



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
WATER MANAGEMENT DIVISION
SOUTH FLORIDA OFFICE
400 NORTH CONGRESS AVE., SUITE 120
WEST PALM BEACH, FLORIDA 33401
SEP 25 2001

Colonel James G. May, District Engineer
Department of the Army
Jacksonville District Corps of Engineers
Attn: Brice McKoy
400 North Congress Avenue, Suite 130
West Palm Beach, FL 33401

SUBJECT: Phipps Ocean Park Supplemental Environmental Impact Statement
200000380(IP-BM)

Dear Colonel May:

This is in response to your letter dated August 31, 2001, requesting U.S. Environmental Protection Agency (EPA) comments during the scoping process for developing a Supplemental Environmental Impact Statement (SEIS) for permit application number 200000380(IP-BM) submitted by the Town of Palm Beach. The purpose of the project is to restore and stabilize 10,032 linear feet of beach shoreline along Phipps Ocean Park Beach with 1.5 million cubic yards of ocean dredged sand material. The dredged material would be obtained from 2 borrow areas located 0.34 miles offshore, between Department of Natural Resources (DNR) monuments R-127 and R-134. The project is located in the Atlantic Ocean, between DNR monuments R-116 and R-126, in Sections 11, 14, and 23, Township 44 South, Range 43 East, Town of Palm Beach, Palm Beach County, Florida.

EPA is pleased that the U.S. Army Corps of Engineers (USACE) will conduct an SEIS for the Phipps Ocean Beach Nourishment Project. We will work closely with your staff to ensure that the SEIS will provide the appropriate information for us, as environmental stewards, to make sound decisions on future beach nourishment projects. EPA provides the following comments during the scoping process of the SEIS:

-EPA requests the SEIS include a review of the primary, secondary, and cumulative impacts beach nourishment projects have on nearshore and offshore hardbottom resources. It is our understanding that the USACE will soon be processing ten additional beach nourishment projects within the vicinity of the Phipps Ocean Park site. Cumulative impacts caused by all these beach nourishment projects can only be adequately assessed by expanding the scope of the SEIS area.

-We request that the SEIS contain an assessment of the functions offshore and nearshore hardbottom habitats provide which will be affected by dredge and fill activity. Offshore and nearshore hardbottom structure can be colonized by an ecologically diverse community of algae, porifera, and cnidaria, and provides important shallow water fish habitat. Several lines of evidence suggest the nearshore hardbottom habitats along the east coast of Florida can serve as

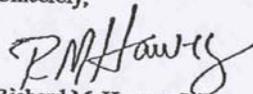
nursery areas for many coastal fish species and can support considerable larval abundances (Lindeman, Snyder 1999). This project is within an area identified as Essential Fish Habitat by the South Atlantic Fishery Management Council (SAFMC) and the National Marine Fisheries Service (NMFS) for federally managed species. Hardbottom habitats are defined as Habitat Areas of Particular Concern in the Fishery Management Plan Amendments by the SAFMC (NMFS 1999). For these reasons, EPA considers the hardbottom habitats found within this project site to be aquatic resources of national importance.

- EPA requests the SEIS provide information on impacts to the macro-invertebrate communities associated with the proposed borrow area. We believe that the impacts from the dredging operation to sand borrow areas and their associated macro-invertebrate communities may be more extensive and long-term than has been suggested in assessments of previous beach nourishment projects (USACE 1987, 1994, and 1996). Previous studies had concluded that perturbations within borrow areas were negligible due to rapid re-establishment of the infaunal communities. However, re-examination of the data from the borrow and reference areas of four beach renourishment projects on the southeast coast of Florida, found that changes to the infaunal community structure may persist for 2-3 years or more (Wilbur and Stern 1992). Other studies have shown a decrease in diversity and abundance of the infaunal community in borrow areas several years following the dredging (Turbeville and Marsh 1982; Goldberg 1989). The impacts that such projects have on macro-invertebrate communities should be considered as significant because they are either directly, or indirectly, a major portion of the diet for many fish and macrocrustaceans (Baird and Ulanowicz 1989). The State of Florida and the Florida Keys National Marine Sanctuary have prohibited the collection of "live sand" (i.e. sand material, typically containing a high diversity of algal, bacterial and macroinvertebrate species, used in the aquarium industry) within the Sanctuary, stating that the sand substrate is an important habitat for grazers and detritivores and the removal of this habitat was determined to adversely impact marine productivity, fisheries, wildlife habitat, and water quality (FDEP 1998).

-EPA requests the SEIS include an assessment of the functions and values provided by artificial reef habitats placed in various depths and compare them to those of natural hardbottom habitats. This assessment should include a review of data collected for the Juno Beach Renourishment Project.

Thank you for the opportunity to comment on the scope of this SEIS. If you should have any questions, please contact Ron Miedema at the letterhead address or by telephone at 561-616-8741.

Sincerely,



Richard M. Harvey, P.E.
Director

cc: FWS, Vero Beach, FL
NMFS, Miami, FL

References

- Baird, D. and R.E. Ulanowicz. 1989. The season dynamics of the Chesapeake Bay ecosystem. *Ecol. Monogr.* 59:329-364.
- Florida Department of Environmental Protection (FDEP). 1998. Consolidated Notice of Denial for ERP Activities on Sovereign Submerged Lands. January 8, 1998. File Number 0128760-001.
- Goldberg, W.M. 1989. Biological effects of beach restoration in south Florida: the good, the bad, and the ugly. *In Proc. 1988 National Conf. Beach Preserv. Technol. FL. Shore and Beach Preserv. Assoc., Tallahassee, FL.* p. 19-27.
- Lindeman, Kenyon C. and David B. Snyder. 1999. Nearshore hardbottom fisheries of southeast FL and effects of habitat burial caused by dredging. *Fish Bul.* 97:508-535.
- National Marine Fisheries Service (NMFS). 1999. Essential Fish Habitat: New Marine Fish Habitat Conservation Mandate for Federal Agencies, Southeast Regional Office, St. Petersburg, Florida.
- Turbeville, D.B. and G.A. Marsh. 1982. Benthic fauna of an offshore borrow area in Broward County, Florida. U.S. Army Corps of Engineers Coastal Engineering Research Center. Misc. Rep. 82-1. p. 1-43.
- U.S. Army Corps of Engineers (USACE). 1987. Design Memorandum Addendum I for Beach Erosion Control and Hurricane Protection. Dade County, Florida, North of Haulover Beach Park. Jacksonville, FL.
- U.S. Army Corps of Engineers (USACE). 1994. Palm Beach County, Florida, Shore Protection Project. General Design Memorandum For Jupiter/Carlin Segment. Jacksonville, FL.
- U.S. Army Corps of Engineers (USACE). 1996. Coast of Florida erosion and storm effects study: Region III with final environmental impact statement. Jacksonville, FL.
- Wilber, P. and M. Stern. 1992. A re-examination of infaunal studies that accompany beach renourishment projects. *In S. Tait (ed.), Proc. 1992 National Conf. Beach Preserv. Technol., FL. Shore and Beach Preserv. Assoc., Tallahassee, FL.* p. 242-257.