



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Field Office
1612 June Avenue
Panama City, FL 32405-3721

Tel: (850) 769-0552
Fax: (850) 763-2177

March 9, 2000



FILE

Colonel Joe R. Miller
District Engineer
U.S. Army Corps of Engineers
Panama City Regulatory Field Office
475 Harrison Avenue, Suite 202
Panama City, Florida 32401

Attn: Don Hambrick

Re: FWS Log No. 4-P-97-108
Amendment No. 2 to Biological Opinion
Panama City Beach Nourishment
199701891 (IP-DH)
Bay County, Florida

Dear Colonel Miller:

This letter constitutes amendment no. 2 to the April 8, 1999, biological opinion on the offshore dredging and beach nourishment of Gulf of Mexico beaches in Bay County, Florida (permit 199701891 (IP-DH) and modifications). The Fish and Wildlife Service (Service) received your letter dated March 6, 2000, requesting reinitiation of consultation related to modification of the subject permit tilling requirements as requested by the applicant. The applicant has requested that the tilling: 1) requirements be deleted from the central 6.5-mile portion of the project area; 2) depth be reduced from 36 inches to 24 inches in the three remediation zones; and 3) completion date be changed from April 15 to May 15. This request for modification of tilling requirements is the result of a meeting between the applicant, their nourishment contractor, Coastal Planning & Engineering, Inc. (CPE), U.S. Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission, Florida Department of Environmental Protection, and the Fish and Wildlife Service on February 10, 2000. Tilling is required to minimize impacts to sea turtles from sand compaction resulting from the beach nourishment. Compaction affects adult turtles attempting to nest, hatchling turtles emerging from the nest, and the nest environment.

The applicant has requested that the tilling requirement be deleted in areas of lower sea turtle nesting density within the project area. This would encompass approximately 6.5 miles in the

central portion of the developed beaches between monuments R-35 near the intersection of highway 79 and R-71 in the Boardwalk Resort area. Comparison of pre-project and post-project sand compaction readings indicates that generally the post-project beaches are equal to or less compact than the pre-project beaches. In addition, CPE is in the process of developing a new tilling criteria to be potentially used for the third year of the tilling requirement. The premise of the new criteria is to better correlate cone penetrometer data, grain size variability, and pre- and post-project elevations. This information will be used to better understand the potential effects of sand compaction from this beach nourishment project and to determine the need for tilling.

The second request of the applicant is to reduce the depth of tilling from 36 inches to 24 inches in the areas of sand color remediation zones. This includes approximately 3,200 linear feet in three separate areas (Laguna Beach, Sandpiper Beacon Motel, and Ramsgate condominiums). The sand in these areas will be removed to a depth of 24 inches and replaced with suitable colored sand. Tilling deeper than 24 inches could bring up the darker remaining sand and mix it with the new lighter sand. The requirement for tilling is based on the average depths of turtle nests. Loggerhead turtles lay the shallower nests, with green and leatherback turtles digging progressively deeper nests. Only loggerhead turtles have been documented to nest within the project area since monitoring began in 1991. Thus, tilling to a depth of 24 inches should be sufficient for loggerhead turtle nesting.

The applicant has also requested that the tilling be conducted from mid-April to mid-May instead of being completed prior to April 15, 2000, because of safety concerns with heavy equipment on the beach during the Spring Break visitor period (March through mid-April). Since the monitoring of sea turtle nesting began in 1991 on the developed beaches, the earliest documented nest laid occurred on May 23rd in the years of 1995 and 1998. Generally, the "first nest of the season" is laid during the last week in May or the first week in June. The nesting survey begins on May 1 each year. No information was provided concerning the scheduling of the tilling. The highest density of sea turtle nesting along the west end of the developed beaches should be tilled first to minimize the potential for impacting this area.

Therefore, we would not anticipate that the requested modifications to the project would exceed the level of incidental take that would occur from the original project. However, to address the modifications, Term and Condition 5 of our April 16, 1999 amendment no. 1 to the original biological opinion dated April 8, 1998, will change. (Terms and Conditions 1 and 4 were changed in amendment no. 1). All other Terms and Conditions and Reasonable and Prudent Measures remain in effect for the subject modification. The changes from the original condition are underlined.

Terms and Conditions

5. Immediately after completion of the beach nourishment project and prior to March 15, for 3 subsequent years, sand compaction shall be monitored in the area of beach nourishment in accordance with a protocol agreed to by the Service, the State regulatory agency, and the applicant. At a minimum, the protocol provided under a. and b. below shall be followed. If required, the area shall be tilled to a depth of 36 inches (91 cm). Regardless of the compaction

required, the area shall be tilled to a depth of 36 inches (91 cm). Regardless of the compaction readings in the color remediation zones at Laguna Beach, Sandpiper Beacon Motel, and Ramsgate condominiums, tilling to only a depth of 24 inches (61 cm) in these zones shall be required for the year 2000. Tilling shall begin at the western end of the project area in the year 2000. All tilling activity must be completed prior to May 15, 2000. In 2001 the completion date for all tilling shall be April 15, 2001. Regardless of the compaction readings between R-35 and R-71, no tilling in this area shall be required for the year 2000. In 2001, the tilling protocol shall revert to a. and b. below and the tilling depth shall revert to 36 inches (91 cm). A report on the results of compaction monitoring shall be submitted to the Service prior to any tilling actions being taken. An annual summary of compaction surveys and the actions taken shall be submitted to the Service. This condition shall be evaluated annually and may be modified, if necessary, to address sand compaction problems identified during the previous year.

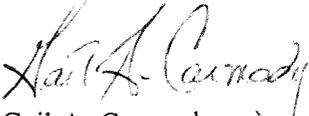
- a. Compaction sampling stations shall be located at 500-foot (152-m) intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area) and one station shall be midway between the dune line and the high water line (normal wrack line). (Note: The number of stations has been reduced from 3 to 2.)

At each station, the cone penetrometer shall be pushed to a depth of 6, 12, and 18 inches (15.2, 30.5, and 45.7 cm) three times (three replicates). Material may be removed from the hole, if necessary, to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lay over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final 6 averaged compaction values.

- b. If the average value for any depth exceeds 500 psi (35 kg/cm²) for any two or more adjacent stations, then that area shall be tilled prior to April 15. If values exceeding 500 psi (35 kg/cm²) are distributed throughout the project area, but in no case do those values exist at two adjacent stations at the same depth, then consultation with the Fish and Wildlife Service shall be required to determine if tilling is required. If a few values exceeding 500 psi (35 kg/cm²) are randomly present within the project area, tilling shall not be required.

If you have any questions, please contact Lorna Patrick of this office at ext. 229.

Sincerely,


Gail A. Carmody
Project Leader

cc:

FWS, JAFL, (McPherson)

FWC, Bureau of Protected Species Mgmt., Tallahassee, FL (Trindell)

FDEP, Beaches and Coastal Systems, Tallahassee, FL (Brantley)

RMA, Panama City, FL (Watson)

LAP/lp/kh/c:wp/te/pcbnrs14.wpd