



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 33702-2432

September 27, 2001

Colonel James G. May
District Engineer, Jacksonville District
Regulatory Division, South Permits Branch
Department of the Army, Corps of Engineers
400 North Congress Avenue, Suite 130
West Palm Beach, Florida 33401

Dear Colonel May:

The National Marine Fisheries Service (NMFS) has received the April 10, 2001, Notice of Intent (NOI) to prepare a Draft Supplemental Environmental Impact Statement (SEIS) regarding permit application number 200000380 (IP-BM). The applicant, Town of Palm Beach, proposes nourishment of approximately 1.9 miles of beach shoreline along the Atlantic Ocean at Phipps Ocean Park Beach, Palm Beach County, Florida. The NMFS has previously recommended against the proposed action and provided notice, pursuant to Part IV, paragraph 3(a) of our Clean Water Act 404(q) Memorandum of Agreement (MOA), that higher level review may be sought in this matter. We have determined that unacceptable impacts to EFH, Habitat Areas of Particular Concern (HAPC), and other NMFS-trust resources are possible in connection with the proposed action. Our views regarding this were reinforced, in accordance with Part IV paragraph 3(b) of the MOA, by letter dated September 5, 2000, by the Regional Administrator for the NMFS Southeast Region.

According to the NOI to prepare a draft SEIS for the project, various alternatives will be considered in the study, including a No Action Alternative and various structural and non-structural alternatives. The NMFS recommends the draft SEIS incorporate analyses regarding the following project issues:

1. *Shoreline erosion.* The section of beach located between R-116 and R-126 has never been nourished. Our review of the historical erosion data provided in the Project Justification, dated June 22, 2000, shows that the majority of the shoreline between monuments R-116 and R-126 has either accreted or remained the same since 1974. Only two areas (monuments R-116 and R-117) had experienced significant shoreline recession. The applicant's response, dated January 25, 2001, to the U.S. Army Corps of Engineers (COE) regarding predicted erosion in 10 and 15 years under the No Action Alternative, states that no additional shoreline recession would occur between R-113 and R-128 due to the presence of exposed nearshore hard bottom, seawalls, or natural rock headland features. We agree with the comments of the U.S. Fish and Wildlife Service, in their letter dated May 5, 2000, which states that the placement of sand over the nearshore hard bottom may undermine the



natural erosion protection that the reefs provide. Based upon our assessment of the proposed project, the limited erosion occurring along small sections of the beach does not justify nourishment of the entire 1.9 miles of shoreline and the resulting adverse impact to highly important living marine resources.

2. *Avoidance and minimization.* In order to avoid direct and indirect impacts to adjacent offshore reefs, adequate buffer zones should be placed around the proposed borrow areas. Based upon review of other similar projects along the southeast Florida coast, we recommend that, at a minimum, 400-foot buffers should be incorporated into the project. Such buffers would reduce the risk of adverse impacts to hard bottom reefs from turbidity and sedimentation plumes that may be transported from the dredge site. In addition, the buffers would reduce the risk of anchor damage or accidental mechanical damage from the dredge head.

Impacts to nearshore reefs, containing worm reefs and hard bottom reefs, should be avoided in areas of the project that are not currently experiencing erosional loss of shoreline. As discussed in previous paragraphs, the majority of the shoreline between monuments R-116 and R-126 has either accreted or remained the same since 1974. Burial of these resources would not only result in adverse impacts to Essential Fish Habitat, but would eliminate the natural shoreline protection that these features provide.

3. *Indirect and cumulative impacts.* The SEIS identify and evaluate direct, indirect, and cumulative impacts to marine resources from the proposed project, as well as other dredge and fill projects planned for Palm Beach County. Suspension of sediments from dredging activities and placement of sand on nearshore habitats are known to cause significant spatial and temporal impacts to marine benthic resources. Persistence of turbidity plumes around borrow areas and along nearshore habitats could produce acute and chronic stresses to living marine resources. A complete review of available published literature and unpublished reports regarding beach dredge and fill projects should be conducted to assist in determining potential long-term effects from this and related projects.

4. *Compensation for impacts, temporal losses, and proposed mitigation reef.* To compensate for adverse impacts to 5.17 acres of nearshore hard bottom impacts, the applicant proposes to construct a 2.2-acre limestone artificial reef. Ten separate aerial photographic "snap-shots" taken between 1983 and 1999, were used to estimate the average amount of hard bottom that has existed in this area (i.e. time-averaging method). Based upon these analyses, the applicant has estimated that approximately 2.2 acres of hard bottom have been available as habitat for various marine organisms. The NMFS does not agree that this methodology is suited for determination of mitigation needs since an averaged dimension may exclude viable reef areas. Instead, reef size should be determined based on evidence which depicts the maximum areal extent of the reef. Then, in the event that appropriate avoidance and minimization issues are satisfied, mitigation for all acreage of hard bottom habitat impacted by the proposed project should be provided.

In addition, the NMFS considers temporal losses to resources impacted to be significant and should be included in the analysis for determining mitigation. Based upon the review of available literature, it is our opinion that artificial reefs are unlikely quickly, if ever, provide the same ecological

complexity and function as a natural hard bottom habitat. Therefore, we recommend that a time-lag factor be incorporated into the mitigation analysis, such as the National Oceanic and Atmospheric Administration's habitat equivalency analysis for damage assessment and restoration projects.

We appreciate the opportunity to provide these comments and look forward to reviewing the SEL when it becomes available. If we can be of further assistance, please advise. Related comments, questions or correspondence should be directed to Michael R. Johnson in our Miami office. He may be contacted at 305/595-8352.

Sincerely,

David M. Reakley

fer Andreas Mager, Jr.
Assistant Regional Administrator
Habitat Conservation Division

cc:
EPA, WPB
DEP, WPB
SAFMC, CHAS
FFWCC, TALL
FWS, VERO
F/SER3
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