

UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

June 21, 2000

Colonel Joe R. Miller  
District Engineer, Jacksonville District  
Department of the Army, Corps of Engineers  
Planning Division, Environmental Branch  
Jacksonville, Florida 32232-0019

Dear Colonel Miller:

The National Marine Fisheries Service (NMFS) has reviewed your staff's letter dated June 19, 2000, regarding the maintenance dredging of Arecibo Harbor and nearshore disposal at Arecibo, Puerto Rico. Initial project disposal operations have adversely impacted up to six acres of hard bottom habitat including the direct filling of four acres and the settling of a thin layer of sand and fine sediments on two acres. A third of the dredging (60,000 cubic yards) has been completed. The dredging operation has ceased and the Corps of Engineers (COB) now is requesting our response to project modifications.

The COB proposal to modify the project design would include constructing a retaining berm to limit the width of the beach fill to 75 feet, as measured between the seawall and mean low water. The length of the proposed fill area would be extended to the west as necessary to provide adequate disposal capacity. It is anticipated that the berm will rapidly erode and the angle of repose from the disposed material subsequently will impact additional, adjacent hard bottom habitat.

The project is within an area identified as Essential Fish Habitat (EFH) by the Caribbean Fishery Management Council (CFMC) and the NMFS, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). Because dredging and disposal operations in and adjacent to the Arecibo Harbor may adversely affect EFH, project activities are subject to the consultation requirements of the 1996 amendment to the MSFCMA. To facilitate EFH consultation, the Jacksonville District and the NMFS have jointly developed a "findings" which specifies procedure and content of EFH consultations. Unfortunately, the District failed to consult prior to initiation of construction and its June 19, 2000, request for EFH consultation did not provide the minimal information necessary to meet EFH assessment standards.

While information about the project is limited, we estimate the overall impact to be over 10 acres of nearshore hard bottom habitat designated as EFH. Studies along the southeast coast of Florida by Lindeman (1997 and 1999) documented significant utilization of such nearshore hard bottom habitat by recreationally and commercially important fish species, and identified adverse fishery impacts

associated with beach nourishment. While comparable studies are not available for the Arecibo site, there is a similarity of habitat-fishery associations and we anticipate that adverse impacts to EFH and Federally managed fisheries would be significant.

The following is provided in consideration of the COEs interest in completing the project in a cost efficient manner and in the spirit of interagency cooperation. To ensure the conservation of EFH and associated fishery resources, the NMFS recommends the following for this project:

#### EFH Conservation Recommendations

- I. The outside toe of proposed berm, constructed to retain the dredged material, shall be located at the mean high water line.
  
2. The burial of hard bottom habitat shall be mitigated by creating or restoring approximately 10 acres of marine habitat having functional values similar to those that existed prior to filling. The exact mitigation acreage shall be determined by a post-construction survey of the area impacted by fill placement, and the details of the mitigation plan should be coordinated with the NMFS Habitat Conservation Division.

Please be advised that both the MSFCMA and the implementing regulations (50 CFR Section 600.920) require your office to provide a written response to this letter. That response must be provided within 30 days and at least 10 days prior to final agency action. A preliminary response is acceptable if final action cannot be completed within 30 days. Your final response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendation, you must provide an explanation of the reasons for not implementing those recommendations.

We are available for further discussion with your staff to address construction and mitigation alternatives. In this regard, please contact Mark Thompson at 850/234-5061.

Sincerely,

Andreas Mager, Jr.  
Assistant Regional Administrator  
Habitat Conservation Division

cc:

COE, PR  
CFMC, PR  
FWS, PR  
DNER, PR  
EP A, NY  
F/SBR3  
F/SBR4

## Literature Cited

Lindeman, K. C. 1997. Development of grunts and snappers of southeast Florida: cross-shelf distributions and effects of beach management alternatives. Ph.D. Dissertation, University of Miami .

Lindeman, K.C. and D.B. Snyder. 1999. Nearshore hardbottom fishes of southeast Florida and effects of habitat burial caused by dredging. Fish. Bull.97:508-525.