

Colonel Andrew M. Perkins, Jr.
District Engineer
Norfolk District, Corps of Engineers
Fort Norfolk, 803 Front Street
Norfolk, VA 23510-1096

Attn: Kathy Spencer
Regulatory Branch

Re: Sprint Cellular, Permit Application
94-5842-09, City of Suffolk, Virginia

Dear Colonel Perkins:

The U.S. Fish and Wildlife Service (Service) has reviewed the Sprint Cellular Department of the Army (DOA) permit application 94-5842-09 to construct an antenna tower in Suffolk, Virginia. Your December 23, 1994 request for formal consultation was received on January 3, 1995. This document represents the Service's biological opinion on the effects of that action on the Dismal Swamp southeastern shrew (*Sorex longirostris fisheri*) in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). It should be noted that the shrew has not been documented at the project site, but the applicant has chosen to assume that the shrew is present.

CONSULTATION HISTORY

12-07-94 The Service received a request to review this project for impacts to the Dismal Swamp southeastern shrew from Tom Stokes of Stokes Environmental Associates, Ltd.

12-19-94 The Service participated in a site visit with the Corps and Mr. Stokes.

01-03-95 The Service received the Corps' request to initiate formal consultation.

01-24-95 The Service participated in a visit to the proposed shrew habitat preservation site with the Corps and Mr. Stokes.BIOLOGICAL OPINION

Description of Proposed Action

The permit applicant, Sprint Cellular, a subsidiary of Sprint Corporation, has applied for a Federal permit to construct a small gravel road, an electronics building, and a 150-foot tall unguayed antenna tower on 0.18 acres of the Kirk Timber and Farming Company property (Enclosure 1). The site is located 100 feet north of U.S. Route 58, approximately 1 mile west of the Hampton Roads Airport, and approximately 2,000 feet west of the Chesapeake/Suffolk city line in Suffolk, Virginia. The project purpose is construction of a communication transmitter and receiver for telephone and radio service to Sprint Cellular customers primarily in western Chesapeake and eastern Suffolk.

A total of 0.18 acres of forested wetlands (PFO1B) will be cleared and graded for the project. The gravel road, proposed to be 65 feet long and 25 feet wide, would begin at an existing gravel road and lead to the antenna site. The antenna tower and electronics building will be located in a 70-foot by 80-foot area with an additional 25-foot by 25-foot parking area; this area will be fenced. Work on the project will take a maximum of one month to complete. The applicant has agreed to place 0.36 acres of wetlands contiguous with the Great Dismal Swamp National Wildlife Refuge in a perpetual conservation easement (Enclosure 2). This area contains appropriate habitat for the Dismal Swamp southeastern shrew.

Status of the Dismal Swamp Southeastern Shrew

The Dismal Swamp southeastern shrew is a small mammal that weighs less than 0.2 ounces and measures approximately 4 inches in length. Its distribution is considered to be coincidental with the boundaries of the historic Dismal Swamp, an extensive contiguous wetland complex that once occupied most of the low-lying land between

Norfolk, Virginia and the Albemarle Sound in North Carolina. Historically, this wetland complex was maintained in a variety of successional stages (such as marshes, canebrakes, pocosins, and forest) by natural fires. The original Dismal Swamp ecosystem has been greatly reduced in size as a result of urban development and the clearing and draining of land for agriculture. Most of the remaining wetlands are forested. About 197,680 acres of these wetlands still remain, more than half of which are preserved by the Service as the Great Dismal Swamp National Wildlife Refuge, created in 1974. The Service is attempting to restore some of the vegetational and successional diversity to the portion of the Dismal Swamp ecosystem within the National Wildlife Refuge.

Within the historic Dismal Swamp boundaries, the shrew is likely to exist at highest densities in early successional wetland habitats, such as cane stands; shrub-dominated areas; and young, open forests which retain a fairly dense herbaceous understory. The shrew is also known to occur at high densities within cleared right-of-ways, such as those used for utility lines, as these areas often contain early successional wetland habitats such as scrub-shrub wetlands. Mature wetland forests also provide habitat diversity important to the integrity and dynamic structure of the shrew population as a whole. Rose (1983) found that the shrew was most abundant in mid-successional, 12 to 15 year-old regenerating forests having a dense understory, moist organic soils, and moderate leaf litter. The main reasons for the shrew's decline are habitat loss; habitat modification, primarily draining and drying of wetlands; and interbreeding with the common upland subspecies (Sorex longirostris longirostris) (Rose and Padgett 1991).

Recently, new evidence suggests that the Dismal Swamp southeastern shrew may occur throughout the coastal plain of North Carolina, at least as far south as Wilmington (U.S. Fish and Wildlife Service 1994). However, until this can be substantiated through additional distribution and taxonomy studies, the shrew will remain on the Service's list of endangered and threatened wildlife and plants. As such, the shrew, and its habitat, will continue to receive protection pursuant to the Endangered Species Act until it is removed from this list.

Effects of the Action

In evaluating the effects of the Federal action under consideration in this consultation, 50 CFR 402.2 and 402.14(g)(3) require the Service to evaluate the direct effects of the action on the species. Direct impacts to the shrew associated with this project include the potential for killing shrews with construction vehicles and heavy equipment while clearing vegetation and constructing the facility, parking area, and gravel road. Shrews are also likely to be killed during stockpiling of materials or equipment. Typically, the Dismal Swamp southeastern shrew stays under the leaf litter and does not burrow underground, and thus may be crushed by vehicles, heavy equipment, and heavy materials. Additionally, the shrew will be directly affected by the permanent loss of 0.18 acres of habitat and the temporary loss of any habitat outside the immediate project area where vegetation clearing or stockpiling of materials or equipment may take place.

Conclusion

The Dismal Swamp southeastern shrew is threatened primarily due to habitat loss and alteration and the potential for interbreeding. Given the small amount of habitat (0.18 acres) and the small proportion of the total shrew population that will be affected by this project, it is the Service's biological opinion that this project, as proposed, is not likely to jeopardize the continued existence of the Dismal Swamp southeastern shrew. No critical habitat has been designated for this species, therefore, none will be affected.

INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the Endangered Species Act, 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.

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.

Amount or Extent of Take

The Service anticipates incidental take of the Dismal Swamp southeastern shrew will be difficult to detect because the population density of the shrew within the project area has not been determined and any shrews that are killed during clearing of vegetation, project construction, and stockpiling of equipment will be difficult to observe or locate due to their coloring and small body size. However, the level of take of this species can be anticipated by the areal extent of the potential habitat affected. This incidental take statement authorizes the taking of Dismal Swamp southeastern shrews at the location described in the Description of Proposed Action section resulting from vegetation removal, construction activities, stockpiling of materials and equipment, and permanent and temporary loss of habitat.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the Dismal Swamp southeastern shrew. In order to be exempt from the prohibitions of section 9 of the Endangered Species Act, the Corps and the applicant must comply with the following reasonable and prudent measures. These measures are non-discretionary and must be incorporated as binding conditions of any DOA permit issued by the Corps.

1. The following measures will be taken during clearing, construction, and maintenance activities associated with the project:
 - a. No ground disturbance or vegetation clearing will occur outside the 0.18-acre project area.
 - b. No use of vehicles or heavy equipment will occur in wooded areas or wetlands outside the 0.18-acre project area.
 - c. No placement of fill material or stockpiling of materials or equipment will occur in wooded areas or wetlands outside the 0.18-acre project area.
 - d. No use of broad scale or aerial herbicide or pesticide applications within the 0.18-acre project area.
2. The following measures will be taken to permanently protect the 0.36- acre compensation area containing shrew habitat:
 - a. The 0.36 acres must be put into a perpetual conservation easement to be held by a third party. A list of organizations that hold such easements is attached (Enclosure 3). However, there are likely many other organizations that are qualified to hold this easement.
 - b. To permanently protect the 0.36-acre area, the language in the conservation easement will be the

same as, or substantially similar to, the language in Enclosure 4.

c. A copy of the deed signed by the landowner and the conservation organization that will hold the easement must be given to the Service and the Corps before any clearing or construction begins at the project site.

d. Copies of the final recorded version of the conservation easement with the deed book and page numbers must be sent to the Service and the Corps within 90 days of recording.

3. The Service must be notified before initiation of construction and upon completion of the project at the address given below. All additional information required by the Service should be sent to the following address:

Virginia Field Office
U.S. Fish and Wildlife Service
P.O. Box 480
White Marsh, VA 23183
(804) 693-6694

4. Care will be taken in handling dead specimens to preserve biological material in the best possible state. In conjunction with the preservation of biological materials for a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. Upon locating a dead specimen, initial notification must be made to the following Service Law Enforcement office:

Division of Law Enforcement
U.S. Fish and Wildlife Service
P.O. Box 187
Yorktown, VA 23690
(804) 890-0003

The reasonable and prudent measures are designed to minimize incidental take that might otherwise result from the proposed action. With the implementation of these measures the Service believes that only shrews located within the 0.18-acre project area will be incidentally taken. If, during the course of the action, this minimized level of incidental take is exceeded, such incidental take represents new information requiring review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

REINITIATION OF FORMAL CONSULTATION

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 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.

The Service appreciates this opportunity to work with the Corps in fulfilling our mutual responsibilities under the Endangered Species Act. Please contact Cindy Schulz of this office at (804) 693-6694 if you require additional information or wish to discuss our comments further.

Sincerely,

Karen L. Mayne
Supervisor
Virginia Field Office

Enclosures LITERATURE CITED

Rose, R. K. 1983. A study of two rare mammals endemic to the Virginia/North Carolina Dismal Swamp. Prepared for U.S. Fish and Wildlife Service. Newton Corner, MA.

Rose, R. K. and T. M. Padgett. 1991. Southeastern shrew. In Terwilliger, K., ed. Virginia's endangered species. McDonald and Woodward Publishing Company. Blacksburg, VA.

U.S. Fish and Wildlife Service. 1994. Dismal Swamp southeastern shrew (Sorex longirostris fisheri) recovery plan. Hadley, MA. 49pp.
Enclosure 3

Organizations That Hold Conservation Easements

The Nature Conservancy, Virginia Chapter
1233A Cedars Court
Charlottesville, VA 22903
(804) 295-6106

Virginia Outdoors Foundation
221 Governor Street
Richmond, VA 23219
(804) 786-5539

Trust for Public Lands
Chesapeake Lands Project
666 Pennsylvania Avenue S.E., Suite 401
Washington, DC 20003
(202) 543-7552

National Audubon Society
1725 I. Street N.W., Suite 602
Washington, DC 20006
202-223-8210

Conservation Inc.
P.O. Box 11027
Norfolk, VA 23510

Department of Conservation and Recreation
Virginia Division of Natural Heritage
1500 East Main Street, Suite 312
Richmond, VA 23219
(804) 786-7951

Inclusion of names on this list does not constitute endorsement by the U.S. Fish and Wildlife Service or any other U.S. Government agency (11-08-94).
Enclosure 4

Conservation Easement Language

CONSERVATION EASEMENT

THIS CONSERVATION EASEMENT, made this day of, 19.. by, hereinafter collectively called the "Grantor," and hereinafter the "Grantee."

WITNESSETH:

WHEREAS, the Grantor is the owner in fee simple of certain real property, hereinafter called the "Protected Property," consisting of ... acres of land located in, Virginia, as more particularly described on Exhibit ... attached hereto and by this reference made a part hereof;

WHEREAS,, is a non-profit corporation incorporated under the laws of the Commonwealth of Virginia whose purpose is to preserve and conserve natural areas for aesthetic, scientific, charitable, and educational purposes; and

WHEREAS, the Grantor desires to preserve the Protected Property by the conveyance of a conservation easement;

NOW, THEREFORE, the Grantor, for and in consideration of the facts above recited and of the mutual covenants, terms, conditions and restrictions herein contained and as an absolute and unconditional gift, does hereby give, grant, bargain, sell and convey unto the Grantee, its successors and assigns forever a Conservation Easement in perpetuity over the Protected Property consisting of the following:

1. The right of the Grantee, in a reasonable manner and at reasonable times, to enforce by proceedings at law or in equity the covenants hereinafter set forth. The Grantee, or its successors or assigns, does not waive or forfeit the right to take action as may be necessary to insure compliance with the covenants and purposes of this grant by any prior failure to act. Nothing herein shall be construed to entitle the Grantee to institute any enforcement proceedings against the Grantor for any changes to the Protected Property due to causes beyond the Grantor's control, such as changes caused by fire, floods, storm or the unauthorized wrongful acts of third persons. In the event that the Grantee becomes aware of any event or conditions herein set forth, the Grantee shall give notice to the Grantor, his successors or assigns, at his last known post office address, of such event or circumstance of non-compliance via certified mail, return receipt requested, and request corrective action sufficient to abate such event or circumstance of noncompliance and restore the Protected Property to its previous condition. Failure by the Grantor to cause discontinuance, abatement or such other corrective action as may be requested by Grantee within thirty (30) days after receipt of notice shall entitle Grantee to bring an action at law or equity in a court of competent jurisdiction to enforce the terms of this agreement; to require the restoration of the property to its prior condition; to enjoin such non-compliance by ex parte temporary or permanent injunction in a court of competent jurisdiction to enforce the terms of this agreement. If such court determines that the Grantor has failed to comply with this agreement, Grantor shall reimburse Grantee for any reasonable costs of enforcement, including costs of restoration or court costs and reasonable attorneys fees, in addition to any other payments ordered by such court. Grantor hereby waives any defense of laches with respect to any delay by the Grantee, its successors or assigns, in acting to enforce any restriction or exercise any rights under this Conservation Easement.

2. The right to enter the Protected Property at all reasonable times and, if necessary, across other lands retained by the Grantor, for the purposes of (a) inspecting the Protected Property to determine if the Grantor, or his successors or assigns, is complying with the covenants and purposes of this grant; (b) enforcing the terms of this Conservation Easement; and (c) taking any and all actions with respect to the Protected Property as may be necessary or appropriate, with or without order of court, to remedy or abate violations hereof.

And in furtherance of the foregoing affirmative rights, the Grantor makes the following covenants, on behalf on himself, his successors and assigns, which covenants shall run with and bind the Protected Property in perpetuity:

GENERAL COVENANTS

1. There shall be no construction or maintenance of buildings, camping accommodations or mobile homes, fences, signs, billboards or other advertising materials, or other structures.

2. There shall be no ditching, draining, diking, filling, excavating, dredging, mining or drilling, removal of topsoil, sand, gravel, rock, minerals or other materials, nor any building of roads or change in the topography of the land in any manner.

3. There shall be no removal, destruction or cutting of trees or plants, use of fertilizers, spraying with biocides, or disturbance or change in the natural habitat in any manner, except as needed for disease control.

4. There shall be no dumping of ashes, trash, garbage, or other unsightly or offensive materials, and no changing of the topography through the placing of soil or other substance or material such as land fill or dredging spoils, nor shall activities be conducted on the Protected Property or on adjacent property which could cause erosion or siltation on the Protected Property.

5. Prior to undertaking any changes in the use of the property the Grantor shall consult with the Grantee regarding the proposed changes to determine the effect of such changes on the natural values being protected on the property. Grantee shall have the right to approve such changes in use, such approval not to be unreasonably withheld.

NEVERTHELESS, and notwithstanding any of the foregoing provisions to the contrary and as expressly limited herein, the Grantor reserves for himself, his heirs, successors and assigns the following reserved rights, which may be exercised after providing written notice to the Grantee:

RESERVED RIGHTS

1. The right to use to property for all purposes not inconsistent with this grant.

2. The right to sell, give or otherwise convey the Protected Property or any portion of portions of the Protected Property, provided such conveyance is subject to the terms of this easement.

Nothing contained in this Conservation Easement shall give or grant to the public a right to enter upon or to use the Protected Property or any portion thereof where no such right existed in the public immediately prior to the execution of this Conservation Easement.

The Grantor, for himself and on behalf of his successors and assigns, agrees to pay any real estate taxes or other assessments levied by competent authorities on the Protected Property and to relieve the Grantee from any duty or responsibility to maintain the Protected Property. If the Grantor or his successors and assigns, becomes delinquent in payment of said taxes or assessments, such that a lien against the land is created, the Grantee, at its option, shall have the right to purchase and acquire the Grantor's, or his successor's or assign's, interest in said Protected Property by paying funds to discharge said lien or delinquent taxes or assessments, or to take other actions as may be necessary to protect the Grantee's interest in the Protected Property and to assure the continued enforceability of this Conservation Easement.

The Grantor agrees that the terms, conditions, restrictions and purposes of this grant will be inserted by him in any subsequent deed or other legal instrument by which the

Grantor divests himself of either the fee simple title to or his possessory interest in the Protected Property.

Any notices required in his Conservation Easement shall be sent by registered or certified mail to the following address or such address as may be hereafter specified by notice in writing:

Grantor:

Grantee:

If any provision of this Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of the Conservation Easement and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid shall not be affected thereby.

The covenants agreed to and the terms, conditions, restrictions and purposes imposed with this grant shall not only be binding upon the Grantor but also his agents, personal representatives, successors and assigns, and all other successors to him in interest and shall continue as an easement, covenant and servitude running in perpetuity with the Protected Property.

The parties hereto recognize and agree that the easement conveyed by the Grantor herein is transferable; provided that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue to carry out in perpetuity the conservation purposes which the contribution was originally intended to advance.

The Grantee hereby covenants and agrees that in the event that the Protected Property suffers an unexpected change which makes impossible or impractical any continued use of the property for conservation purposes, and the restrictions are extinguished by judicial proceeding, upon the subsequent sale, exchange or condemnation of the Protected Property, the Grantee will apply any proceeds received from such sale, exchange or taking in a manner consistent with the conservation purposes of the original contribution or for the protection of Dismal Swamp southeastern shrew (Sorex longirostris fisheri).

TO HAVE AND TO HOLD the said Conservation Easement unto the said Grantee, its successors and assigns forever.

IN WITNESS WHEREOF, the Grantor has executed and seals this document the day and year first above written.

Witness:

Grantor

.....

STATE OF
CITY/COUNTY OF

The foregoing Conservation Easement was acknowledged before me the day of, 19.., by

Notary Public

My Commission Expires: