local coral species resulting in transplanted corals not always surviving their new surroundings is a serious and real concern.

NPCA suggests the Coral Reef Restoration Plan for reattaching biota place more emphasis on building up a robust coral nursery. As the CRRP mentions, Baums (2008) proposed corals from reefs near the injured site be used in nurseries in order to attain

genetically similar transplant corals in an attempt to increase post-transplant survival. Thus the problems associated with genetics transplants would largely be avoided if coral fragments from grounding sites are rescued immediately, restored onsite in the park's coral nursery, and then used for future restoration activities that require reattaching biota. The CRRP accurately states that "utilization of nursery corals may be limited by the availability and quantity of desired coral types or size maturities to meet the restoration needs at grounding sites. As sufficient quantities and sizes of corals increase in these nurseries, nursery-raised corals may become usable as a source for restoration activities." NPCA strongly agrees the park needs to be very proactive in building a significant quantity of coral reef components (corals, sponges, see fans, etc.) in a nursery as a major "tool" in the park's restoration tool kit. NPCA suggests this CRRP post-injury restoration focus should be on the immediate reattachment of corals large and healthy enough to survive being adequately secured to the reef. However, for those coral and other reef components fragmented and too small to be reattached, the CRRP should focus on taking those fragments to the park's nursery for rehabilitation and eventual use in restoration of the damaged reef. BNP's innovative coral reef nursery should be a leader in the field and well publicized, so the other national parks can follow its lead in proactively restoring these disappearing treasures.

4. Biological Seeding

   NPCA understands the logistics of *Biological Seeding*--- 'Collect larvae during spawning events, maintain under laboratory conditions, and subsequently deploy within a mesh enclosure directly over the injured areas." However, to date this labor intensive method has not produced the successful results that reef scientists/managers had hope for and thus will likely have limited application as a tool in the CRRP toolkit.

5. Abate Fuel/Chemical Spills

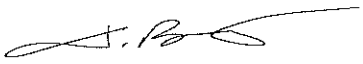
   The CRRP states "restoration activities used to abate fuel and chemical spills include removing the grounded vessel, using booms to contain surface spills, and applying dispersants capable of removing oils from the sea surface by transferring it into the water column." NPCA has concerns that the use of chemical dispersants may have negative environmental consequences and may not be appropriate for this CRRP in BNP. NPCA encourages the park to closely monitor the large scale use of chemical dispersants in the Gulf of Mexico Deep Horizon disaster for findings and techniques that may be more appropriate for the CRRP.

8. Stabilize Displaced Substrate
9. Stabilize Displaced Substrate with Artificial Structures
10. Stabilize Rubble

    NPCA understands taking proactive measures with certain tools are attempts at helping stabilize damaged reefs and provide an opportunity for recovery. With some of these methods there is a lack of peer reviewed science showing positive benefits. When these methods are employed, the appropriate level of scientific analysis should be a complement especially since the risk exists for "Material chosen for fabricated structures may negatively affect biota recruitment and may alter the biological structure of the injured reef system....Chosen material may affect the type of organisms that will inhabit the substrate."

NPCA values the varied components that make Biscayne National Park a special place: the natural quiet, the unspoiled mangrove islands, the living coral reefs, and the unique wildlife. These treasures are fast disappearing from areas outside the park and, if we are not careful, could also disappear inside the park. NPCA is committed to working constructively with the park, park user groups and partners to identify and implement solutions for Biscayne National Park. On behalf of NPCA members we hope to bring considerable expertise and energy to these issues. We look to Biscayne National Park to seize the opportunities before it to protect one of the most unique places in the south Florida ecosystem and to ensure the enjoyment of such a treasured place for our children and grandchildren.

Sincerely,



Jason Bennis
Marine Program Manager
National Parks Conservation Association