



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
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March 6, 2009

Colonel Paul L. Grosskruger
District Commander
U.S. Army Corps of Engineers
701 San Marco Boulevard, Room 372
Jacksonville, Florida 32207-8175

Service Consultation Code: 41420-2007-FA-0221

Date Received: February 25, 2009

Formal Consultation Re-Initiation Date: March 2, 2009

Project: Lake Worth Inlet Jetty Repair
Applicant: U.S. Army Corps of Engineers
County: Palm Beach

Dear Colonel Grosskruger:

The U.S. Fish and Wildlife Service (Service) has reviewed the February 20, 2009, request from the U.S. Army Corps of Engineers (Corps) to amend the Service's March 28, 2007, Biological Opinion (Service Consultation Code 41420-2007-FA-0221) for the Lake Worth Inlet jetty repair project. The Biological Opinion provided an incidental take statement for the threatened loggerhead sea turtle (*Caretta caretta*), endangered green sea turtle (*Chelonia mydas*), endangered leatherback sea turtle (*Dermochelys coriacea*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), and endangered Kemp's ridley sea turtle (*Lepidochelys kempii*). This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*).

The Corps proposed repair of the entire concrete cap on the south jetty from station 43+05 to station 60+95 and from station 48+10 to station 49+00, and station 40+55 to station 41+05 on the north jetty. Repairs consist of preparing forms on the jetties to contain the cement, placing chinking stone or bags of cement into the interstitial spaces between rocks, and placing cement into the forms. A variety of trucks are used to construct the forms and a temporary barrier, and deliver the chinking stone and other supplies. Cement is piped onto the jetties directly from a cement pump truck. Access to the north jetty is through uplands and no beach access is necessary. All repairs to the south jetty are conducted through the use of the 80-foot government easement through the Kuvins' property located immediately adjacent to the south jetty. The purpose of the repairs is to reduce shoaling within the entrance channel and assist in maintaining safe navigation conditions. The project which commenced on January 12, 2009, has been completed along the north jetty while the south jetty component is ongoing.



Due to space limitations within the government easement, the Corps has requested to modify the project to use an additional beach access corridor to facilitate the movement of construction vehicles and equipment to ensure timely project completion. The additional beach access corridor is located at Florida Department of Environmental Protection (DEP) monument R- 78 located approximately 2,400 feet south of the south jetty (Figure 1). To avoid and minimize impacts to nesting sea turtles, the Corps has proposed to modify the project as follows:

1. Vehicles, equipment, supplies, and personnel will be transported to the south jetty project area using the south access corridor.
2. Vehicles, equipment, supplies, and personnel will not proceed onto the beach through use of the south access corridor, and proceed north to the south jetty project area, until the area has been surveyed and permission to proceed granted by the sea turtle permit holder.
3. All sea turtle nests will be marked and avoided.
4. All vehicles will travel between the south access corridor and the south jetty project area seaward of the mean high water line (MHWL) to the maximum extent practicable. Vehicles unable to traverse seaward of the MHWL will travel seaward of any dune vegetation. No dune vegetation shall be impacted along the corridor.
5. By midnight April 14, 2009, all project-related vehicles, equipment, supplies, fencing, posts, wooden forms, pipes, waste cement, and all other project-related debris will be demobilized and removed from the project area and south access corridor.
6. Both the south jetty project area and south access corridor will be restored to pre-construction conditions. For example, areas where vehicle ruts and waste cement pits are present, or upland vegetation has been affected, will be restored to pre-construction conditions. If these areas require tilling this work must be completed prior to April 15, 2009.

CONCLUSION

The Service has discussed the project with the DEP, Florida Fish and Wildlife Conservation Commission, and the Corps, reviewed sea turtle nesting data, and considered the cumulative effects. Based on our review, the Service believes that the proposed modifications will not significantly change the effects of the project on nesting sea turtles. Therefore, the Service amends the March 28, 2007, Biological Opinion as requested. With the exception of the criteria as referenced above, all parts of the March 28, 2007, Biological Opinion for this project remain as written.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered or threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to

listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, carrying out an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement, and that stated in the March 28, 2007, Biological Opinion.

The Reasonable and Prudent Measures and Terms and Conditions outlined in the March 28, 2007, Biological Opinion, and the avoidance and minimization measures outlined above are non-discretionary, and must be implemented by the Corps so that they become binding conditions of any grant or permit issued to them, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement the terms and conditions or, (2) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps must report the progress of the action and its impacts on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

AMOUNT OR EXTENT OF TAKE

The Service anticipates an additional 2,400 feet of nesting beach habitat could be taken as a result of this proposed action. The incidental take is expected to be in the form of: (1) destruction of all nests that may be constructed and eggs that may be deposited and missed by a nest survey and egg relocation program within the boundaries of the proposed project; (2) destruction of all nests deposited from October 1 through February 28 (or 29 as applicable) when a nest survey and egg relocation program is not required to be in place within the boundaries of the proposed project; (3) reduced hatching success due to egg mortality during relocation and adverse conditions at the relocation site; (4) harassment in the form of disturbing or interfering with female turtles attempting to nest within the construction area or on adjacent beaches as a result of construction activities; (5) behavior modification of nesting females or hatchlings due to the presence of the jetty, which may act as barriers to movement; (6) behavior modification of nesting females if they dig into shallowly buried jetty material, resulting in false crawls or situations where they choose marginal or unsuitable nesting areas to deposit eggs; (7) behavior modification of nesting females due to escarpment formation within the project area during a nesting season, resulting in false crawls or situations where they choose marginal or unsuitable nesting areas to deposit eggs; and (8) destruction of nests from escarpment leveling within a nesting season when such leveling has been approved by the Service.

Incidental take is anticipated for an additional 2,400 feet of beach associated with south jetty repair activities. The Service anticipates incidental take of sea turtles will be difficult to detect for the following reasons: (1) the turtles nest primarily at night and all nests are not found because [a] natural factors, such as rainfall, wind, and tides may obscure crawls and [b] human-caused factors, such as pedestrian and vehicular traffic, may obscure crawls, and result in nests

being destroyed because they were missed during a nesting survey and egg relocation program; (2) the total number of hatchlings per undiscovered nest is unknown; (3) the reduction in percent hatching and emerging success per relocated nest over the natural nest site is unknown; (4) an unknown number of females may avoid the project beach and be forced to nest in a less than optimal area; and (5) escarpments may form and keep an unknown number of females from accessing a suitable nesting site. However, the level of take of these species can be anticipated by the disturbance of suitable turtle nesting beach habitat because: (1) turtles nest within the project site; and (2) jetty repairs will likely take place during a portion of the nesting season.

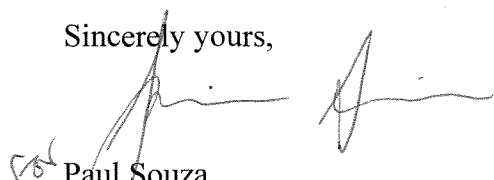
EFFECT OF THE TAKE

Based on the project outlined in the March 28, 2007, Biological Opinion, and taking into account the project modifications requested by the Corps, the Service has determined the level of anticipated take would not likely result in jeopardy to the species. In addition, because critical habitat has not been designated in the project area; the project would not result in destruction or adverse modification of critical habitat.

This concludes formal consultation on the action outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions regarding this amended Biological Opinion, please contact Jeff Howe at 772-562-3909, extension 283.

Sincerely yours,


Paul Souza
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cc: electronic copy only

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Figure 1. Location of the Lake Worth Inlet south jetty project area and south access corridor, Palm Beach County, Florida.