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May 17, 2014

Lieutenant Colonel Thomas M. Greco
Deputy District Commander, South Florida
U. S Army Corps of Engineers
Jacksonville District, Division Office
P.O. Box 4970
Jacksonville, Florida 32232-001

Re: Request for EIS to be conducted on beach renourishment Segment II, Broward County, FL

Dear Lt. Col. Greco:

We write to you requesting that you review the current status of your agency's review of a Joint Coastal Permit issued by the Florida, Department of Environmental Protection (FDEP) on January 31, 2014, authorizing Broward County, Florida to initiate beach renourishment activities between Hillsboro Inlet and Port Everglades, Florida. The activities that are authorized under FDEP permit number 0314535-001-JC specifically include segments within Lauderdale-by-the-Sea and Fort Lauderdale that include nearshore hardbottom and reefs that in the past has been given heightened protections by the FDEP.

Cry of the Water is a coral reef conservation organization with a diverse membership that is dedicated to the protection of Southeast Florida coral reefs. Our members and volunteers donate their time and talent to monitor the health and impacts to the coral reefs off the coast of Southeast Florida. We actively inform citizens of issues affecting the reefs including nutrient waste loading from storm water runoff, outfalls ports, inlets and impacts from destructive beach projects and coastal construction. Part of our commitment is to encourage the preservation and protection of coral reefs and their resources through sane environmental management, resource utilization and to encourage the adoption of coral reef resource management programs and participate in the implementation and support of such programs.

Public Employees for Environmental Responsibility (PEER) is a national alliance of local state and federal resource professionals. PEER works nation-wide with government scientists, land managers, environmental law enforcement agents, field specialists and other resource professionals committed to responsible management of America's public resources. Resource employees in government agencies have unique responsibilities as stewards of the environment. PEER supports those who are courageous and idealistic enough to seek a higher standard of environmental ethics and scientific integrity within their agency. Our constituency represents one of the most crucial and viable untapped resources in the conservation movement.



Background

On or about June 3, 2003, the FDEP issued Joint Coastal Permit number 0163435-005-JC ("Permit I") authorizing the use of sovereign submerged lands for the purpose of multiple beach restoration and nourishment projects in Broward County, as well as the creation of artificial coral reefs in the vicinity and removal of "derelict structures" found during implementation of the project. Permit I described the status of the coral in the area in which these projects would take place. It stated:

"The Broward County nearshore and offshore underwater landscape consists of a complex combination of hardbottom and softbottom communities. In general, these communities are represented by shore-parallel rock ridges divided by troughs that are filled with a variable thickness of predominantly carbonate sediments. These rock ridges are often called "reefs," although most of the ridges are not coral/algal carbonate buildups. The hardbottom communities in Broward County are developing at the northern proximity of the coral reef belt of the Atlantic Ocean. In comparison to the coral reefs of Florida Reef Tract along the Florida Keys and reefs of northern Cuba and the Bahamas, the Broward County coastal systems are depleted in scleractinian coral fauna (i.e. major reef-builders). There are no developed *Acropora palmate* barriers and *Montastraea annularis* buildups like in the adjacent areas mentioned above. Although it has been demonstrated that *Acropora* reefs existed in south Florida during the Holocene time (i.e., just a few thousand years, which is very recent on the geological time scale), the slight change in environmental conditions (sea-level rise and, most likely, a decrease in annual temperatures) led to the decline of coral reef development (Lighty, 1979). The contemporary process of reef building is very restricted. Few areas of hardbottom in Broward County have a cover by reef-building corals of more than 2-3%. Hardbottom formations are mostly dominated by algal-octocoral-sponge communities. Many scientists, commercial and amateur divers, who worked in the area through the years, have been documenting the anthropogenic impact on coral fauna and its decline. At the same time, an advance of opportunistic staghorn coral, *Acropora cervicornis*, has been documented in Broward County. *A. cervicornis* is not considered to be a primary reef-building coral. It mostly contributes to rubble accumulation rather than rigid "reef-frame."

The nearshore hardbottom habitat in the Segment II project area includes a composite of seasonally stressed and species depauperate, nearshore hardbottom communities at very shallow water depths of less than 3 meters. More stable hardbottom communities typically occur at deeper water depths of 3.0– 4.5 meters. The nearshore hardbottom edge community is characterized by high frequency environmental stresses such as high-energy wave action, abrasive and burial effect of sediment transport, and low water clarity due to turbidity. This area is dominated by opportunistic algae such as *Jania adherens*, *Wrangelia argus*, *Cladophora* spp., *Chaetomorpha* spp. (*aerea*, *linum*), *Ulva lactuca*, *Enteromorpha flexuosa* and blue-green algae (*Lyngbya* sp.) The dominance of the last three species usually is an indicator of anthropogenic nutrification. Scleractinian reef-building corals are not common in this zone, with the exception of small colonies of genera *Siderastrea*, which is characterized by a high recruitment rate, i.e. the same life strategy as the algae mentioned above, which compensates for high mortality in a naturally stressful environment. High mortality leads to the situation where few epilithic species achieve considerable size."

(Permit I, pages 11-12, emphasis in original)

This may be true for portions of Segment II that have been subjected to past beach dredge and fill projects. However this is a poor representation of the Ft. Lauderdale portion of Segment II that has not had a past beach project. Ft. Lauderdale holds an irreplaceable wealth of marine resources, such as:

- Ancient corals, many over 400-500 years old
- Thickets of Endangered Staghorn coral, *Acropora cervicornis*
- Enormous Gorgonians reefs
- Ledges with over 44% hard coral cover
- Endangered Pillar Coral, *Dendrogyra cylindrus*
- Essential juvenile fish habitat
- Endangered green sea turtle grazing grounds

Nevertheless, the FDEP authorized these restoration and nourishment projects with the ACOE's approval, noting that because of modifications to the Segment III project "... indirect burial is expected to occur gradually from one to three years following fill placement as waves and currents rework the construction fill profile [in Segment III]..." (Permit I, page 13) Permit I further noted that the State of Florida was requiring compensatory mitigation due to what was expected to be unavoidable impacts to the hardbottom community, as well as physical and biological monitoring of the site. (Permit I, pages 17-23)

Although Permit I was modified numerous times to allow for situational changes, the destruction caused by the activities conducted under the permit was unmistakable. Biological monitoring of Segment III demonstrated that two separate areas sustained significant unmitigated losses. [John U. Lloyd Park (JUL) R85.7 - R92 and Hallandale-Hollywood-Dania Beach (HHD) R98.3-R128] saw losses of 14.12 and 16.35 acres respectively. In addition, significant sand accumulations were seen throughout the segment, leading to stressed corals, octocorals, sponges, and other benthic sedentary organisms. There were significant impacts on branching forms of scleractinian corals, which yielded mortality rates 18 times higher than that found in massive forms. Sediments in waves caused lethal damages to branching corals such as *Acropora cervicornis*. *These corals saw losses exceeding 40% within six months of construction.* Two of five monitored colonies of *Acropora. cervicornis* died, and two of three remaining colonies decreased in size within two years.

The net losses due to the construction under Permit I were substantial. 30.47 acres were lost permanently. 210.63 acres saw temporary losses ranging from 100% for 1 year down to 25% for 1 year with varying rates of recovery from that point.

The New Permit

Permit I was modified several times by the FDEP until the FDEP decided to issue a new permit that would control the beach restoration projects contemplated by Broward County. This new Joint-Coastal Permit (Permit II) was given a new number (0314535-001-JC). It was issued on January 31, 2014 and expires fifteen years later. It did not incorporate the provisions of Permit I. Rather, it is a stand-alone permit.

The events leading up to the issuance of Permit II are suspect. Cry of the Water had been a regular participant in negotiations with the FDEP at every stage leading up to the issuance of Permit I, as well as all of the modifications to that permit. But in 2013 when the FDEP decided to put yet more changes in place it elected to do so by issuing a new permit with a new number. When Cry of the Water indicated

that we would challenge the new permit the FDEP claimed that Permit II could not be challenged because Cry of the Water had not formally challenged the prior modification(s) to Permit I. The FDEP's claim was spurious at best.

The FDEP also circumvented past practices when it elected to issue Permit II without receiving pre-issuance input from federal agencies such as the ACOE, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. In the past, the agencies had worked more or less in tandem to ensure that the permits, once issued, would form a cohesive framework that would be protective of our natural resources and within which the permittee could operate.

When Permit II was issued it became evident why the FDEP sought to prevent any outside review. While Permit II admirably provides protections for Sea Turtles and Nesting Seabirds and Shorebirds it has also significantly reduced protections for the hardbottom, corals and essential fish habitat that exists close offshore to the project.

Permit I went to great lengths to predict the anticipated impacts from the proposed project, unfortunately the predictions were grossly inadequate. Fortunately Cry of the Water had anticipated outcome and filed for a DOAH hearing. This came to a settlement to let the Segment III portion be built under Permit I and pending the outcome to Segment III a later decision would be made to determine if Segment II could be built under the same permit. The FDEP decided not to authorize the work in Segment II to precede under Permit I, a permit that had gone through a complete EIS, had a detailed Biological Monitoring Plan, Biological Option from the Federal Agencies, Cumulative Impact Study and a Mitigation Plan (although additional compensatory mitigation has not been built seven years post-construction for Segment III).

In contrast, Permit II requires physical monitoring of the impacts of the project, but does not require the biological monitoring that was required by Permit I. Permit II was issued without an EIS, Biological Option, Cumulative Impact Study or a Biological Monitoring Plan. Since Permit II has not been subjected to a new EIS, the lessons learned from the destruction of the reefs in Segment III and the safeguards to protect them have not been incorporated into Permit II. While Permit II does require off-site mitigation, overall the protections afforded the hardbottom community are far weaker than those provided by Permit I. Neither is there a justification for such a drastic weakening of the protection of the hardbottom, essential fish habitat and ancient coral community found in this area.

The Necessity of an EIS

Given the drastic weakening of protections afforded to the hardbottom community now authorized for Florida's DEP, petitioners maintain that the Army Corps of Engineers (ACOE) should undertake an Environmental Impact Statement (EIS), pursuant to 40 C.F.R. § 1508.11, prior to deciding whether or not to authorize the beach restoration and nourishment project encompassed within Permit II.

An EIS would allow the public, as well as other agencies, an opportunity to comment upon and bring issues to the attention of the ACOE. Several significant issues are involved concerning the authorization in question. Those issues include, but are not limited to:


- Whether or not the proposed project, if authorized, will afford the necessary protections to the hardbottom community and, if not, what additional protections are necessary,
- The necessity of biological monitoring both during and subsequent to completion of the project,
- Cumulative impacts, including, but not limited to:


- Local divers are currently reporting the burial of nearshore reefs and hardbottom in Pompano Beach. The sand is coming from the recent ACOE Civil Works truck haul beach project (ACOE Civil Works Project). The ACOE had claimed that there would be no impact to the nearshore hardbottom and reef from this project because the sand was only being placed on the dry beach. For this reason this project was allowed to go on with a lesser environmental review than was needed. (See video of reef Burial provided by local divers) There are several video's documenting this problem: <http://youtu.be/OjMzqh-JuQk>, http://youtu.be/AOgB7ahT_w, <http://youtu.be/SdHSBDPUKA8>, <http://youtu.be/qaI11PJma2I>. This is of particular concern because the sand source that was used in this project is also the sand to be used in the proposed Broward County Permit I 0163435-005-JC.
- The ACOE Civil Works project placed approximately 110,000 cubic yards of sand on the dry upland beach. The Broward County Joint-Coastal Permit (Permit II) 0314535-001-JC now proposes to place over 1 million cubic yards of sand along many of the same beaches.
- Sections of Ft. Lauderdale that are projected for renourishment in this new project have never had a prior beach project. For this reason this area contains some of the best nearshore reefs in Florida and many of these reefs and hardbottom habitats occur very near shore. Much of the nearshore habitat in the Ft. Lauderdale area start inside of the swim buoys.
- Because of the close proximity to shore there is a great potential to bury and destroy hundreds of acres of reef and essential fish habitats. We must also look at the cumulative impacts such as chronic silt, sediment and turbidity causing secondary impact not just direct burial. We must also look at the cumulative impact from not only this project but other projects in the area such as the 2005-2006 Broward County Dredge and Fill project, whose impacts have still not been mitigated for. These impacts need to be considered along with the (a) Hillsborough-Deerfield Dredge and Fill project that has not been mitigated for (b) the recent ACOE Civil Works project which is currently burying reef in Pompano Beach, that has not been mitigated for and (c) the proposed expansion of Port Everglades with its destruction of over 28 acres of reef and onsite dredging that may take as long as a year to complete. The Port Everglades project alone will put a large amount of silt and sediments into the system. As if this was not bad enough Broward County dumped over a million tires off shore Ft. Lauderdale in the 1970's and those tires have now migrated from their dump site in 60 to 80 feet of water and are now bouncing around on the Ft. Lauderdale reefs causing damage during every storm event.
- We must look at the cumulative impacts from all of these projects past, present and proposed as well as water quality, diseases, rise in sea surface temperatures and ocean acidification. All of these factors must be considered when attempting to assess the anticipated impacts from Broward County Beach Project 0314535-001-JC.

Lieutenant Colonel Thomas M. Greco
Deputy District Commander, South Florida
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Petitioners respectfully request that the ACOE undertake the necessary EIS prior to any contemplated authorization of the projects currently authorized under Permit II and that the ACOE undertake any other actions that the agency deems just and proper at this time.

Respectfully submitted,


Dan Clark
Cry of the Water


Jerry Phillips
Florida PEER