

APPENDIX E
PERTINENT CORRESPONDENCE

L. Preston Bryant, Jr.
Secretary of Natural Resources



Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

101 N. 14th Street, 17th Floor, James Monroe Building

Richmond, Virginia 23219-3665

Phone: (804) 225-3440 TOLL-FREE/TDD: 1-800-243-7229

FAX: 804-225-3447 WEBSITE: www.cblad.virginia.gov

July 11, 2006

Mr. Mark T. Mansfield
Chief, Planning and Policy Branch
Department of the Army
Norfolk District, Corps of Engineers
Fort Norfolk, 803 Front Street
Norfolk, Virginia 23510-1096

Dear Mr. Mansfield,

The information we received on the Hurricane and Storm Damage Reduction Study for Willoughby Spit and Vicinity did not include any figures, therefore it is difficult to fully evaluate the proposed plan.

However, please be aware that the project would be in a Resource Protection Area and is subject to the Chesapeake Bay Preservation Act; Virginia Code sections 10-1-2100 through 10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Code §9 VAC 10-20-10 et seq.

The activity would be a permitted buffer modification for shoreline erosion control according to best technical advice and applicable permit conditions or requirements per 9 VAC 10-20-130 5 a (4).

We appreciate the opportunity to provide comments on this project. Please do not hesitate to contact us at 1-800-CHESBAY should you have any questions.

Sincerely,

A handwritten signature in red ink that reads "Alice R. T. Baird".

Alice R. T. Baird, LA, ASLA
Chesapeake Bay
Special Projects Coordinator

L. Preston Bryant, Jr.
Secretary of Natural Resources



Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

217 Governor Street
Richmond, Virginia 23219-2010
(804) 786-7951 FAX (804) 371-2674

July 21, 2006

Mark T. Mansfield
U.S. Army Corps of Engineers, Norfolk District
803 Front Street
Norfolk, VA 23510-1096

Re: Hurricane and Storm Damage Reduction Study – Willoughby Spit and Vicinity

Dear Mr. Mansfield:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, a Least Tern (*Sterna antillarum*, G4/S2B/NL/SC) colony has been documented in the project area. The Least Tern nests on broad, flat beaches with minimal vegetation and forages in saltwater near the shore. Threats to this species include loss of nesting habitat due to development and disturbance of breeding colonies by human activities and high numbers of predators (Beck, 1991). Please note that the Least Tern is listed as a special concern species by VDGIF. DCR recommends avoidance of the nesting sites for the Least Tern (April 15-August 1).

Our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

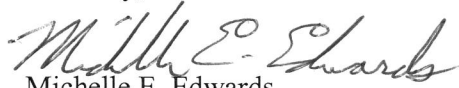
Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, that may contain information not documented in this letter. Their database may be accessed from www.dgif.virginia.gov/wildlife/info_map/index.html, or contact Shirl Dressler at 804-367-6913.

Should you have any questions or concerns, feel free to contact me at 804-692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

A handwritten signature in cursive script that reads "Michelle E. Edwards". The signature is written in black ink and is positioned above the printed name.

Michelle E. Edwards

Locality Liaison

Literature Cited

Beck, R. A. 1991. Least Tern. In *Virginia's Endangered Species: Proceedings of a Symposium*. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia. pp. 505-506.




COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-6124
August 25, 2006

MEMORANDUM

TO: Mark T. Mansfield, U. S. Army Corps of Engineers

FROM: Robert Munson, Planning Bureau Manager 

SUBJECT: DCR-06-052: Hurricane Storm Damage Reduction Study Willoughby Split and Vicinity

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, a Least Tern (*Sterna antillarum*, G4/S2B/NL/SC) colony has been documented in the project area. The Least Tern nests on broad, flat beaches with minimal vegetation and forages in saltwater near the shore. Threats to this species include loss of nesting habitat due to development and disturbance of breeding colonies by human activities and high numbers of predators (Beck, 1991). Please note that the Least Tern is listed as a special concern species by VDGIF. DCR recommends avoidance of the nesting sites for the Least Tern (April 15-August 1).

Our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources. New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, that may contain

information not documented in this letter. Their database may be accessed from www.dgif.virginia.gov/wildlife/info_map/index.html, or contact Shirl Dressler at 804-367-6913.

Thank you for the opportunity to comment on this project.



COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

July 10, 2006

Ms. Helene Haluska
US Army Corps of Engineers, Norfolk District
803 Front Street
Norfolk, VA 23510

Re: Hurricane and Storm Damage Reduction Study
Willoughby Spit and Vicinity
DHR File # 2006-0995

Dear Ms. Haluska:

We have received your request for our review and comment regarding the above referenced project. We require additional information in order to assist you, however. With regard to the beach areas in question, there are several recorded properties in the Willoughby Spit area as well as along the shoreline. In order to provide you with the most useful technical assistance we ask that you provide an explanation of the beach nourishment process and its potential to cause either direct or visual effects upon historic properties. With regard to the proposed borrow area, we ask that you keep the possible presence of historic shipwrecks in mind during project planning. This area has been the site of heavy marine traffic throughout Virginia's history, and dredging activities may encounter historic resources.

Given the historic nature of the project area we recommend that you perform a search of our Archives to determine the presence of any known historic properties that may be affected by planned activities, and provide a copy of the resulting data to us. We also recommend that you consider an underwater archaeological survey of the preferred borrow site once that has been determined. We will complete our review upon receipt of the requested data.

If you have any questions about the Section 106 review process or our comments, please call me at (804) 367-2323, Ext. 140.

Sincerely,

Joanna Wilson, Archaeologist
Office of Review and Compliance

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 863-1624
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Winchester Region Office
107 N. Kent Street, Suite 203
Winchester, VA 22601
Tel: (540) 722-3427
Fax: (540) 722-7535



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061



July 20, 2006

Colonel Dionysios Annios
District Engineer
Norfolk District, Corps of Engineers
Fort Norfolk, 803 Front Street
Norfolk, Virginia 23510-1096

Attn: Helene Haluska
Planning Branch

Re: Willoughby Spit Hurricane and
Storm Damage Reduction Project
Norfolk, Virginia

Dear Colonel Annios:

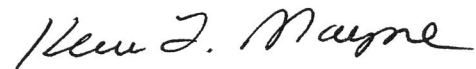
The U.S. Fish and Wildlife Service (Service) has reviewed your June 19, 2006 request for information of federally listed species that occur around the Willoughby Spit Hurricane and Storm Damage Reduction Study area. This letter is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat.401, as amended; 16 U.S.C. 661 *et seq.*) and Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

You are conducting a reevaluation of the 1983 Hurricane and Storm Damage Reduction Study for Willoughby Spit and Vicinity, Norfolk, Virginia. The study proposes constructing a beach berm along the 7.3 miles of shoreline, from the tip of Willoughby Spit to the mouth of Little Creek Inlet, and periodic nourishment. The borrow area identified as a potential sand source is within the Thimble Shoal Horseshoe Bank. There are recorded strandings of the federally listed threatened, loggerhead sea turtle (*Caretta caretta*) and the Hawksbill turtle (*Eretmochelys imbricate*) along the shoreline of Willoughby Spit. An active nest of the bald eagle (*Haliaeetus leucocephalus*), also federally listed threatened is approximately 3,040 meters from the mouth of Little Creek, well outside the management zones.

The Service will continue to coordinate with you on this project. Our planning aid report and Coordination Act report will provide detailed comments and descriptions of potentially affected species. We also recommend you coordinate with the Virginia Department of Game and Inland Fisheries, Virginia Department of Agriculture, and NOAA Fisheries regarding species under their purview. We thank you for the opportunity to coordinate with you. Please contact Sumalee

Hoskin of this office at (804) 693-6694 extension 105 if you have questions or to discuss the project further.

Sincerely,

A handwritten signature in cursive script that reads "Karen J. Mayne".

Karen Mayne
Supervisor
Virginia Field Office



DEPARTMENT OF THE ARMY
NORFOLK DISTRICT, CORPS OF ENGINEERS
FORT NORFOLK, 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

REPLY TO
ATTENTION OF

June 19, 2006

Planning and Policy Branch

SEE LIST OF ADDRESSEES

Dear Sir/Madam:

The Norfolk District Corps of Engineers, in cooperation with the city of Norfolk, is in the early stages of a general reevaluation of the Hurricane and Storm Damage Reduction Study for Willoughby Spit and Vicinity, which is located in Norfolk, Virginia. This study was originally authorized by a resolution adopted September 15, 1971, by the U.S. Senate Committee on Public Works. The Feasibility Report that was produced in 1983 recommended construction of a beach berm along the entire 7.3-mile study area shoreline with periodic nourishment as needed. The Water Resources Development Act of 1986, as amended, authorized the recommendations in this report. The current reanalysis effort will reformulate the project in light of the changes that have taken place over the past 23 years.


There are two specific areas of concern for this study: the Willoughby Spit/Ocean View shoreline and a large area in the lower Chesapeake Bay that would be the source of the borrow material for the shoreline. The shoreline portion of the study area extends from the tip of Willoughby Spit to the entrance of Little Creek Inlet (see Figure). The location and orientation of this shoreline at the southern boundary of the Chesapeake Bay and immediately within the mouth of the bay have made this area highly susceptible to damages associated with coastal storm activity. An area within the Thimble Shoal-Horseshoe Bank area will be investigated as a source of nourishment material (see enclosed Figure).

We are currently gathering information that will help in the development of alternative plans for this study. We are especially interested in the occurrence of significant environmental resources under your purview within the study areas of the proposed project. We realize that this is early in the planning process, but any information you could provide would be helpful. We especially want to be certain that we have the most updated information with which to formulate our plans and prepare the necessary environmental documentation as we proceed with the study. Any additional comments or concerns you may have in regard to this project would also be welcomed.

Please contact Helene Haluska at (757) 201-7008 or Jeff Strahan at (757) 201-7195 if you can provide the information requested or if you have any questions. Thank you for your time, and we look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark T. Mansfield". The signature is fluid and cursive, with a long horizontal stroke at the end.

 Mark T. Mansfield
Chief, Planning and Policy Branch

Enclosure

LIST OF ADDRESSEES

Mr. William Arguto
3ES30
U.S. EPA, Region III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Northeast Regional Director
National Park Service
U.S. Custom House
200 Chestnut Street, Fifth Floor
Philadelphia, Pennsylvania 19106

Ms. Karen Mayne
U.S. Fish and Wildlife Service
6669 Short Lane
Gloucester, Virginia 23061

U.S. Geological Survey
Water Resources Division
John W. Powell Federal Building
12201 Sunrise Valley Drive
Reston, Virginia 20192

Commander AOW (Attn: Albert Grimes)
Atlantic Area, Fifth District
United States Coast Guard
431 Crawford Street
Portsmouth, Virginia 23704

Division of Environmental Assessment
National Marine Fisheries Service, NOAA
Oxford, Maryland 21654

National Marine Fisheries Service
Protected Resources Division
Northeast Regional Office
One Blackburn Drive
Gloucester, Maryland 01930-2298

Mr. Joe Hassell, Environmental Programs Manager
Division of Water Resources
Virginia Department of Environmental Quality
629 East Main Street, 8th Floor
Richmond, Virginia 23219

Mr. Allen R. Brockman
Waste Division
Virginia Department of Environmental Quality
629 East Main Street, 5th Floor
Richmond, Virginia 23219

Mr. A.C. Ray
Environmental Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Commissioner
Virginia Department of Health
Madison Building
109 Governor Street
Richmond, Virginia 23219

Ryan M. Link
Principal Planner
Chesapeake Bay Local Assistance Board
101 N. 14th Street, 17th Floor
Richmond, Virginia 23219

Mr. Derral Jones
Virginia Department of Conservation and Recreation
203 Governor Street, Suite 326
Richmond, Virginia 23219

Mr. Alan Weber
Office of Drinking Water
Virginia Department of Health
Madison Building, 6th Floor
109 Governors Street
Richmond, Virginia 23219

Ms. Elizabeth Locklear
Natural Heritage Division
Department of Conservation
and Recreation
203 Governor Street, Suite 326
Richmond Virginia 23219-2010

Mr. John Davy, Jr.
Director
Virginia Division of Planning, Policy
and Recreation Resources
Suite 326, 203 Governor Street
Richmond, Virginia 23219

Mr. Bert Parolari
Environmental Manager
Tidewater Regional Office
Virginia Dept of Environmental Quality
5636 Southern Boulevard
Virginia Beach, Virginia 23462

Mr. David O'Brien
Virginia Institute of Marine Science
P.O. Box 1346
Gloucester Point, Virginia 23062-1346

Ms. Joanna Wilson
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

Mr. Charlie Ellis
Office of Environmental Impact Review
Virginia Department of Environmental Quality
629 East Main Street, 6th Floor
Richmond, Virginia 23219

Mr. Robert Grabb
Habitat Management Division
Virginia Marine Resources Commission
2600 Washington Ave., 3rd Floor
Newport News, Virginia 23607

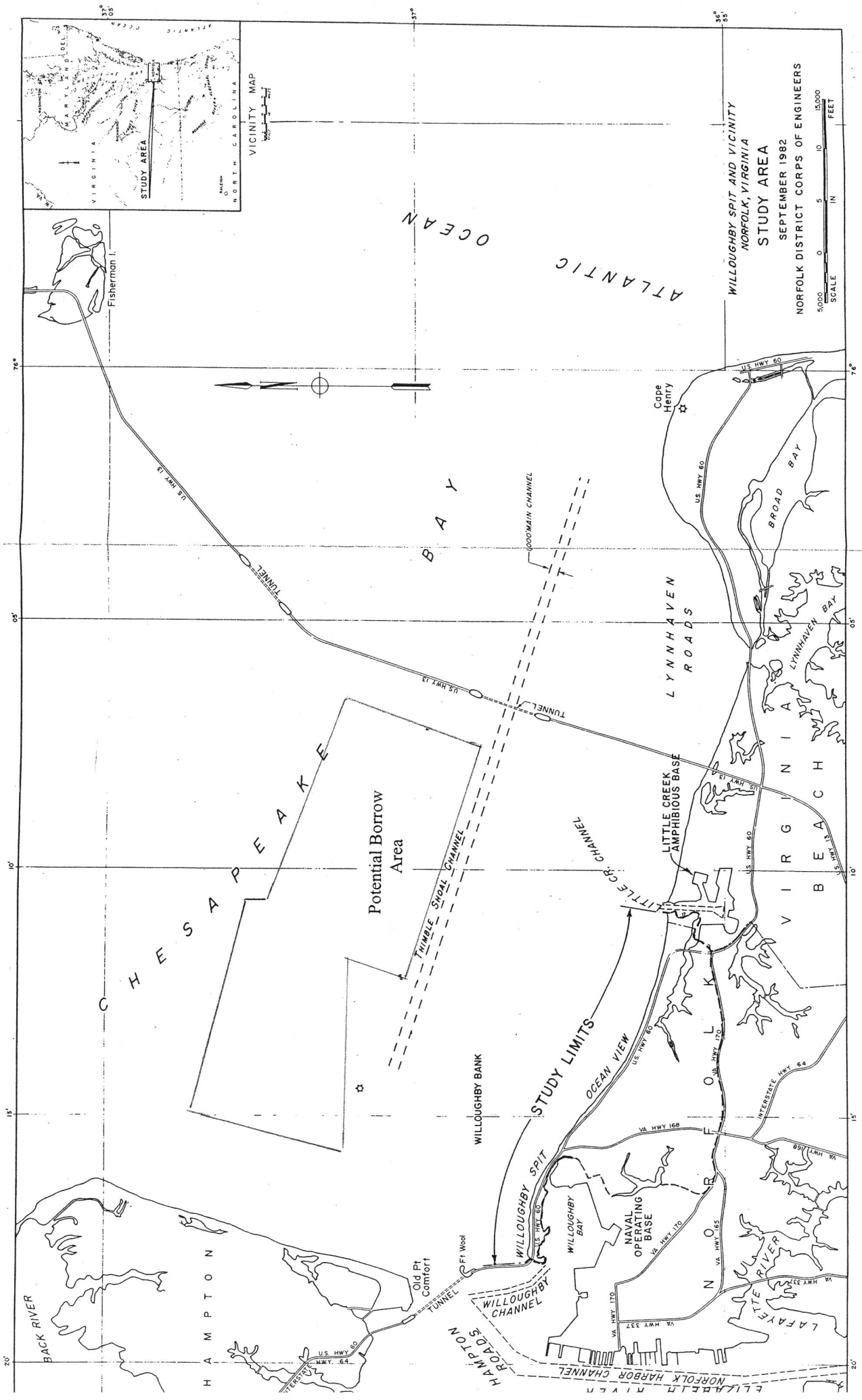
Mr. Raymond T. Fernald
Virginia Department of Game and Inland Fisheries
4010 West Broad Street
Richmond, Virginia 23230

Mr. Tom Ballou, Environmental Engineer Senior
Air Data Analysis Section
Virginia Department of Environmental Quality
629 East Main Street, 8th Floor
Richmond, Virginia 23219

Mr. Arthur Collins
Executive Director, Hampton Roads
Planning District Commission
The Regional Building
723 Woodlake Drive
Chesapeake, Virginia 23320

Mrs. Regina V. K. Williams
City Manager
1101 City Hall Building.
810 Union Street
Norfolk, Virginia 23510

Mr. John M. Keifer
Director, Public Works Department
City Hall Building
810 Union Street
Norfolk, Virginia 23510



WILLOUGHBY SPIT AND VICINITY
 NORFOLK, VIRGINIA
 STUDY AREA
 SEPTEMBER 1982
 NORFOLK DISTRICT CORPS OF ENGINEERS

SCALE
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 IN

Enclosure



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

JUL - 3 2006

Mark T. Mansfield, Chief
Planning and Policy Branch
Department of the Army
Norfolk District, Corps of Engineers
Fort Norfolk, 803 Front Street
Norfolk, Virginia 23510-1096

Dear Mr. Mansfield,

This is in response to your letter dated June 19, 2006 regarding the Norfolk District Corps of Engineers (ACOE) reevaluation of the Hurricane and Storm Damage Reduction Study for Willoughby Spit and Vicinity, located in Norfolk, Virginia. Your letter notes two specific areas of concern for this study: the Willoughby Spit/Ocean View shoreline and a large area in the lower Chesapeake Bay, within the Thimble Shoal-Horseshoe Bank area, that would be the source of the borrow material for the shoreline. The ACOE is currently gathering information that will help in the development of this study.

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) are distributed along the entire East Coast of the United States and have been designated a Species of Concern by NOAA's National Marine Fisheries Service (NMFS). Many populations, including those found in the Chesapeake Bay, have undergone drastic declines in abundance since the late 1800s. Consequently, NMFS has initiated a status review for this species to determine if listing as threatened or endangered under the Endangered Species Act (ESA) of 1973, as amended, is warranted. If it is determined that listing is warranted, a final rule listing the species could be published within a year from the date of publication of the listing determination or proposed rule.

The best available scientific information indicates that a reproducing Atlantic sturgeon population persists in the James River. Additionally, Atlantic sturgeon occupy the mainstem of the Chesapeake Bay and at least the York, Rappahannock, Nanticoke and Susquehanna Rivers. These populations are likely small and as such, may be particularly vulnerable to natural and/or anthropogenic disturbances. Atlantic sturgeon are vulnerable to interactions with dredges and have been captured near the areas to be dredged, including during pre-dredge trawling associated with ACOE dredging activities. While Atlantic sturgeon receive no substantive or procedural protection under the ESA, NMFS recommends that the ACOE consider implementing



conservation actions to limit the potential for adverse effects on Atlantic sturgeon from this project.

As you know, several threatened and endangered species of sea turtles are known to be present in the Chesapeake Bay from April 1 – November 30 each year. Loggerhead (*Caretta caretta*), Kemp's ridley (*Lepidochelys kempi*), and green sea turtles (*Chelonia mydas*) are present in the Chesapeake Bay, mainly during late spring, summer and early fall when water temperatures are relatively warm. An estimated 3,000 - 10,000 loggerhead turtles and 500 Kemp's ridley sea turtles are found in the Chesapeake Bay annually. In the Chesapeake Bay, Kemp's ridleys frequently forage in shallow embayments, particularly in areas supporting submerged aquatic vegetation and on tidal flats. Approximately 95 percent of the loggerheads found in the Chesapeake Bay are juveniles; these turtles are found most commonly from the mouth of the Bay to the Potomac River while foraging along channel edges. The summer developmental habitat for green turtles encompasses estuarine and coastal waters of Chesapeake Bay and this species occurs is known to occur in the Bay in warmer months. Leatherback sea turtles (*Dermochelys coriacea*) are predominantly pelagic but are also seasonally present in the Chesapeake Bay. Recent data from sightings and incidental captures in fishing gear indicate that loggerhead and Kemp's ridley are the species of sea turtles most likely to be found in the waters of Chesapeake Bay while leatherback and green sea turtles are less common in the area.

Sea turtles are vulnerable to interactions with hydraulic hopper dredges. Fifty-seven sea turtles have been killed during hopper dredging operations in the Norfolk district since 1994, including two loggerhead sea turtles killed in June 2006. The borrow area proposed for the Willoughby Spit area is geographically close to the areas where these interactions with sea turtles have occurred. If the proposed borrow site will be dredged with a hopper dredge during the April – November time frame, effects to listed sea turtles are likely. As these effects are likely to amount to the take of a listed species (defined by the ESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct”) a formal consultation pursuant to Section 7 of the ESA is required.

Please note that if a formal section 7 consultation is necessary, NMFS has 135 days from the date of initiation of consultation (i.e., the date that NMFS has all information necessary to conduct consultation) to deliver a Biological Opinion and Incidental Take Statement to ACOE. If formal consultation is necessary, the ACOE will need to prepare a Biological Assessment (BA) that includes a thorough description of the proposed project including: a proposed schedule for dredging and the volume of material likely to be removed during each dredge cycle; a description of the substrate and habitat types at the borrow site including any information on the presence of sea turtle forage items; any special conditions that the ACOE will require (i.e., observer coverage, draghead deflectors); and, an assessment of likely effects to listed sea turtles.

In the Norfolk district there are currently three large scale dredging projects covered by three separate Biological Opinions and Incidental Take Statements. NMFS urges the ACOE to look at these projects programmatically and develop a programmatic BA that encompasses all hopper dredging projects in the Norfolk District and analyzes the cumulative effects of these projects on

listed sea turtles. NMFS would then produce one Biological Opinion that analyzed the effects of all of the projects and would include one Incidental Take Statement. The Willoughby Spit project could be included in this effort. My staff looks forward to working with you on the conservation of listed species in the Chesapeake Bay. Please contact Julie Crocker of my staff at (978)281-9300 x6530 to discuss these comments and the procedures for initiating consultation.

Sincerely,



Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

Cc: Nichols - F/NER4
Gorski - F/NER4
McNulty, Upite, Keane – F/NER3



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Habitat Conservation Division
James J. Howard Marine
Sciences Laboratory
74 Magruder Road
Highlands NJ 07732

July 31, 2006

Mark T. Mansfield
Chief, Planning and Policy Branch
Department of the Army
Norfolk District, Corps of Engineers
Fort Norfolk, 803 Front Street
Norfolk, VA 23510-1096

ATTN: Helen Haluska and Jeff Strahan

Dear Mr. Mansfield:

Reference is made to your letter dated June 19, 2006 concerning the Norfolk District Corps of Engineers' (ACOE) general reevaluation of the Hurricane and Storm Damage Reduction Study for Willoughby spit and Vicinity, in Norfolk, VA. The areas of concern for this study include the Willoughby Spit/Ocean View Beach shoreline and a large area in lower Chesapeake Bay that would be the source of borrow material for the shoreline. The shoreline portion of the study area extends from the tip of Willoughby Spit to the entrance of the Little Creek Inlet. An area within the Thimble Shoal-Horseshoe Bank area will be investigated as a source of nourishment material.

The project area has been designated as essential fish habitat by the Mid-Atlantic Fishery Management Council, the New England Fishery Management Council, the South-Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS) for the following species: red hake (*Urophycis chuss*), windowpane (*Scophthalmus aquosus*), Atlantic butterflyfish (*Peprilus triacanthus*), Atlantic sea herring (*Clupea harengus*), bluefish (*Pomatomus saltatrix*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristus striata*), cobia (*Rachycentron canadum*), king mackerel (*Scomberomorus cavalla*), Spanish mackerel (*Scomberomorus maculatus*), red drum (*Sciaenops ocellatus*), clearnose skate (*Raja eglanteria*), little skate (*Leucoraja erinacea*), winter skate (*Leucoraja ocellata*), sandbar shark (*Charcharinus plumbeus*), sand tiger shark (*Odontaspis taurus*), Atlantic sharpnose shark (*Rhizopriondon terraenovae*) and dusky shark (*Charcharinus obscurus*). The area has also been designated as a habitat area of particular concern (HAPC) for sandbar sharks.

Section 305(b)(2) of the MSA requires all federal agencies to consult with NMFS on any action authorized, funded, or undertaken by that agency that may adversely affect EFH. Included in this consultation process is the preparation of a complete and appropriate EFH assessment to provide necessary information on which to consult. Our EFH regulation at 50 CFR 600.905 mandates the preparation of EFH assessments and generally outlines each agency's obligations in this consultation procedure. The consultation process for civil works projects is further described in our January 18, 2000 EFH Finding Letter to the ACOE's North Atlantic Division. This finding specifies that the EFH consultation for civil works projects will be completed through the NEPA process.



The required contents of an EFH assessment includes: 1) a description of the action; 2) an analysis of the potential adverse effects of the action on EFH and the managed species; 3) the ACOE's conclusions regarding the effects of the action on EFH; 4) proposed mitigation, if applicable. Other information that should be contained in the EFH assessment, if appropriate, includes: 1) the results of on-site inspections to evaluate the habitat and site-specific effects; 2) the views of recognized experts on the habitat or the species that may be affected; 3) a review of pertinent literature and related information; and 5) an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH. This assessment should address the cumulative effects of sand mining operations on the borrow sites. We note that the Thimble Shoal-Horseshoe Bank area is proposed for use as a sand borrow site for several other projects including the Virginia Beach Hurricane Protection Project and the Craney Island Dredged Material Management Expansion Project.

We also recommend that the ACOE develop and implement a comprehensive baseline benthic sampling at the beach nourishment site and the borrow site to characterize the benthic community of the borrow area and the placement site. Monitoring of the benthic community structure over the course of at least a year is needed determine the species composition of the areas and their value as foraging habitat, and the impacts that may occur from repeatedly dredging the site. Post construction monitoring of the borrow area and placement area should also be planned as part of the project.

The borrow site is located with the Virginia Bay-Wide Spawning Sanctuary for blue crabs. Crab harvesting is prohibited in this area from June 1 to September 15 to protect spawning blue crabs. In the winter, mature female crabs burrow into surficial sediments as water temperature declines. Overwintering in a dormant, immobile state until water temperature rises in the spring, the crabs are in a torpid state and would be unable to escape entrainment into the dredge plant. Steimle et al. (2000) has documented that juvenile blue crabs are a food source for several state and federally managed fish species including little skate, winter skate, scup and summer flounder. The destruction of blue crabs by the dredge during their overwintering can reduce the quality of the EFH for these species by reducing their prey availability. The ACOE should evaluate the impacts of the project on these commercially important species.

Lastly, several threatened and endangered species of sea turtles and marine mammals may be present in the project area. NOAA's Northeast Region's Protected Resources Division may be providing you with comments on this project in a separate letter. If you have any questions concerning threatened and endangered species or the Endangered Species Act consultation process, please contact Julie Crocker or our Protected Resources Division at 978 281-9300 ext. 6530.

We hope that these comments have been helpful. If you have any questions or need additional information, please contact Karen Greene at 732 872-3023.

Sincerely,



Stanley W. Gorski
Field Offices Supervisor

cf: PRD – J. Crocker
HCD – Annapolis - J. Nichols

LITERATURE CITED

Steimle, F.W., R.A. Pikanowski, D.G. McMillan, C.A. Zetlin, and S.J. Wilk. 2000. Demersal fish and American lobster diets in the Lower Hudson-Raritan Estuary. NOAA Technical Memorandum NMFS-NE-161. Woods Hole, MA. 106 p.



COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Douglas W. Domenech
Secretary of Natural Resources

Kathleen S. Kilpatrick
Director

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September 4, 2012

John Haynes
U.S. Army Corps of Engineers, Norfolk District
Fort Norfolk
803 Front Street
Norfolk, VA 23510

RE: Willoughby Spit and Vicinity Hurricane Protection and Beach Erosion Control
City of Norfolk, Virginia
DHR File No. 2012-4033
Received August 13, 2012

Dear Mr. Haynes:

On August 13, 2012 we received your request for our comments on the referenced project. It is our understanding the project involves the placement of dredged sand along the beachfront sections of Willoughby Spit and Ocean View within the City of Norfolk, Virginia. Following the consideration of several alternatives, the dredged material would only be used for beach nourishment without the construction of a new sand berm. Dredged sand material would be gathered from the Thimble Shoals Auxiliary Channels area located just north of Cape Henry.

Although the Willoughby Spit and Ocean View areas of Norfolk contain numerous previously identified architectural resources, DHR has no concerns for negative effects to above-ground resources as any visual impacts would be minimal and temporary.

With respect to archaeological sites, previous investigations (Tidewater Atlantic Research 2000, 2007; Panamerican Maritime 2000) have determined that no significant cultural resources lie within the Thimble Shoals Auxiliary Channels area. Given this information, it is our recommendation to the Corps that this project will have No Adverse Effect on historic properties

Thank you for giving us the opportunity to comment on this project. If you have any questions concerning our comments, or if we may provide any further assistance, please do not hesitate to contact me at (804) 482-6452; brad.mcdonald@dhr.virginia.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad McDonald".

Brad McDonald, Archaeologist
Office of Review and Compliance

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Email from David O'Brien of NOAA

Received August 2, 2013

Topic: Willoughby Spit EFH assessment and sandbar shark HAPC

Hello Janet,

To confirm our recent telephone conversation, I have reviewed your draft EFH assessment for the Willoughby Spit hurricane protection project which involves dredging sand from Thimble Shoal channel, depositing and spreading the material along the intertidal and supratidal shoreline. As we discussed, although the lower Chesapeake Bay is designated as a habitat area of particular concern (HAPC) for sandbar shark, the physical conditions at both the borrow site and the City of Norfolk's Willoughby Spit shoreline do not meet the habitat requirements as pupping or nursery areas for this species. Therefore, I am confident I will concur with your determination that the proposed project is not likely to adversely affect sandbar shark HAPC.

I look forward to working with you and reviewing your EFH assessment for this project. Please feel free to contact me if you have any questions.

Regards,
Dave

David L. O'Brien
Fisheries Biologist
NOAA Fisheries Service
1375 Greate Rd.
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Gloucester Point, VA 23062
804-684-7828 phone
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Email from Christine Vaccaro of NOAA
Received August 1, 2013
Topic: Willoughby Spit Project ESA Coordination

No problem. It indeed looks as though those activities are covered. You're all set!

-Chris

Chris Vaccaro
Fisheries Biologist
Protected Resources Division
NOAA Fisheries/NERO
Gloucester, MA
Phone: 978-281-9167
Email: christine.vaccaro@noaa.gov

On Thu, Aug 1, 2013 at 12:02 PM, Cote, Janet NAO <Janet.Cote@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Chris,

Thanks for taking the time to talk about the Willoughby project. I took a look through the BiOp and I believe that it does cover both the dredging and the placement. Section 3.0 describes the proposed actions that the BiOp covers. The second paragraph of Section 3.1 "Port of Hampton Roads Approach Channels - Thimble Shoals and Atlantic Ocean Channel reads:

"The proposed action involves continued ongoing sand borrow operations, maintenance and future new work dredging of the AOC and TSC and the use of the associated dredged material placement sites. The project includes the entire footprint of these channels and the shoals contained within each channel, plus the entire footprint of the associated dredged material placement sites. The AOC and TSC are preferred sand borrow sources for beach nourishment and port development projects in the Hampton Roads region. Projects that have historically used, or are proposing to borrow from, the TSC and AOC includes the Craney Island Eastward Expansion, Virginia Beach Hurricane Protection Project, Willoughby Spit and Vicinity Hurricane Protection Project, and JEB Fort Story Beach Replenishment Project (U.S. Navy)."

The second sentence of that paragraph the proposed actions include the dredging and "entire footprint of the associated dredged material placement sites." So as we discussed, I will describe the Biop in the ESA section of the EA and will add a description of the RPM's that must be followed and the conservation recommendations.

Again, thanks for your help,
J

Janet Cote
Ecologist
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Planning and Policy Branch
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