

Colonel Robert H. Reardon, Jr.  
U.S. Army Corps of Engineers  
Norfolk District  
803 Front Street  
Norfolk, Virginia 23510-1096

Attn: Gerry Tracy  
Regulatory Branch

Re: Tom Smith, Permit Application No.  
97-0684, Northampton County,  
Virginia

Dear Colonel Reardon:

The U.S. Fish and Wildlife Service has reviewed the Department of the Army permit application, 97-0684, submitted by Tom Smith, to construct a groin in Northampton County, Virginia. Your May 9, 1997 request for formal consultation on this permit application was received on May 9, 1997. This document represents the Service's biological opinion on the effects of that action on the northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) in accordance with Section 7 of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.). A complete administrative record of this consultation is on file in this office.

### I. CONSULTATION HISTORY

05-09-97      The Service received the U.S. Army Corps of Engineers' requests to initiate formal consultation.

### II. BIOLOGICAL OPINION

#### DESCRIPTION OF PROPOSED ACTION

The applicant proposes to construct a 64-foot long low-profile timber groin on Smith Beach along the Chesapeake Bay in Northampton County, Virginia (Figure 1). The groin will extend approximately 40 feet channelward of mean high water (MHW). The stated purpose of the proposal is to replace sand lost during a storm in the fall of 1996 and to stabilize the beach and protect the upland.

### RANGEWIDE STATUS OF THE SPECIES

This information on the northeastern beach tiger beetle was recently provided to the Corps in a biological opinion dated April 29, 1997.

### ENVIRONMENTAL BASELINE

As defined in 50 CFR 402.02 "action" means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas. The "action area" is defined as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. The direct and indirect effects of the actions and activities resulting from the federal actions must be considered in conjunction with the effects of other past and present federal, state, or private activities, as well as the cumulative effects of reasonably certain future State or private activities within the action area. The Service has determined the action area for this project to be the applicant's property between mean low water (MLW) and the landward edge of the beach.

Status of the Species in the Action Area - The project is located along the Chesapeake Bay in the Smith Beach subdivision. The site has a 12-foot high bank and is experiencing erosion. There are existing bulkheads, riprap revetments, and groins all along the shoreline at Smith Beach. A lot of sand is moving in the offshore transport system at Smith Beach. Evidence of this is the fact that existing low profile groins do not have the typical build-up of sand on one side and erosion on the other. Additionally, the beach profile is relatively the same in sections of beach with or without groins. There are existing groins on both sides of the proposed groin.

To the south of the project site is the Wilkins Beach tiger beetle population. During a northeastern beach tiger beetle survey conducted between 1989 and 1991, Buhlmann and Pague (1992) documented 154 adult tiger beetles per 100 m on the undeveloped portion of the beach and 39 adults per 100 m on developed the beach. No tiger beetles surveys have been conducted at the project site. However, the Corps, on behalf of the applicant, has chosen to assume that the beetle is present in areas with appropriate habitat.

Effects of the Action - Direct impacts to the tiger beetle will result in the crushing of adult beetles, and subsequent injury or death, during construction from use/placement/stockpiling of equipment and materials on the beach and foot traffic within the construction area. Construction will also result in temporary loss of habitat for adults through disruption of their daily activity patterns (i.e., foraging,

mating, basking, egg-laying). Larval tiger beetles will be directly affected through crushing, dislodging, and entombment, resulting in death or injury, during construction by use/placement/stockpiling of equipment and material on the beach and heavy foot traffic within the construction area. Larval beetles will also be prevented from feeding during that time due to their sensitivity to vibrations, movements, and shadows, resulting in injury and potentially death. Existing habitat, for both larval and adult beetles, will be permanently lost within the footprint of the groin between MLW and the landward edge of the beach.

Indirect effects are defined as those that are caused by the proposed action and are later in time, but still are reasonably certain to occur (50 CFR 402.02). Much of the sand supply for this beach is from offshore. The groin is designed to capture sand from longshore movement. However, because this shoreline already has multiple groins which do not appear to be altering the distribution of sand, the addition of one groin is not likely to have a noticeable effect on the beach profile.

Future maintenance of the proposed shoreline stabilization structures may not require Corps' authorization. These activities may result in injury or death to adult and larval tiger beetles through heavy foot traffic on beach areas, use/stockpiling of heavy equipment, and stockpiling/placement of materials. Maintenance activities may also result in temporary or permanent habitat loss. These activities may result in further impacts to the tiger beetle population at this site.

Cumulative Effects - Cumulative effects include the effects of future State, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the ESA.

Construction of shoreline stabilization structures (e.g., riprap, bulkhead) landward of MHW may occur within the action area in the future and such activities would not require Corps' authorization. This type of activity would adversely affect tiger beetles directly through death or injury during pre-construction and construction activities and temporary and permanent habitat loss. However, due to the existing beach stabilization structures, long-term impacts are expected to be minor.

## CONCLUSION

After reviewing the current status of northeastern beach tiger beetle throughout its range and in the action area, the environmental baseline for the action area, the effects of the proposed groin, and the cumulative effects, it is the Service's biological opinion that the issuance of a DOA permit for this project, as proposed, is not likely to jeopardize the continued existence of the northeastern beach tiger beetle. No critical habitat has been designated for this species, therefore, none will be affected.

## III. INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as 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 any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency or applicant. 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 a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

#### AMOUNT OR EXTENT OF TAKE

The Service anticipates that incidental take of the northeastern beach tiger beetle will be difficult to quantify and detect because the population density of the beetle within the project area has not been determined, and any beetles (adult or larvae) that are killed during project construction, stockpiling of equipment and materials, and habitat loss will be difficult to observe or locate due to their coloring, small body size, and tendency for larvae to remain beneath the surface. However, the level of take of this species can be anticipated by the areal extent of the potential habitat affected. This incidental take statement anticipates the taking of northeastern beach tiger beetles from 270 square feet along the groin alignment resulting from construction activities, stockpiling of materials and equipment, and temporary and permanent (within the footprint of the groin) habitat loss between the landward edge of the beach and MLW within a 10-foot wide construction area.

#### REASONABLE AND PRUDENT MEASURES

The measures described below are nondiscretionary, and must be implemented by the Corps so that they become binding conditions of any permit issued to the applicant in order 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 require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of Section 7(o)(2) may lapse. The Service considers the following reasonable and prudent measures to be necessary and appropriate to minimize take of the northeastern beach tiger beetle.

- o Human activity, materials, and equipment on the beach must be minimized to reduce the impact to adult and larval tiger beetles.

- o Construction activities must be conducted when adult beetles are not present.

### TERMS AND CONDITIONS

In order to be exempt from the prohibitions of Section 9 of the ESA, the Corps must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline the required reporting/monitoring requirements. Monitoring is not required for this project because only a small number of tiger beetles are likely to be affected by the proposed project, the anticipated take is minimal, and extensive shoreline alteration has already occurred. These terms and conditions are nondiscretionary.

1. No construction, earth-moving, placement of materials or equipment, or maintenance of structures will occur on the beach between June 1 and September 15 of any year.
2. Materials will be transported to the beach only on an as-needed basis.
3. No ground disturbance or use of vehicles or heavy equipment will occur on the beach outside of the applicants' property boundaries.
4. No refueling of equipment or vehicles will occur on the beach.
5. No use of pesticides on the beach.
6. The applicant is required to notify the Service before initiation of construction and upon completion of the project at the address given below. All additional information to be sent to the Service should be sent to the following address:

Virginia Field Office  
U.S. Fish and Wildlife Service  
P.O. Box 99  
6669 Short Lane  
Gloucester, VA 23061  
Phone (804) 693-6694  
Fax (804) 693-9032

7. Care must be taken in handling any dead specimens of proposed or listed species that are found in the project area to preserve biological material in the best possible state. In conjunction with the preservation of any dead specimens, the finder has the responsibility to ensure that evidence intrinsic to determining the cause of death of the specimen is not unnecessarily disturbed. The finding of dead specimens does not imply enforcement proceedings pursuant to the ESA. The reporting of dead specimens is required to enable the

Service to determine if take is reached or exceeded and to ensure that the terms and conditions are appropriate and effective. Upon locating a dead specimen, notify the Service at the address provided.

V. REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the action outlined in the Corps' 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 and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the 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 this opinion does not contain national security or confidential business information, the Service will provide copies to the appropriate state natural resource agencies ten business days after the date of this opinion.

The Service appreciates this opportunity to work with the Corps in fulfilling our mutual responsibilities under the ESA. Please contact Cindy Schulz of this office at (804) 693-6694, extension 127, if you require additional information.

Sincerely,

Karen L. Mayne  
Supervisor  
Virginia Field Office

Enclosure

## LITERATURE CITED

Buhlmann, K.A. and C.A. Pague. 1992. Natural heritage inventory of *Cicindela dorsalis dorsalis* (northeastern beach tiger beetle). Natural Heritage Technical Report #92-16. Virginia Department of Conservation and Recreation, Division of Natural Heritage. Richmond, VA. 41 pp.

(CSchulz:5/14/97)

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bcc: ARD-South, Region 5  
Endangered Species Coordinator, Region 5  
CBFO Reading File  
Law Enforcement, Yorktown  
(Attn: Dan Hurt)  
Law Enforcement, Richmond  
(Attn: Senior Resident Agent)

10 business days after the date of this letter, mail copies to:

DNH, Richmond  
(Attn: Tom Smith)  
VDACS, Richmond  
(Attn: John Tate)