



U.S. Army Corps of Engineers  
Charleston District

# **APPENDIX Q**

**CHARLESTON HARBOR POST 45**  
*CHARLESTON, SOUTH CAROLINA*

## **Correspondence**

03 October 2014



US Army Corps  
Of Engineers®  
Charleston District

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NATIONAL ENVIRONMENTAL POLICY ACT  
SCOPING COMMENTS

For

CHARLESTON HARBOR NAVIGATION  
IMPROVEMENT PROJECT  
(POST 45)

Compiled

February 10, 2012

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**US Army Corps  
Of Engineers®**  
Charleston District

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**US Army Corps  
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## **SCOPING PROCESS SUMMARY**

The scoping process as outlined by the Council on Environmental Quality was utilized to involve Federal, State, and local agencies, and other interested persons and organizations. A Notice of Intent was published in the Federal Register (Vol. 76, No. 156, August 12, 2011). A scoping letter was sent to appropriate agencies/organizations asking for comments. On October 4, 2011, the Corps held an interagency meeting to discuss issues related to the project. On December 13, 2011, the Corps held a NEPA scoping meeting in a public workshop format at Mark Clark Hall, the Citadel from 1730 – 2000. At this workshop the public was notified of multiple ways to comment, including written comments on a comment card that could either be taken at the meeting or mailed in at a later date, email comments to a specified email address (Chas-Post45-Comments@usace.army.mil) , or give oral comments to a court reporter. The public was notified that the NEPA scoping period would end on February 10, 2012. Comments received throughout NEPA scoping are presented below. The Corps intends to use these comments to help refine the project scope to focus on the issues most significant and to minimize the effort on the issues that are not anticipated to be significant.



# NOTICE OF INTENT

**BILLING CODE: 3720-58**

**DEPARTMENT OF DEFENSE**

**Department of the Army; Corps of Engineers**

**Intent to Prepare a Draft Environmental Impact Statement (DEIS) for a Study on the Feasibility of Deepening Charleston Harbor**

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DOD.

**ACTION:** Notice of Intent.

**SUMMARY:** The US Army Corps of Engineers (Corps), Charleston District, intends to prepare a Draft Environmental Impact Statement (DEIS), for the Charleston Harbor Deepening Study (Post-45 study). The purpose of this DEIS and feasibility study is to investigate modification of the existing Charleston Harbor project in the interest of navigation improvements.

**FOR FURTHER INFORMATION CONTACT:** Questions about the proposed action and DEIS can be directed to: Mark Messersmith, (843) 329-8162, *Chas-Post45-Comments@usace.army.mil*, 69 A Hagood Ave, Charleston, SC 29403. To submit comments please see our website at:

*<http://www.sac.usace.army.mil/?action=programs.post45>*.

**SUPPLEMENTARY INFORMATION:**

*a. Background:* Since 2000, the total value of international trade has risen by over 40 percent and it is becoming a larger part of our national economy. The combined value of foreign trade (imports and exports) represented 13 percent of GDP in 1990, rising to nearly 22 percent in 2006. If this trend continues, it is projected that the value of U.S. foreign trade will be equivalent to 35 percent of the Nation's GDP in 2020 and 60 percent in 2030. Marine transportation will become even more important to our economy as 95 percent of America's foreign trade is moved by ship. To sustain expected growth, it is estimated the U.S. must expand its overall port capacity by 10 percent annually. This would require port expansion, mainly on the West Coast, Gulf Coast and South Atlantic. That is the equivalent of adding capacity equal to the Port of Oakland every year.

The Charleston port district's ranking as a global trading port is consistently in the top ten nationally in container traffic and cargo value. In 2009, the Charleston port district was ranked ninth (out of 200 deep-draft ports) in cargo value, and ninth (out of 80 container ports) in container traffic.

Shipping trends in Charleston show adherence to projections for considerable growth in ship size, in all three dimensions, draft, beam, and length. As economies of scale and improved vessel technologies have driven ship sizes larger, the world's port infrastructure must be rapidly expanded in channel depths and widths and terminal capacity to accommodate larger ships. The number of ports able to handle larger vessels around the world is growing, and, most importantly, the Panama Canal is currently expanding lock capacity to handle ships of 25% greater draft (up to 50 ft), 52% greater beam (up to 160 feet), and 30% greater length (up to 1250 feet). Ships have been under

construction for several years to be ready for the new canal capacity when the new Panama Canal locks open in 2014.

*b. Objectives:* There is opportunity to deepen the navigation channel at Charleston Harbor to accommodate larger container vessels. Particularly important is the great increase in the deployment of those vessels, which is occurring now and expected to increase when the Panama Canal Expansion Project is completed in 2014. These larger vessels, commonly referred to in the shipping industry as the “Super Post-Panamax” vessels, are expected to comprise greater percentages of vessel fleet composition over the next several decades. This transition to larger vessels is expected to occur rapidly and current Panamax vessels are expected to no longer be used in the Asia service by 2024. Additional depth would be required to serve existing users of Charleston Harbor by that time, as the transition from the current Panamax fleet is complete.

*c. Alternatives:* The reconnaissance level alternatives analysis does not constitute a complete analysis of the full array of potential alternatives nor does it define a preferred alternative or National Economic Development (NED) plan. Detailed analyses are expected to be conducted in the proposed feasibility phase and would likely involve evaluation of all alternatives to address the problems and opportunities. The array of alternatives that may be examined in the feasibility study would likely include navigational improvements to some or all of the channels in Charleston Harbor, including (1) deepening channel(s) up to 50 feet MLLW or more, (2) widening channel(s), (3) adjusting existing channel alignments/bend easing, and (4) widening and/or lengthening turning basins.

During the feasibility phase, Charleston Harbor will be evaluated to identify the extent to which the array of alternatives will be applied to each reach of the Federal Navigation Channel. Problems and opportunities pertinent to each reach will be identified and investigated. A matrix of reach specific alternative plans will be developed and evaluated to produce a recommended plan for improvements to Charleston Harbor. This process will include the appropriate level of engineering, economic, and environmental analyses to identify all possible benefits and impacts associated with the projected navigational improvements.

Additional channel depth would allow current and future shippers to more fully utilize larger class vessels and would reduce future anticipated congestion. The current depth of the existing inner harbor channel is 45 feet MLLW. The Entrance Channel from the Atlantic Ocean through the jetties is 47 feet MLLW deep to allow for wave action.

*d. Issues:* The DEIS will consider the possible effects of channel deepening/widening on aquatic resources, loss of wetlands, as well as other project related impacts on protected species, water quality, fish and wildlife resources, cultural resources, essential fish habitat, socio-economic resources, coastal processes, aesthetics, and other impacts identified through scoping, public involvement, and agency coordination.

*e. Scoping process:* The scoping process as outlined by the Council on Environmental Quality would be utilized to involve Federal, State, and local agencies, and other interested persons and organizations. A scoping letter will be sent to the appropriate parties regarding issues to consider during the study. Public scoping

meetings would be held throughout the process. Exact dates, times, and locations will be published in local papers.

Date \_\_\_\_\_

Edward P. Chamberlayne, P.E.  
Lieutenant Colonel, EN  
Commander, US Army Engineer District, Charleston



**US Army Corps  
Of Engineers®**  
Charleston District

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# **PUBLIC COMMENTS**

**From:** [Jennifer](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** charleston harbor comment  
**Date:** Thursday, February 09, 2012 10:59:13 AM

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Hello,

I've recently heard about the plans to deepen Charleston Harbor and I am concerned about the potential resulting impacts on Crab Bank, an important nesting area for seabirds and shorebirds. An acquaintance of mine who is the Executive Director of the Cape Romain Bird Observatory, recommended the following, and I would like to second his suggestions in the interest of preserving Crab Bank:

"In order to mitigate the negative ecological effects of the Charleston Harbor Deepening Project, some of the (clean and sandy) dredge spoils from the outer Charleston Harbor area that are produced by the project should be deposited on Crab Bank, an all-but-disappeared seabird nesting island in Charleston Harbor. It should be noted that ship wakes have been a contributing factor in the erosion / subsidence of Crab Bank, which has seen a near-total decline in nesting Brown Pelicans and other species in recent years.

Similar efforts by the Corps of Engineers in other areas have yielded remarkable and well-documented results. One such example is the bird nesting spoils island at Hatteras Inlet, NC. Another example is the bird nesting spoils island (Thomkins Island) at the mouth of the Savannah River:  
[http://www.sas.usace.army.mil/environment/Bird\\_Watching.html](http://www.sas.usace.army.mil/environment/Bird_Watching.html)

It should be noted that Crab Bank has had dredge spoils deposited on it in the past, resulting in positive benefits for nesting Brown Pelicans, Black Skimmers, Royal Terns, and other breeding species. Preventing the complete erosion/disappearance of Crab Bank would also preserve vital resting and feeding habitat for shorebirds and wading birds.

If the cost for pumping the (cleaner) outer harbor spoils to crab bank is a barrier, then perhaps matching funds could be obtained from the SC State Ports Authority and other entities. If this is not possible, then the creation of an island similar to Thomkins Island should be pursued. One potential location for such an island would be the sandbar complex between the east end of the southern Charleston Harbor jetty and Cummings Point on Morris Island.

The preservation of Crab Bank as a seabird nesting island is critical for South Carolina seabird populations, due to the loss or partial/total abandonment of multiple other seabird nesting areas in the state. Some former nesting colonies in Cape Romain NWR are no longer extant. Bird Key Stono has seen marked declines in nesting birds over the past few years for a combination of reasons. Deveaux Bank is decreasing in size and the inshore shoaling has allowed mammalian predators to reach the island with increasing frequency."

Thank you,

Jennifer Horton

**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Tuesday, January 31, 2012 10:15:24 AM

---

First Name: Klaus Schnede

Company: Eastman Chemical Company

E-Mail: [kschnede@eastman.com](mailto:kschnede@eastman.com)

Phone:

Address: 200 South Wilcox Drive, Bldg. 471

Comments: To Whom It May Concern:

As an exporter of over 40,000 TEU annually we are very concerned about east coast ports being able to accommodate 10,000+ TEU vessels in the future. It is viable for Eastman's exports to be able to ship via Charleston, SC port to reach our customers in Europe, Asia and Latin America. And it has to be done in a competitive way.

We are in competition with North American chemical manufacturere as well as overseas companies. If cost associated with shipping through the port of Charleston sky-rocket due to it's uncomptitive nature with other east coast ports, we would have to seek alternatives which A) may turn out to be more expensive, B) less time efficient and C) contribute to being less competitive ourselves trying to sell our products in overseas markets.

We are in full support of the Charleston Harbour Depening efforts to remain a solid, viable port on the east coast! We NEED Charleston as an exit port for our products in the future. And we need this done now, it will take a long time to get this job done, let's not waste anymore time on this project...!

Thank you.

Klaus Schnede  
Manager for Marine, Air and Facilities Procurement  
Eastman Chemical Company  
Kingsport, TN

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 1:49:34 PM

---

First Name: Anne Cooper

Company:

E-Mail: AdelaMoran@aol.com

Phone:

Address:

Comments: Would this intensify the effects of a tsunami surge? (Especially to nearby residences/condos)

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Sunday, January 08, 2012 3:38:34 AM

---

First Name: Jhett

Company: UsIGshmUOV

E-Mail: wuqiaoling\_5230@126.com

Phone:

Address: QUJIRRSsIPTsc

Comments: I came, I read this artclie, I conquered.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Sunday, January 08, 2012 3:38:30 AM

---

First Name: Jhett

Company: UsIGshmUOV

E-Mail: wuqiaoling\_5230@126.com

Phone:

Address: QUJIRRSsIPTsc

Comments: I came, I read this artclie, I conquered.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Thursday, December 15, 2011 11:59:34 AM

---

First Name: David T. Ginn

Company: Charleston Regional Development Alliance

E-Mail: [dginn@crda.org](mailto:dginn@crda.org)

Phone:

Address: 5300 International Blvd, Suite 103

Comments: December 14, 2011

U.S. Army Corps of Engineers  
Charleston District  
ATTN: PM-PL Mark Messersmith  
69A Hagood Avenue  
Charleston, S.C. 29403-5107

Dear Mr. Messersmith:

My name is David Ginn and I serve as president & CEO of the three-county Charleston region's economic development organization, the Charleston Regional Development Alliance, which drives long-term economic prosperity and markets our region as a globally competitive location for business and talent.

On behalf of our board and leadership, made up of our region's top business, academic and elected leaders, the CRDA enthusiastically supports Jim Newsome, and the S.C. State Ports Authority, in their partnership with the U.S. Army Corps of Engineers, to deepen our harbor in preparation for the significant trend of larger container ships entering the global commercial fleet.

This mega-trend will continue for years to come and I'm proud to support our region's and state's largest asset, the deepwater Port of Charleston. For decades, the Port has been a key attraction asset and a deciding factor for the majority of companies considering the Charleston market for an expansion or location. In fact, Charleston is the best and perhaps only option for a true post-Panamax port in the southeastern United States, as it's currently the only port in the Southeast efficiently handling fully loaded post-Panamax vessels.

On behalf of the CRDA's leadership, I encourage the Army Corps of Engineers to move swiftly to ensure the Port of Charleston remains globally competitive.

Sincerely,

David T. Ginn

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Tuesday, December 13, 2011 5:29:45 PM

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First Name: Coleman Thompson

Company: Hunter Transportation Company

E-Mail: [cthompson@huntertransport.com](mailto:cthompson@huntertransport.com)

Phone:

Address: 2357 Hwy. 17 North, Suite C.

Comments: I represent both our company and the Charleston Motor Carriers Association. We believe the Charleston Harbor needs to be deepened for a number of reasons:

- 1) The economic benefit both directly and indirectly for the United States and South Carolina residents.
- 2) The cost of dredging the harbor from its current 48' depth to 50' is the least expensive option available to the Corp and the citizens of the United States for handling the larger commercial vessels destined for our port.
- 3) The harbor is already deep and the additional dredging will not affect the natural surroundings, wildlife, river and oceans involved.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, December 02, 2011 1:28:49 PM

---

First Name: Jim Conner

Company:

E-Mail: [jim.conner@us.behrgroup.com](mailto:jim.conner@us.behrgroup.com)

Phone:

Address: 107 Calhoun Ave

Comments:

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, December 02, 2011 11:17:53 AM

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First Name: Carole J. Forsythe

Company:

E-Mail: [caroleforsythe@gmail.com](mailto:caroleforsythe@gmail.com)

Phone:

Address: P.O. Box 13346

Comments: Please get on with this project. The area needs the industry and jobs that this project will bring to our area. I don't know why this would be any kind of a debate.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, December 02, 2011 10:38:44 AM

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First Name: Agnes Tagunova

Company: Premier Logistics Solutions

E-Mail: tagunovaa@premier3pl.com

Phone:

Address: 904 Commerce Circle

Comments: As a worker in the Logistics industry, I stand with the mayors of South Carolina as stated in their letter to the President 12/9/10 (excerpt below) and I support the Charleston Harbor Deepening Project. I ask for Senator DeMint, Senator Graham, Congressman Scott and Governor Haley to support the project with their voices and their actions.

"For the East Coast to remain competitive in international trade, we must offer ocean carriers a 50-ft. harbor to import and export their goods in the northeast, mid-Atlantic and southeast. For the southeast, Charleston has been deemed by the Corps of Engineers to be the best value for the taxpayer as the federal government invests in harbors and shipping channels in a region where approximately 26,000 companies in two dozen states utilize our port facilities. This fact cannot be overlooked as you and the Congress are challenged daily by the mounting federal debt and the need to balance the budget. We in the South are very encouraged by your export initiatives and are willing participants in the efforts to double exports from the United States in ten years. This cannot be achieved, however, without critical investments in harbors such as the one in Charleston. We actively seek your support for our infrastructure project and ask that you engage the Corps of Engineers in a discussion about what Charleston has to offer the region and country. Our state and port stand ready to complete necessary studies to construct this deepening project. We simply need the money to plan the project and fire up the dredges."

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Monday, January 30, 2012 8:58:14 AM

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First Name: Richard H. Simpson

Company: Global Logisitcs & Customs of Charleston, Inc.

E-Mail: ricky@glc-associates.com

Phone:

Address: 238 Mathis Ferry Rd., STE 201

Comments: The Charleston Port deepening is vital to the continued economic growth our our state and region. We strongly urge your expedited review of this study so we can begin the process.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Saturday, January 28, 2012 2:08:11 PM

---

First Name: George & Cecily Thomas

Company:

E-Mail: g.a.thomas @comcast.net

Phone:

Address: 5545 Colonial Chatsworth Circle

Comments: Absolutely essential that our port remains viable for both economic and security reasons. This is the type of infrastructure support the federal government should be supporting because it affects both our national and international commerce.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 5:54:55 PM

---

First Name: Randall Toney

Company:

E-Mail: [BMWSAV@HOTMAIL.COM](mailto:BMWSAV@HOTMAIL.COM)

Phone:

Address: 144 Bristow Ln

Comments: I feel that deepening the port will allow larger cruise ships of tomorrow to berth in Charleston in addition to larger cargo ships and that in turn will aid in South Carolina's economy greatly.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 3:00:29 PM

---

First Name: Faye H Gooding

Company: Le Creuset

E-Mail: [fgooding@lecreuset.com](mailto:fgooding@lecreuset.com)

Phone:

Address: 114 bob gifford blvd

Comments: We import 1+ container per day through the port of Charleston. The port and this project is important to Le Creuset.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 3:00:25 PM

---

First Name: Virginia Ross

Company: SGL Carbon, LLC

E-Mail: [ginny.ross@sglcarbon.com](mailto:ginny.ross@sglcarbon.com)

Phone:

Address: 10130 Perimeter Parkway Suite 500

Comments: Would like to be able to use the Port Charleston for off loading bulk raw material. The process would be to discharge the material (petroleum coke) from the vessel directly to a (covered) hopper rail car or covered dump truck.

Currently, we have no other feasible East Coast Port option to offload this material and we are discharging from ocean vessels hold to barge in New Orleans.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 2:42:45 PM

---

First Name: Charles Bishop

Company: CAI Interntional, Inc

E-Mail: [charles@capps.com](mailto:charles@capps.com)

Phone:

Address: 1501 Little Rock Blvd.

Comments: Due to the widening of the Panama Canal, larger vessels will be able to transit from the West to the East via the Panama Canal. To enable the Port of Charleston receive these larger vessels, the depth and width of the shipping channel must increase. If the Port of Charleston, either does not deepen, or takes too much time to deepen the channel, more cargo & jobs will be lost to neighboring ports.

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**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 2:20:30 PM

---

First Name: Shelia Rains

Company:

E-Mail: srms8112@yahoo.com

Phone:

Address: 304 Summerfield Pl

Comments: Hopefully once this is completed more cruise lines will begin sailing from the Port of Charleston. There are some of us who do not like cruising on Carnival. Thank you.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Friday, January 27, 2012 1:54:01 PM

---

First Name: Teresa J Schott

Company:

E-Mail: [seashott@yahoo.com](mailto:seashott@yahoo.com)

Phone:

Address: 1412 Relyea Ave

Comments: I fully support deepening the harbor. I work on the waterfront and growth for our port is very important to me.

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**From:** [webmaster@scspa.com](mailto:webmaster@scspa.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Deepening Comments  
**Date:** Tuesday, January 31, 2012 5:08:13 PM

---

First Name: THEODORE D. STONEY, JR.

Company: THE STONEY COMPANY, INC.

E-Mail: [ted@thestoneycompany.com](mailto:ted@thestoneycompany.com)

Phone:

Address: 38 ROMNEY STREET

Comments: Dear Sir:

I have worked on the Charleston waterfront as summer help during my three summers of college, worked for a steamship agency in equipment control, operations, and sales, and managed the original Charleston Line Handling Company before moving into commercial real estate in 1986. Because of this past shipping experience, and due to my commercial real estate experience, I am fully aware of how vital the Port of Charleston is to, not only to the local economy, but to the State of South Carolina, and the entire southeastern United States.

Charleston Harbor is the most cost effective port to dredge to a 50 foot depth which is vitally needed to handle the larger container ships that will soon be transiting the Panama Canal. It is imperative that the permits be approved as soon as possible to insure that the needs of our state and nation are met at the most reasonable price, and Charleston is the only port that can achieve this efficiency.

Please do everything within your power to expediate the feasibility study and permit this project as fast as possible.

Sincerely,

Theodore D. Stoney., Jr.

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**From:** [Jack Daniel \(SC\)](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston harbor deepening  
**Date:** Monday, January 30, 2012 10:08:19 AM

---

Dear Sir,

It is essential that Charleston harbor be deepened to accommodate the new larger vessels transiting the Panama Canal in 2014 or 2015. The depth should be at the very least 50 feet but should really be 52 feet to allow proper clearance under the keel for a fully loaded Panamax vessel. The port of Charleston has a fine natural harbor with a "mud" bottom that is the most economically feasible to deepen on the South Atlantic coast. No other seaport offers the economic efficiencies Charleston harbor offers. The biggest bang for the Federal dollar is in Charleston. Our import and export customer base is growing rapidly and the pending need is great. Please help us get this project accomplished as soon as practically possible. We really can't wait another 10 years. Thank you for your consideration in this matter.

Sincerely,

Jack Daniel, CHB  
President | International Forwarders, Inc.  
1350 Ashley River Road, Charleston, SC 29407  
office: +1-843-769-7030

fax: +1-843-769-7042

email: [jackdaniel@odysseylogistics.com](mailto:jackdaniel@odysseylogistics.com) <<mailto:jackdaniel@odysseylogistics.com>>

web: [www.ifichs.com](http://www.ifichs.com) <<http://www.ifichs.com/>>

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**From:** [Dennis Weaver](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Dredging  
**Date:** Friday, January 27, 2012 1:45:52 PM

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The Port business community cannot wait until 2024 for the deepening of the harbor. This project must be given the highest priority possible, it is crucial for the survival of the South Carolina Port community. We respectfully request the study be approved quickly, funding made available and the project given the green light. Regards. Dennis J. Weaver Regional Vice President, CERES Marine Terminals, Inc.. [dweaver@ceresglobal.com](mailto:dweaver@ceresglobal.com)

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**From:** [Chris DeScherer](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Navigation Improvement Project, Charleston, SC -- Scoping Comments  
**Date:** Friday, February 10, 2012 11:57:29 AM  
**Attachments:** [SKMBT\\_C28012021011460.pdf](#)

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Dear Mr. Messersmith,

Please find the attached scoping comments, which we are submitting on behalf of the Coastal Conservation League.

Please do not hesitate to contact me with any questions.

Thank you.

Christopher K. DeScherer

Senior Attorney

Southern Environmental Law Center

43 Broad Street, Suite 300

Charleston, SC 29401-3051

843-720-5270

843-720-5240 (fax)

[cdescherer@selcsc.org](mailto:cdescherer@selcsc.org)

[www.southernenvironment.org](http://www.southernenvironment.org) <<http://www.southernenvironment.org/>>

**From:** [Jessica Lewis](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Post 45 Project comment  
**Date:** Thursday, February 09, 2012 9:56:23 AM

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To Whom It Concerns,

As a member of the public that both works and plays in the marine environments around Charleston, I am concerned about the effect that further altering of Charleston harbor will have on my quality of life, as well as the quality of the great many other fauna that depend on the harbor. Crab Bank is an important breeding area for many shore bird species, just as one example. Diadromous fish species use the channels on a daily basis, as do marine mammals and reptiles. Fragile migration patterns used by nesting shorebirds are alarmingly easy to alter.

I see no need to continue expanding Charleston Harbor simply to satisfy the needs of money making and increasing foreign trade for the sake of expanding the nation's GDP. There is no monetary value that can be placed on a nest of Snowy Egrets or Piping Plovers. Charleston's beauty will certainly not be increased by a 300+ ft tall super post-Panamax ship sailing through the harbor, dwarfing historic steeples.

Meddling humans are to blame for the continuous need for beach renourishment and ever increasing alterations 'needed' to stabilize the coastline. Further modifications can only spell more trouble for the citizens and tax-payers of Charleston.

Rather than potentially devastating the local wildlife native to South Carolina, perhaps we should focus on preserving the natural beauty we've been given and the historical importance of the City.

I absolutely do not support the deepening or expansion of Charleston Harbor and increased traffic by container ships, especially considering the many risks that we would be taking for very little local gain.

Thank you for your attention.

-Jessica Lewis  
James Island, SC

**From:** [Nathan Dias](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Post 45 Project Public Comment  
**Date:** Wednesday, February 08, 2012 2:02:59 PM

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To whom it may concern: please accept the following suggestion (Public comment) regarding the proposed deepening of the Charleston Harbor shipping channel:

In order to mitigate the negative ecological effects of the Charleston Harbor Deepening Project, some of the (clean and sandy) dredge spoils from the outer Charleston Harbor area that are produced by the project should be deposited on Crab Bank, an all-but-disappeared seabird nesting island in Charleston Harbor. It should be noted that ship wakes have been a contributing factor in the erosion / subsidence of Crab Bank, which has seen a near-total decline in nesting Brown Pelicans and other species in recent years.

Similar efforts by the Corps of Engineers in other areas have yielded remarkable and well-documented results. One such example is the bird nesting spoils island at Hatteras Inlet, NC. Another example is the bird nesting spoils island (Thomkins Island) at the mouth of the Savannah River:

[http://www.sas.usace.army.mil/environment/Bird\\_Watching.html](http://www.sas.usace.army.mil/environment/Bird_Watching.html)

SC DNR biologists I have consulted with are whole-heartedly in favor of such an initiative, as are certain US Army Corps biologists I have consulted. It should be noted that Crab Bank has had dredge spoils deposited on it in the past, resulting in positive benefits for nesting Brown Pelicans, Black Skimmers, Royal Terns, and other breeding species. Preventing the complete erosion/disappearance of Crab Bank would also preserve vital resting and feeding habitat for shorebirds and wading birds.

If the cost for pumping the (cleaner) outer harbor spoils to crab bank is a barrier, then perhaps matching funds could be obtained from the SC State Ports Authority and other entities. If this is not possible, then the creation of an island similar to Thomkins Island should be pursued. One potential location for such an island would be the sandbar complex between the east end of the southern Charleston Harbor jetty and Cummings Point on Morris Island.

The preservation of Crab Bank as a seabird nesting island is critical for South Carolina seabird populations, due to the loss or partial/total abandonment of other seabird nesting areas in the state. Former nesting colonies in Cape Romain NWR are no longer extant. Bird Key Stono has seen marked declines in nesting birds over the past few years for a combination of reasons. Deveaux Bank is decreasing in size and the inshore shoaling has allowed mammalian predators to reach the island with increasing frequency.

Sincerely,

Nathan Dias

---

Executive Director  
Cape Romain Bird Observatory  
McClellanville, SC

<http://www.crbo.net/>

**From:** [Audra Rourk](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Post 45 Project  
**Date:** Wednesday, February 08, 2012 5:44:39 PM

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Please make using clean dredge spoil to increase the size of Crab Bank Island a priority. This tiny spoil island is constantly chewed away by the motion of large container ships and it is critically important nesting ground for many species of birds, including a number which are threatened and/or endangered. Refreshing the island with clean spoil will help to preserve it for the birds and for all of us.

Thank you,

Audra Rourk



**From:** [John Scavetto](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Harbor Post 45 Project  
**Date:** Thursday, February 09, 2012 9:15:47 AM

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To whom it may concern:

I am aware your time is limited so I will get to the point of the matter. Crab Island was at one time one of South Carolina's most important breeding bird colonies for species such as American Oystercatchers, Black Skimmers, Brown Pelican, and Royal Terns. As the years have progressed and with the dredging of the bay to accommodate deeper drafting vessels the island has all but disappeared. The wake from these ships has also taking it's tole on the island as well. Currently their is little of this island left at all and the high tides cover what is left each day. Which of course means the birds have no where to nest, rest or feed from any longer. This island was here long before the colonization of the America's and do to mans progression we have destroyed another ecosystem in the name of progress. There is a fix ! It's not all doom and gloom. You have a chance to right a wrong and bring back this island and give breeding shorebirds and seabirds a place to live, rest and feed. In the past when dredging has occurred dredge spoils were deposited to rebuild this island. It had a positive effect. What if while doing project 45 we took the cleaner spoils and deposited them in a effort to rebuild Crab Island. This is not unprecedented by any means. The Army Corp of Engineers has done this in the past with incredible results. Here is a link to a project on Hatteras Island that was successful. [http://www.sas.usace.army.mil/environment/Bird\\_Watching.html](http://www.sas.usace.army.mil/environment/Bird_Watching.html)

I understand there will be a need to find funds for such a undertaking. Nothing worth while is easy. Hard work is something the Corp is familiar with. You have chance to fix a problem. You have the technology and the Corp in a position to find a way to get matching funds from sources someone like me is unaware of but looking into. We need you to right a wrong. I see a chance to bring back Crab Island and restore it back to a close resemblance of what it was,maybe even better. A place where shorebirds and seabirds can breed once again the way they have for many century's before. There are not many places left for them to go. Numbers are declining. Breeding bird studies show huge declines in numbers in just the past 15 years. Something needs to be done. Please find a way to make this project happen. It's important to the birds. It's important in maintaining balance when and where you can. This is one of those times that you can make a difference! Thank you for your time, your efforts and hopefully for your ability to make this plan a reality. It is desperately needed.

Sincerely,

John Scavetto  
PO BOX 313  
Matthews, NC 28106  
704-989-6763



December 14, 2011

U.S. Army Corps of Engineers  
Charleston District  
ATTN: PM-PL Mark Messersmith  
69A Hagood Avenue  
Charleston, S.C. 29403-5107

Dear Mr. Messersmith:

My name is David Ginn and I serve as president & CEO of the three-county Charleston region's economic development organization, the Charleston Regional Development Alliance, which drives long-term economic prosperity and markets our region as a globally competitive location for business and talent.

On behalf of our board and leadership, made up of our region's top business, academic and elected leaders, the CRDA enthusiastically supports Jim Newsome, and the S.C. State Ports Authority, in their partnership with the U.S. Army Corps of Engineers, to deepen our harbor in preparation for the significant trend of larger container ships entering the global commercial fleet.

This mega-trend will continue for years to come and I'm proud to support our region's and state's largest asset, the deepwater Port of Charleston. For decades, the Port has been a key attraction asset and a deciding factor for the majority of companies considering the Charleston market for an expansion or location. In fact, Charleston is the best and perhaps only option for a true post-Panamax port in the southeastern United States, as it's currently the only port in the Southeast efficiently handling fully loaded post-Panamax vessels.

On behalf of the CRDA's leadership, I encourage the Army Corps of Engineers to move swiftly to ensure the Port of Charleston remains globally competitive.

Sincerely,

A handwritten signature in black ink that reads "David Ginn".

David T. Ginn

**From:** [Andrew Wunderley](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Charleston Waterkeeper Post 45 Scoping Comments  
**Date:** Thursday, February 09, 2012 5:13:18 PM  
**Attachments:** [waterkeeper\\_scoping\\_comment.pdf](#)

---

Please see attached comments.

Andrew J. Wunderley, Esq.  
Legal Affairs Coordinator  
Charleston Waterkeeper  
PO Box 29  
Charleston, SC 29402  
(843) 906-7073  
@andrewwunderley <<http://www.twitter.com/andrewwunderley>>



Andrew J. Wunderley, Esq.  
Legal Affairs Coordinator

360 Concord St., Suite 103  
Charleston, South Carolina 29401

(843) 906-7073  
andrew@charlestonwaterkeeper.org  
@andrewwunderley

Dear Mr. Messersmith,

Charleston Waterkeeper appreciates the opportunity to comment during the scoping process for the Draft Environmental Impact Statement (DEIS) being prepared for the Charleston Harbor Post 45 Project. Charleston Waterkeeper is a 501(c)(3) not-for-profit organization organized under the laws of the State of South Carolina. Charleston Waterkeeper represents more than 250 members who fish, swim, and recreate in the Charleston Harbor watershed and is dedicated to the protecting the public's right to clean water.

Charleston Waterkeeper attended the December 13, 2011, public scoping meeting and workshop at Mark Clark Hall on the campus of the Citadel. The Charleston Harbor is an invaluable natural and economic resource for the people of South Carolina. Throughout the course of South Carolina's history the Charleston Harbor has been used for shipping, commercial and recreational fishing, and numerous recreational activities.

At present, the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) consider the Charleston Harbor system "water quality limited" due to low dissolved oxygen levels. Total Maximum Daily Loads (TMDLs) are in place for the Ashely and Cooper Rivers. Additionally, in the near future, DHEC is expected to hand down a new TMDL for the entire harbor system based upon a 3D water quality model developed by the EPA, DHEC, Applied Technology and Management, Inc., and the point source dischargers in the Charleston Harbor watershed.

Charleston Waterkeeper understands and is encouraged that the Corps will use this 3D model in determining what effects the proposed dredging activity will have on water quality. In addition to the other parameters, Charleston Waterkeeper encourages the Corps to carefully consider how the proposed dredging activity will effect dissolved oxygen levels in the Charleston Harbor. Any such consideration should make a separate set of assumptions for the cool months (Nov. to Feb.) and the warm months (Mar. to Oct.). More specifically, the Corps should carefully consider the additional loading of oxygen demanding substances from dredging activity and whether such loadings will decrease DO levels in the Charleston Harbor beyond 0.10 mg/l during the warm months. See S.C. Code Regs. 61-68(D)(4) (requiring that "the quality of [naturally low dissolved oxygen] surface waters shall not be cumulatively lowered more than 0.10 mg/l for dissolved oxygen from point sources and other activities").

Charleston Waterkeeper appreciates the opportunity to comment during the scoping phase the Charleston Harbor Post 45 Project and looks forward to reviewing the results of the 3D water quality modeling performed by the Corps and the DEIS.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew J. Wunderley, Esq.", with a long horizontal line extending to the right.

Andrew J. Wunderley, Esq.

**From:** [Doreen Cubie](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Comment on Charleston Harbor Dredging  
**Date:** Friday, February 10, 2012 9:21:49 AM

---

Dear Sir or Madam,

I request that the Corps consider depositing dredging material on Crab Bank in Charleston Harbor. This island is an important breeding island for terns, black skimmers and other seabirds, and it is disappearing from erosion. In the past, the Corps has used such dredging materials to build or shore up nesting islands.

Thank you,

Doreen Cubie

7329 Awendaw Landing Road

Awendaw, SC 29429

843-991-1054

**From:** [jcox3222@comcast.net](mailto:jcox3222@comcast.net)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Comment relating to Charleston Harbor Deepening Study (Post 45)  
**Date:** Thursday, February 09, 2012 7:33:37 PM

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To whom it may concern:

I am writing to have the following comments added to the record as part of the Charleston Harbor Deepening Study (Post 45) NEPA Scoping. Specifically, I have concerns regarding the erosional impacts that Post Panamax vessel wakes and the required dredging of the federal navigation channel to accommodate such vessels may have to the natural, historic and cultural resources located within Charleston Harbor. A particularly sensitive natural resource of concern is Crab Bank located on the northeast side of the navigation channel and southwest of the Mount Pleasant Ship Channel.

Crab Bank has become highly eroded over the past several years to the point that it is breached in at least three location under high tide conditions. Crab Bank has been an important Brown Pelican and other sea bird species rookery; however, in its greatly reduced state, its ability to support a rookery is marginal.

As part of the dredge material disposal options evaluation, beneficial use of coarse-grained sediments through placement on Crab Bank (beach nourishment) should be strongly considered. In any event, I encourage the project scoping to include a comprehensive erosion impact study similar to that which was completed as an under-pinning study for the Charleston Harbor Marine Container Terminal EIS.

Thank you for the opportunity to comment on this important project.

John Cox PG, CGWP, LEED AP

725 Dragoon Drive

Mount Pleasant, SC

29464

[jcox3222@comcast.net](mailto:jcox3222@comcast.net)

843-884-1371

**From:** [William Burke](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Crab Bank  
**Date:** Thursday, February 09, 2012 11:44:27 AM

---

To whom it may concern:

Please accept the following public comment regarding the deepening of the Charleston Harbor shipping channel:

In order to mitigate the negative ecological effects of the Charleston Harbor Deepening Project, I believe that some of the dredge spoils from the outer Charleston Harbor area should be deposited on Crab Bank, an all-but-disappeared seabird nesting island in Charleston Harbor. It should be noted that ship wakes have been a contributing factor in the erosion / subsidence of Crab Bank, which has seen a near-total decline in nesting Brown Pelicans and other species in recent years.

Similar efforts by the Corps of Engineers in other areas have yielded remarkable and well-documented results. One such example is the bird nesting spoils island at Hatteras Inlet, NC. Another example is the bird nesting spoils island (Thomkins Island) at the mouth of the Savannah River:  
[http://www.sas.usace.army.mil/environment/Bird\\_Watching.html](http://www.sas.usace.army.mil/environment/Bird_Watching.html)

It should be noted that Crab Bank has had dredge spoils deposited on it in the past, resulting in positive benefits for nesting Brown Pelicans, Black Skimmers, Royal Terns, and other breeding species. Preventing the complete erosion/disappearance of Crab Bank would also preserve vital resting and feeding habitat for shorebirds and wading birds.

If the cost for pumping the (cleaner) outer harbor spoils to Crab Bank is a barrier, then perhaps matching funds could be obtained from the SC State Ports Authority and other entities. If this is not possible, then the creation of an island similar to Thomkins Island should be pursued. One potential location for such an island would be the sandbar complex between the east end of the southern Charleston Harbor jetty and Cummings Point on Morris Island.

The preservation of Crab Bank as a seabird nesting island is critical for South Carolina seabird populations, due to the loss or partial/total abandonment of multiple other seabird nesting areas in the state. Some former nesting colonies in Cape Romain NWR are no longer extant. Bird Key Stono has seen marked declines in nesting birds over the past few years for a combination of reasons. Deveaux Bank is decreasing in size and the inshore shoaling has allowed mammalian predators to reach the island with increasing frequency.

Sincerely,  
W. Lewis Burke, attorney at law  
119 Loch Rd.  
Columbia, SC 29210

**From:** [Kari Whitley](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Crab Bank Heritage Preserve  
**Date:** Wednesday, February 08, 2012 5:42:18 PM

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Nathan Diaz wrote a very important letter regarding the preservation and re-nourishment of Crab Bank Heritage Preserve. I hope that you will take this into consideration when dredging the harbor and allocate necessary funds for this project.

As we colonize and develop barrier islands, we have destroyed important nesting areas for shorebirds. Because they are ground nesters, they need a breeding site that is protected from mammals, snakes and other animals that eat eggs and young birds. Crab Bank is one of the few coastal islands that fits that important niche.

Please preserve this island. Please make this a priority.

Sincerely,

Kari Whitley, Plant Pathologist  
Scout Horticultural Consulting  
843.568.1102



**From:** [Michael Johnson](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Crab Bank Heritage Preserve  
**Date:** Wednesday, February 08, 2012 7:25:57 PM

---

Please use some of the clean dredge from your work in the harbor to expand the Crab Bank Island. It is vitally important as a nesting site for a multitude of birds. Please, you have the materials. It has to go somewhere, why not see that it is used for an excellent project?

Thank you,

Michael Johnson  
Mount Pleasant, SC 29466

**From:** [Bill](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Crab Bank  
**Date:** Thursday, February 09, 2012 11:46:52 AM

---

Dear sir:

Please consider the area called Crab Bank when working on the Charleston Harbor project. Sea and shore birds are fast losing places to nest and this traditional place is slowly slipping away.

Thank you for your consideration,

William Fisk

125 Chimney Glen Dr.

Hendersonville, NC 28739

**From:** [William Semmes](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Deepening Project Port of Charleston  
**Date:** Wednesday, December 14, 2011 3:30:04 PM

---

Dear Sirs,

I understand that the initial time line for the port deepening project here in Charleston, South Carolina, indicated 2024 as a completion date. I'm sure the demands on the Corps of Engineers are significant, but to complete the project 10 years after the Panama Canal is streaming the new larger ships through to the East Coast is unconsciously long and places the Port and the region it serves (South Carolina, North Carolina and parts of North Georgia) at a distinct disadvantage concerning commerce, jobs and financial viability.

The Port of Charleston ranks 8th in the nation based on the value of cargo handled annually with a total of \$50 billion, \$19.3 billion of that being exports. If this were a straight business rather than a government/political decision, environmental issues notwithstanding, we'd get this done a lot faster.

I think your Planning Department needs to go back to the drawing board and get out their calculators.

Yours sincerely,

William A. Semmes  
1-J Vendue Range  
Charleston, SC 29401

**From:** [Jacob Socolar](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** dredge spoils on Crab Bank  
**Date:** Thursday, February 09, 2012 10:40:58 AM

---

Hello,

I would very much like it if some of the dredge spoils from the deepening of the Port of Charleston could be deposited on Crab Bank. Such efforts have been highly successful (on the NC OBX, near the mouth of the Savannah River, etc) at creating and maintaining nesting and migratory seabird and shorebird habitat.

Sincerely,  
Jacob Socolar  
Chapel Hill NC

**TECKLENBURG & JENKINS, LLC**

ATTORNEYS AT LAW  
www.tecklaw.net

**GARY E. ENGLISH**  
ATTORNEY

Mark,

Good to meet you at today's  
MA3C Ops meeting. You all  
did a terrific job. Look forward  
to seeing you around the water front.  
All the best!

*G. English*

1819 MEETING STREET ROAD, SUITE A • POST OFFICE BOX 20667 (29413) • CHARLESTON, SOUTH CAROLINA 29405  
TELEPHONE (843) 534-2628 • FACSIMILE (843) 534-2629 • E-MAIL: gee@tecklaw.net

**TECKLENBURG & JENKINS, LLC**

ATTORNEYS AT LAW  
www.tecklaw.net

**GARY E. ENGLISH**  
ATTORNEY

↳ Cor Chamberlain

You team did a great job presenting &  
obtaining input from the maritime community  
at today's MA3C Logistics & Operations  
meeting. Well done to Brian Williams,  
Phil Wolf, Sara Brown & Mark Messersmith.  
Look forward to seeing you around the  
waterfront. All the best!

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TELEPHONE (843) 534-2628 • FACSIMILE (843) 534-2629 • E-MAIL: gee@tecklaw.net

**From:** [Sharpe, Lindsay](#)  
**To:** [Chas-Post45-Comments](#)  
**Date:** Wednesday, February 08, 2012 5:04:36 PM

---

Please make the wildlife in this area a top priority during this project. Progress is necessary but it is our responsibility to decrease the negative effects our improvements have on the wildlife that was here before us.

Thank you.

Lindsay Sharpe, LVT, RLATg, AAS

Research Specialist II

Division of Lab Animal Resources

Medical University of South Carolina  
114 Doughty Street Rm 648  
Charleston, SC 29425  
Cell (843)693-5503  
Fax (843) 876-5210

[sharpe@musc.edu](mailto:sharpe@musc.edu)

(Import/Export: <mailto:muscanim@musc.edu>)

**From:** [Richard Gregory](#)  
**To:** [Chas-Post45-Comments](#)  
**Date:** Thursday, February 09, 2012 8:39:14 AM

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It was recognized by the Charleston Naval Complex Redevelopment Authority (CNCRA) back in 1995 that the Navy no longer had use for the Clouter Creek Disposal Area (CCDA) but that it was essential that future tenants of the former navy complex must have an area for disposition of dredge materials. This understanding ultimately led to a March 23, 1995 letter from Lt. Col. George H. Hasel Commanding Officer of Charleston District Corps of Engineers (Corps) stating that "the U. S. Army Corps of Engineers acknowledges the commitment of the Secretary of the Navy to make the area available as a disposal area for future users of the former base facilities". The area discussed in the letter was that portion of the CCDA previously owned by the US Navy and consisting of the south and middle cells and a small portion of the highway cell. (See Enclosure 1) The May 23, 1995 commitment by Col. Hasel, was again, confirmed on August 17, 2010 by Lt. Col. Jason Kirk, Commander and District Engineer of the Charleston District of the Corps of Engineers. (See Enclosure 2)

Last year, Marine Terminals Management, a company associated with CMMC, LLC, requested to deposit dredge material from its shipping terminal at Pier J. As plans were completed for the dredging, it was disclosed by the Corps that the middle cell and the south cell as well as the highway cell were not available because they were full and would require extensive re-work before deposits could be made in those sites. After much discussion with the Corps and a loss of almost four months in Pier J use, a compromise was worked out that resulted in piping dredge material to the north cell.

A review of dredging activity after the above mentioned incident disclosed that use of the south and middle cells of CCDA had increased substantially since the transfer of the property from the Navy to the Corps. The study also disclosed that both new work and maintenance material from the federal navigational channel, which had traditionally gone elsewhere, were now being deposited in the middle and south cells.

The middle cell is now available for use. Our concern is for the future. Access for use of either the middle or south cells is critical to the development of the Naval Complex. Projections indicate that these cells, if continued to be used at the current level and for other pending projects, that the middle and south sites will be full in eight to ten years, making them unavailable for use by Naval Complex tenants without extensive re-dyking to increase capacity.

It is clear that the intent in the transfer of the middle and south cells to the Corps by the Navy was for those areas to act as a long term disposal site for dredge products from the Naval Complex. Col. Hasel, in his May 1995 correspondence, was speaking of those sites (i.e. middle cell, south cell, portion of highway cell) when he committed to make area available as disposal area for future users of the former Naval Base facility. Lt. Col. Kirk, in his correspondence, referring to the same sites confirmed the Corps commitment. Further confirmation that the same property was intended to be used for dredge material from the Naval Base is identified in the 1997 Water Resources Act which reads as follows: Charleston Harbor, South Carolina, "the committee has included an additional \$900,000.00 for the Corps to accomplish ditching, clearing, site preparation and dyking of the southern and middle cells of the Clouter Creek disposal area which are owned by the Army Corps for purpose of disposal of dredge material from areas previously occupied by the Charleston Navy Base." (See Enclosure 3)

It is therefore requested that the Corps of Engineers, while conducting the Post 45 Project Study,

recognize that the Navy Base tenants have priority for dredge disposal in the south and middle cells of Clouter Creek and that the Corps avoid pumping dredge materials into those cells that have traditionally gone to other dredge disposal sites.

Richard K. Gregory

CMMC, LLC

1670 Drydock Avenue

North Charleston SC 29405

843-554-5009





STATE OF SOUTH CAROLINA  
THE SENATE  
COLUMBIA

GLENN F. McCONNELL  
PRESIDENT *PRO TEMPORE*

P. O. BOX 142  
COLUMBIA, SC 29202  
TELEPHONE: (803) 212-6610

December 13, 2012

James I Newsome, III  
President and CEO, South Carolina Ports Authority  
176 Concord Street  
Charleston, South Carolina 29401

Dear Mr. Newsome:

Unfortunately, I had a prior commitment that precluded my attendance at today's Harbor Deepening Support Press Conference. Therefore, I wanted to send you this letter so that you and those at the Press Conference understand that my full support and energy are behind the efforts to deepen the Charleston Harbor in a timely manner.

There is no question that the Port of Charleston is the heart of South Carolina's economic health. The deepening of the Charleston Harbor to depths necessary to handle post-Panamax ships is vital if we are to keep the Port of Charleston competitive in the coming years. South Carolina's very economic future and our ability to compete with other states for new business and the attendant jobs and economic investment new business brings depends on timely harbor deepening.

As we today symbolically start the efforts for harbor deepening, the 260,000 people who rely on the Port of Charleston for their employment are also there with you in spirit supporting this effort so that they can continue to support their families. As you speak with Washington about why the Charleston Harbor deepening makes the most sense environmentally and on a return on investment basis, let those 260,000 people who reside in every county of our state who owe

their jobs to the Port of Charleston amplify your words and your arguments with their voices so that South Carolina is heard loud and clear by those in Washington.

The Port of Charleston has done a great job in compiling a comprehensive list of reasons why deepening the Charleston Harbor makes sense for myriad objective reasons. Clearly Charleston is the best, if not only, option for a true post-Panamax port in the southeastern United States. The Corps of Engineers approved in 2004 the deepening of Charleston Harbor to its current depth and since not much has changed, I would hope that the federal government will move quickly to give all approvals and funding necessary for the deepening of the Charleston Harbor.

However, this issue is too important to simply rely on hope and promises, so I want you to know that I stand committed to help you in the coming days and months ahead in any way I can to help the Port of Charleston succeed in this endeavor. As a South Carolina public servant, my first duty is to fight for the future well being of our state's citizens and businesses and give them the tools they need to win any competition with any other state in the nation or with any other country in the world. The effort to deepen our harbor to post-Panamax depths is the most significant issue for our state's well being I can recall.

We owe it to the children of our great state to do everything within our power to help the Port of Charleston succeed because if harbor deepening fails and we become less competitive than our neighbors there may not be a second chance to salvage an opportunity for the next generation of South Carolinians to achieve the kind of future economic success we want for them.

Thank you for all that you do for the people of South Carolina. With warmest personal regards,  
I am

Sincerely,

A handwritten signature in black ink, appearing to read "Glenn F. McConnell". The signature is written in a cursive, flowing style.

Glenn F. McConnell

**From:** [Jonathan Archer](#)  
**To:** [Williams, Brian P SAC](#)  
**Cc:** [Chas-Post45-Comments](#)  
**Subject:** Morning Meeting  
**Date:** Thursday, November 03, 2011 10:45:54 AM

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Brian:

I heard you speak this morning at the NavOps meeting and wasn't quick enough to grab you before you left. I was hoping to introduce myself and see how I could view what the Core currently has drafted for the Post 45' plan for Charleston Harbor.

I am the Division Manager for Moran Charleston, which is a tug boat operator. We operate in 22 different locations on the East and Gulf coasts of the United States and are considered to be experts in local navigation, ship handling, and marine transportation. I employ Docking Pilots that board ships from the tugs as they approach the dock. At that point we maneuver the ship using tug power and ships controls safely to the berth. As such, our interest in the Post 45' Project would mainly concentrate on the turning basins and select reaches in the harbor for maneuvering purposes. Knowing that, I feel that we are a primary end user of the waterway and have a keen interest in the development and modeling of those portions of the project.

I have been to the website (<http://www.sac.usace.army.mil/?action=programs.post45>) and have seen the boundaries associated with the project, but was hoping to get more information on what may be proposed for potential widening of reaches and turning basins. Is there any specific information you can share?

One last question regarding a comment you made this morning. You mentioned that it would be helpful to share data rather than set up a new collection. Do you have any specific points that you could disclose? We collect a lot of data on the port for our business and some of it may be pertinent to the effort. I'd be willing to share what I have if it would be helpful.

Thanks in advance for your help and I look forward to being of help to the undertaking.

-----  
Jonathan G. Archer

Vice President & GM

Moran Charleston

2075 Thompson Avenue, Suite 200

North Charleston, SC 29405

Tel 843-529-3000

Fax 843-529-3030

[www.morantug.com](http://www.morantug.com)

# CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

Mount Pleasant water works has a wastewater  
outfall line that extends into the Rebellion  
Reach of the Harbor. William Stein, USACEPSEngineer,  
was given a copy of the easement MPW has  
for the pipeline. Please coordinate any dredging  
activities that might affect this pipe.  
Thank you

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Clay Du-He General Manager MPW

Name / Title / Business / Individual / Organization

clayclathie@mpwonline.com

Mailing Address / Telephone / E-mail address

Charleston, S.C.

BKF 170 PG 842

STATE OF SOUTH CAROLINA )  
 )  
COUNTY OF CHARLESTON )

EASEMENT

THIS EASEMENT, made and entered into this 1st day of October, 1987, by and between the State of South Carolina, Budget and Control Board, as Grantor (hereinafter "STATE"), and Mount Pleasant Waterworks and Sewer Commission, as Grantee (hereinafter "COMMISSION").

WITNESSETH

WHEREAS, COMMISSION is a political subdivision authorized to provide water and sewer services in the Charleston County area. COMMISSION's mailing address is 955 Waterworks Boulevard, Post Office Box 336, Mount Pleasant, South Carolina 29464; and

WHEREAS, COMMISSION proposes to construct, install, operate and maintain a 30" diameter buried effluent outfall discharge line into Charleston Harbor in Charleston County, South Carolina. The 30" effluent outfall line and easement area are more particularly shown and delineated on a drawing entitled "MAP TO SHOW LOCATION OF SUBMERGED PARCEL OF LAND FOR PERMANENT EASEMENT IN CHARLESTON HARBOR, CHARLESTON COUNTY, S. CAROLINA", prepared by Kenneth R. Wengler, P.L.S., which is attached hereto and incorporated herein by reference as Exhibit A.

WHEREAS, pursuant to Section 1-11-90 of the South Carolina Code of Laws, 1976, as amended, the STATE is empowered to grant certain rights-of-way or easements through and over riverbeds and marshlands for construction, installation, operation, and maintenance of discharge lines over, on, or under such land or marshland as are owned by the STATE; and

WHEREAS, COMMISSION is desirous of obtaining the hereinafter described easement through and over riverbeds and marshlands in Charleston County, and the STATE considers the granting of such an easement to be in the public interest.

NOW, THEREFORE, the STATE as Grantor, in consideration of the sum of One (\$1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged, does hereby grant, remise, and release unto COMMISSION, its successors and assigns, a right-of-way easement in, to, upon and over the below described portion of riverbed and marshland; such riverbed and marshland situate in Charleston County and lying below the mean high water line.

This Easement of right-of-way shall be used solely for the purposes incidental with the construction, installation, operation and maintenance of said 30" effluent discharge line. The easement area, which contains approximately 10.535 acres, more or less, is more particularly described as follows:

A strip of submerged land in Charleston Harbor 100' wide (50' on each side of the centerline) commencing at the centerline intersection of Center Street and Middle Street in Mt. Pleasant, Charleston County, South Carolina, the coordinates of said point being N=345422.016, E=2347949.090 based on Lambert Project (South Zone) of South Carolina State Plane Coordinate System; thence South 45 Degrees 21 Minutes 49 Seconds West, 271.00', more or less, along the centerline of Center Street to the intersection of the Coastal Council critical line and the point of beginning; thence continuing South 45 Degrees 21 Minutes 49 Seconds West, 4,589.18' to the point of terminus, said point having coordinates (based on said system) of N=342007.23, E=2344490.68.

The easement area is more particularly shown and delineated on a drawing entitled "MAP TO SHOW LOCATION OF SUBMERGED PARCEL OF LAND FOR PERMANENT EASEMENT IN CHARLESTON HARBOR, CHARLESTON COUNTY, S. CAROLINA", prepared by Kenneth R. Wengler, P.L.S., which is attached hereto and incorporated herein by reference as Exhibit A.

This easement of right-of-way is subject to all easements and rights-of-way of record or which may be revealed by inspection of the property and extends only to the STATE's prima facie ownership.

COMMISSION hereby agrees and covenants with the STATE that COMMISSION, its successors and assigns, shall not block or obstruct navigable waters or cause unreasonable adverse impact on fish, wildlife, or water quality in its use of the easement area. COMMISSION shall use the easement area solely for the purposes incidental with the construction, installation, operation, and maintenance of said 30" effluent outfall discharge line, and shall maintain such easement area and discharge line in good condition.

COMMISSION further agrees and covenants that COMMISSION shall indemnify and hold harmless the STATE from and against any and all liabilities, claims, causes of action and expenses including, but not limited to, reasonable costs and attorney fees, resulting from bodily injury or death to any person or persons or damage to any property at any time that arises from or is incident to the construction, installation, operation, maintenance, or use of the easement granted herein.

In the event of major maintenance, after construction, affecting the bed of the waterway, the South Carolina Coastal Council and the South Carolina Water Resources Commission shall be notified in writing prior thereto.

COMMISSION will comply with and be bound by any and all applicable State statutes, regulations and terms and conditions of any permits or agreements concerning this project and any and all lands and waters involved therewith.



This Easement may be terminated by the STATE, in its discretion and such interests as the STATE may have shall revert to the STATE if COMMISSION, its successors and assigns: (1) quits and abandons all use of such effluent discharge line, in which case this easement of right-of-way shall terminate thirty (30) days after the date of such abandonment; or (2) continues an uncorrected violation or breach of any of the terms and conditions herein.

It is further understood and agreed that this easement is not to be construed as an easement granted to the exclusion of the STATE or to others later granted a similar right. This easement is subject to all easements, permits, restrictions and covenants of record, or of plats of record, or which may be revealed upon inspection of the property.

IN WITNESS WHEREOF, this instrument is being executed in accordance with the action of the South Carolina Budget and Control Board at its meeting held on the 27th day of October, 1987.

WITNESSES:

STATE OF SOUTH CAROLINA  
BUDGET & CONTROL BOARD

Mark A. Elam  
Jill C. [Signature]

BY: [Signature]  
Governor Carroll A. Campbell, Jr.  
Chairman

MOUNT PLEASANT WATERWORKS AND  
SEWER Commission

[Signature]  
Leona M. Tomlinson

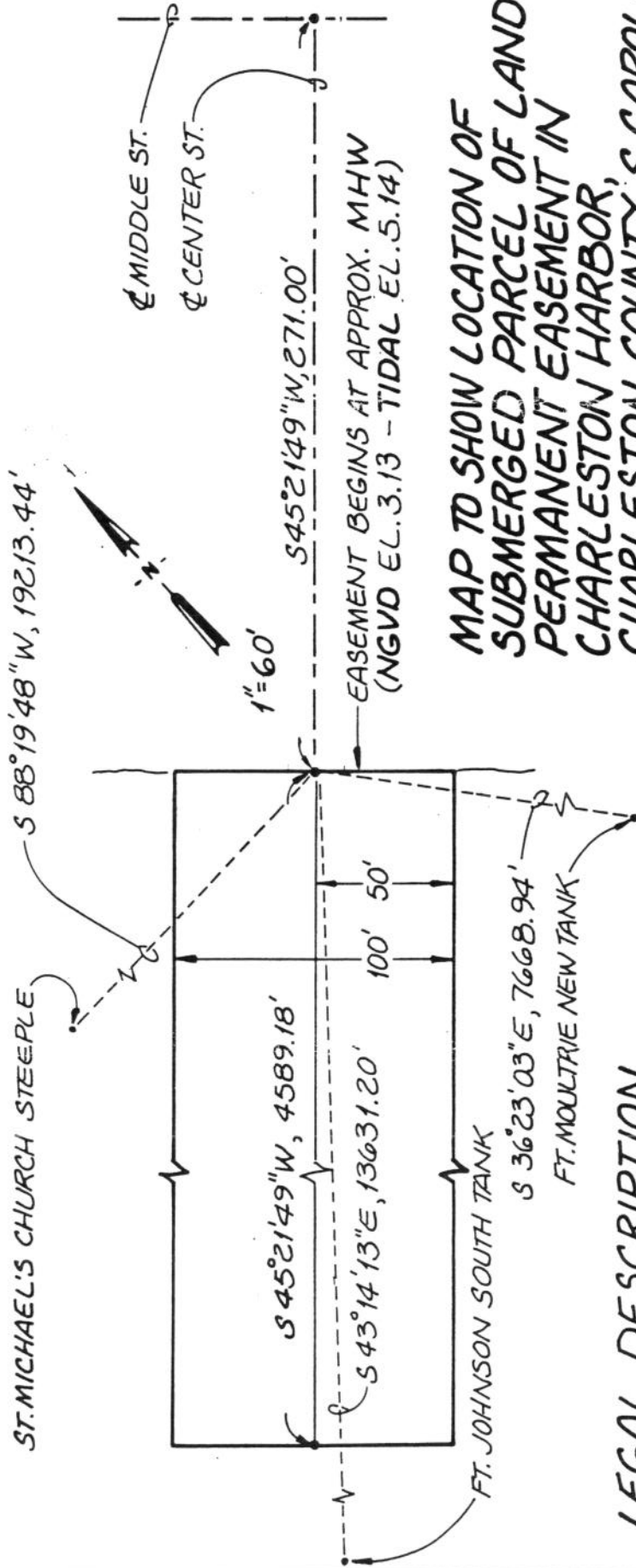
BY: [Signature]  
TITLE: Chairman

(signatures continue)

BKF 170PG846

ATTORNEY GENERAL'S OFFICE

Approved: Kenneth B Woodruff



**MAP TO SHOW LOCATION OF SUBMERGED PARCEL OF LAND FOR PERMANENT EASEMENT IN CHARLESTON HARBOR, S. CAROLINA**

**LEGAL DESCRIPTION**

A STRIP OF SUBMERGED LAND IN CHARLESTON HARBOR 100' FEET IN WIDTH, 50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE: COMMENCE AT THE CENTERLINE INTERSECTION OF CENTER STREET AND MIDDLE STREET IN MT. PLEASANT, CHARLESTON COUNTY, SOUTH CAROLINA THE COORDINATES OF SAID POINT BEING N= 345 422.016, E= 2347949.090 **BASED ON LAMBERT PROJECTION (SOUTH ZONE) OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM; THENCE S45°21'49"W, 271.00 FEET (MORE OR LESS) ALONG THE CENTERLINE OF CENTER STREET TO THE INTERSECTION OF THE COASTAL COUNCIL CRITICAL LINE AND THE POINT OF BEGINNING:**

THENCE CONTINUE S 45°21'49"W, 4589.18 FEET TO THE POINT OF TERMINUS, SAID POINT HAVING COORDINATES (BASED ON SAID SYSTEM) OF N= 342007.23, E= 2344490.68.

THE ABOVE DESCRIBED PARCEL CONTAINS 10.535 ACRES, MORE OR LESS.

MAP AND LEGAL DESCRIPTION PREPARED BY:

*Kenneth R. Wengler*  
 KENNETH R. WENGLER, P.L.S.  
 S. CAR. REG. NO. 7410

STATE OF SOUTH CAROLINA )  
 )  
COUNTY OF RICHLAND )

BKF 170PG847

PERSONALLY appeared before me Mark R. Elam  
and made oath that he/she saw the within named State of South  
Carolina, Budget and Control Board, by its Chairman, Governor  
Carroll A. Campbell, Jr., sign, seal, and as its act and deed  
deliver the within written Easement, and that he/she, along with  
Jill Clary, witnessed the execution thereof.

Mark R. Elam

SWORN to before me this 27th  
day of October, 1987.

Joy Adkins (L.S.)  
Notary Public for South Carolina

My Commission Expires: 3-21-95

\*\*\*\*\*

STATE OF SOUTH CAROLINA )  
 )  
COUNTY OF CHARLESTON )

PERSONALLY appeared before me Ronald E. Bycroft  
and made oath that he/she saw the within named Mount Pleasant  
Waterworks and Sewer Commission by Charles H. Hindman,  
its Chairman, sign, seal, and as its act and  
deed deliver the within written Easement, and that he/she, along  
with Leona Tomlinson, witnessed the execution thereof.

Ronald E. Bycroft

SWORN to before me this 1st  
day of October, 1987.

Susan S. Mellichamp (L.S.)  
Notary Public for South Carolina

My Commission Expires: 8/16/89

**From:** [kecheeks803@yahoo.com](mailto:kecheeks803@yahoo.com)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Post 45 Comments - Deepen Charleston Harbor  
**Date:** Friday, February 10, 2012 7:33:43 AM

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During the planning for dredging operations to deepen Charleston Harbor, I recommend that the Corps consider taking a portion of the dredged material and deposit it on Crab Bank. Crab Bank used to be an important nesting site for shorebirds. Over time, the island has become just a very small area of land at high tide. And, shore birds have practically abandoned its use as a nesting site. A similar dredging project at the mouth of the Savannah River has yielded extremely positive results by building up an area that's used heavily by shorebirds. I agree that shipping in Charleston Harbor is critical to the state's economy, and that the harbor must be deepened to accommodate newer, larger ships. However, the sand from the dredging efforts could be put to good use to restore Crab Bank. It just doesn't make much sense to me to haul it all out to sea. I hope you will consider this request.

Sincerely,

Ken Cheeks  
North Augusta, SC

**From:** [Dennis Forsythe](#)  
**To:** [Chas-Post45-Comments](#); [Chamberlain, David SAC](#)  
**Subject:** Post-45 study comments  
**Date:** Thursday, February 09, 2012 10:07:52 AM

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Dear Sir,

Re: Post-45 Study

I want to encourage you to use some of the materials dredged from the harbor to increase the size and height of Crab Bank in Charleston Harbor. In the past Crab Bank was a significant nesting grounds for pelicans, gulls, terns and others. Recently the bank has eroded so little of it is usable for birds. By using some of the dredged materials from the harbor you could greatly benefit nesting birds and reduce the need to find a place to put some of the materials.. Such projects in the Savannah River and elsewhere have been very successful. Please let me know if I can be of any additional help on this matter.

vr,

Dennis M. Forsythe PhD, EM-AOU  
Emeritus Professor of Biology  
The Citadel  
171 Moultrie St  
Charleston, SC 29409

--

Dennis M. Forsythe PhD  
748 Swanson Ave  
Charleston, SC 29412  
843.795.3996-home  
843.953.7264-fax  
843.708.1605-cell  
dennis.forsythe@gmail.com

**From:** [Robert Ryan](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Public Comment on Deepening Project  
**Date:** Thursday, February 09, 2012 11:06:10 AM

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To the point, the Clouter Creek Disposal Area (CCDA) is directly adjacent the former Naval Complex and was the main disposal area for the Base for almost 100 years. While the Base was closed under the BRAC process, the CCDA was not, but its continued use by the future tenants of the former Base was key to the successful redevelopment of one of the largest closings the Navy had ever done. This fact was recognized by many folks, including then Secretary of the Navy John Dalton. The Secretary committed that the CCDA would be made available to new users of the former Naval Base and that commitment has been reaffirmed by previous Commanders of USACOE Charleston District, Lt. Colonels Hazel and Kirk. The problem is, the commitment is not something that is spelled out in writing in the form of an agreement. While I am confident that the Redevelopment Authority could have wrested the CCDA from the Navy, I think all those concerned at the time thought it was best to let the USACOE take control of the area and put their faith in the fact that dredged material from the former Naval Complex would continue to be accepted into the CCDA. That notion was dispelled last year when the Shipyard was told that it would not be allowed to dredge into the CCDA. Several ships had to be turned away because of this action. Lt. Col. Kirk did what he could, which was a help, and I believe that staff is working to keep users informed of the status of ditching and diking, but how does the District plan to weigh the commitments to the former Naval Complex in its decision making process regarding harbor deepening specifically for the CCDA?

**From:** [Al Hitchcock](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Public comments on harbor deepening  
**Date:** Monday, December 05, 2011 6:29:04 PM

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Good evening,

I am commenting on behalf of Save the Light, Inc, the non-profit organization created to save and preserve the old Morris Island lighthouse.

We are very interested in seeing the harbor deepened to continue our coastal legacy that created Charleston in the first place and in that regard, would be very interested in proposing that the dredge spoils be placed near the base of the lighthouse or around it so that the erosion that has occurred since the early 1900's could be countered. We are interested in suggesting that the lighthouse, that now belongs to the State of South Carolina, could be more stabilized with additional sand around it's foundation. We believe this effort could be coordinated such that most of the dredge spoils could be simply pumped across Morris Island, and disposed at or near the lighthouse. The erosion of the front beaches of Morris Island is well documented by looking at the pre civil war maps and charts, and comparing them to the actual beaches of today. The previously constructed dikes around the current dredge spoil areas on Morris Island are badly caving into the sea on the East side. They will completely be of no value within a few years if the current situation is not corrected soon. I have observed over the past 30 years this erosion of the dikes and the sandbars that come and go around the lighthouse.

We support the dredging of the harbor to deepen it, and believe the materials should and can be used to some advantage rather than hauling them out to sea and disposing there. We will be glad to meet and discuss these suggestions. Our most recent phase of work on the lighthouse installed 68 micro-piles to a depth of 65 feet under the foundation, inside the cofferdam, and we believe the tower is stabilized on this new concrete foundation.

Thank you for the opportunity.

Al Hitchcock

Chairman

Save the Light, Inc.

843-744-4477 office

843-364-9301 cell

"Happiness is not a station you arrive at in life, but a manner of traveling."



**From:** [Pinson, Ray](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Public Notice List  
**Date:** Monday, November 28, 2011 4:35:17 PM

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Hello – I have reviewed the Charleston Harbor Post 45 Project link on the web site, but did not see some pertinent information that you may be able to help me with:

- How can I get on an automated electronic notification for public hearings and scoping meetings for this project;
- The only place I found notice of the December 13th meeting was in the newsletter – is there somewhere else that indicates meeting dates?
- When will the public comment period end?

Thank you in advance for this information.

Raymond L. Pinson, Jr.

Governmental Relations Representative

Santee Cooper

(843) 761-8000, ext. 4777

mobile: (843) 709-4020

ray.pinson@santecooper.com <<mailto:ray.pinson@santecooper.com>>

**Confidentiality Notice:**

This message is intended exclusively for the individual or entity to which it is addressed. This communication may contain information that is proprietary, privileged, confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy or disseminate this message or any part of it. If you have received this message in error, please notify the sender immediately either by phone or reply to this e-mail, and delete all copies of this message.

**From:** [Anita\\_Barnett@nps.gov](mailto:Anita_Barnett@nps.gov)  
**To:** [WASO\\_EQD\\_ExtRev@nps.gov](mailto:WASO_EQD_ExtRev@nps.gov); [Chas-Post45-Comments](mailto:Chas-Post45-Comments)  
**Cc:** [Ben\\_West@nps.gov](mailto:Ben_West@nps.gov); [Linda\\_York@nps.gov](mailto:Linda_York@nps.gov); [Timothy\\_Stone@nps.gov](mailto:Timothy_Stone@nps.gov)  
**Subject:** Re: ER-11/0725 NOI DEIS Charleston Harbor Deepening Study  
**Date:** Monday, October 03, 2011 1:59:31 PM  
**Attachments:** [signed ER 11\\_0725 Charleston Harbor NOI.pdf](#)

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I apologize I sent the wrong attachment. Here is the correct attachment  
(See attached file: signed ER 11\_0725 Charleston Harbor NOI.pdf)

Anita Barnett  
404-507-5706

Anita  
Barnett/Atlanta/N  
PS  
10/03/2011 01:53 PM  
WASO\_EQD\_ExtRev,  
Chas-Post45-Comments@usace.army.mil  
cc  
Timothy Stone/FOSU/NPS@NPS, Linda  
York/Atlanta/NPS@NPS, Ben  
West/Atlanta/NPS@NPS  
Subject  
ER-11/0725 NOI DEIS Charleston  
Harbor Deepening Study

[attachment "ER11\_0725 Signed Charleston Harbor Deepening Study.pdf"  
deleted by Anita Barnett/Atlanta/NPS]

Attached above are the National Park Service Comments on the Notice of  
Intent to prepare a Draft EIS for the Charleston Harbor Deepening Study by  
the U. S. Army Corps of Engineers. If you have any questions please  
contact Anita Barnett at 404-507-5706.

Anita Barnett  
Environmental Protection Specialist  
Planning and Compliance Division  
Southeast Regional Office  
404-507-5706

**From:** [Jim Cubie](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** Replenishing Crab Bank  
**Date:** Friday, February 10, 2012 9:37:17 AM

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Please use dredge fill to renourish Crab Bank. Many of us fought to get this island protected for seabirds– and succeeded. Please do this.



**Lonnie N. Carter**  
President and  
Chief Executive Officer

February 8, 2012

Mr. Mark Messersmith  
Planning and Environmental Branch  
Charleston District  
US Army Corps of Engineers  
69A Hagood Avenue  
Charleston, SC 29403

One Riverwood Drive  
Moncks Corner, SC 29461-2901  
(843) 761-4192  
Fax: (843) 761-7037  
P.O. Box 2946101  
Moncks Corner, SC 29461-6101

**RE: Santee Cooper Comments to the Feasibility Study for Deepening the Charleston Harbor (Post-45 Study)**

Dear Mr. Messersmith:

On August 12, 2011, in compliance with the National Environmental Policy Act, the Corps of Engineers issued a Notice of Intent (NOI) in the Federal Register 76 Fed. Reg. 50187 (Aug. 12, 2011) to prepare a Draft Environmental Impact Statement (DEIS) for a study on the feasibility of deepening the Charleston Harbor. Santee Cooper sincerely appreciates the opportunity to comment on this important project and we urge the Corps of Engineers to expeditiously approve the project on the merits stated herein.

Santee Cooper is South Carolina's state-owned electric and water utility, and the state's largest power producer. Santee Cooper provides power to more than two (2) million South Carolinians including more than 165,000 retail customers in Berkeley, Georgetown, and Horry Counties, 20 electric cooperatives with more than 700,000 customers located in the state's 46 counties, 30 large industrial facilities in 10 counties, the town of Bamberg, the city of Georgetown and the Charleston Air Force Base. Santee Cooper is mandated to provide low cost reliable electricity to its residential, commercial, industrial, and municipal customers in South Carolina.

This project will be one of the defining moments for South Carolina's future in terms of economic growth, stability, and competitiveness to the region. The Charleston Port represents a significant regional and national economic impact with 20,000 companies in two dozen states relying on Charleston to access overseas markets. It is no secret that the shipping industry, just like our own electric power industry, is rapidly changing. New, Post-Panamax shipping vessels requiring deeper draft depths have already been calling on the Charleston Harbor years before the Panama Canal Expansion Project is scheduled for completion in 2014. These vessels are currently being forced to wait for tidal advantage at the entrance to the Charleston Harbor, which delays the ultimate import/export of valuable cargo; thereby increasing transportation costs for commerce and industry. Once the Panama Project has been completed, even more container traffic is expected for the South Atlantic Region.

Mark Messersmith  
February 8, 2012  
Page Two

With ship-builders upsizing in an effort to reduce costs for consumers and businesses, the U.S. needs a South Atlantic port able to efficiently handle these larger vessels. Charleston Harbor has been identified as one of 17 commercial strategic ports in the United States. It is currently the eighth largest U.S. seaport in cargo value at \$50 billion per year. Charleston is the fourth busiest of all the East Coast ports for container traffic with 1.38 million shipping container units per year. When comparing ports along the eastern seaboard, it becomes clear that Charleston provides the best return on investment. In fact, the Charleston Harbor deepening is estimated to deliver \$106 million in net benefits annually for an approximate \$140-million federal investment.

Charleston Harbor is much less expensive to deepen and more efficient to maintain with fewer environmental issues. According to statistics from the SC State Ports Authority, the total cost of the last Charleston Harbor deepening to 45 feet in 2004 was 25 percent less than the mitigation costs alone for the Savannah project. The recent 45-foot deepening project provides a valuable foundation for the Corps to use existing studies, models, and engineering to save time and expense on the 50-foot deepening effort.

As an economic development arm of the state, Santee Cooper is keenly aware that jobs are an important result of a successful shipping industry. According to a recent article in the Professional Mariner, there are currently 260,000 port-related jobs in South Carolina alone accounting for 11% of all jobs in the state. People working in all 46 counties across South Carolina, throughout the Southeast, and beyond rely on international trade through the Port of Charleston. While we compete with other states for new business and jobs, the success of our port will drive our state's economic success. A basic economic model for any business is to create competitive advantage by offering something that no one else can. Charleston could do just that by offering the only 50-foot deep port in the South Atlantic.

The SC State Ports Authority has risen to the challenge of responsible growth to accommodate the shipping industry. While the first container ship in Charleston held around 600 containers in 1966, the port today handles ships carrying more than 9,000 20-foot shipping containers. Considering the Ports Authority's \$1.3-billion, 10-year capital plan for infrastructure improvements and new capacity on the land side, the only missing component is harbor-deepening on the water side.

In conclusion, next generation ships are getting bigger and they require next generation channels to accommodate them. With this fact as a current reality, not a speculative theory, the Southeast needs to be ready with 50-foot deep harbors. Further, when reviewing the

Mark Messersmith  
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available port expansion options, it is clear that the Charleston Harbor stands out above the competition for a number of reasons as stated within these comments. Santee Cooper supports the approval of this project and we look forward to a favorable outcome of the DEIS.

Thank you again for the opportunity to participate in the scoping process. Please feel free to call or reply if you need any additional information or clarification on Santee Cooper's comments.

Sincerely,

A handwritten signature in cursive script that reads "Lonnie N. Carter".

Lonnie N. Carter

LNC/hlm

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

The harbor deepening project is critical to the economic success of the Low Country, our state and our Region. I am in total support of this project, and encourage the project to move forward at the most rapid pace possible, while doing due diligence to ensure the health and welfare of our community and environment is maintained.

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Jim Brickell, Ph.D. PE, AECOM and Member of Charleston Metro Chamber of Commerce  
3830 Faber Place Dr. Ste 300, N. Chas SC 29405-1316

Name / Title / Business / Individual / Organization  
Mailing Address / Telephone / E-mail address

james-brickell@aecom.com

## CHARLESTON HARBOR DEEPENING STUDY

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For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

Information is very informative & helpful.  
However if it were offered on line  
more of the community could get  
involved.

I thank you for being here  
and allowing us to get this information

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Alma B. Greer 1273 Lewellyn Rd  
Mt. Pleasant, SC 29464

Name / Title / Business / Individual / Organization

Mailing Address / Telephone / E-mail address



## CHARLESTON HARBOR DEEPENING STUDY

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For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

No Delays, too many jobs at stake

make quick & thorough the study  
for the harbor.

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

John Krusch-Nilson INTL

Name / Title / Business / Individual / Organization

2017 Pittsburgh Ave C, CHAS SC 29405

Mailing Address / Telephone / E-mail address

808-764-1482 x301

JKrusch@PILYNINTL.COM

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

HAVING LIVED IN MARYLAND FOR MANY YEARS AND WAS INVOLVED IN THE BALTIMORE HARBOR DEEPENING STUDY TO 50 FT. IT IS MY VIEW THAT THE DEEPENING OF CHARLESTON HARBOR TO 50 FT. IS AN ABSOLUTE MUST FOR THE ECONOMY OF THE REGION AND STATE AS A WHOLE. POTENTIAL IMPACTS TO THE ENVIRONMENT MUST BE STUDIED FIRST AND FULLY UNDERSTOOD PRIOR TO THE PROJECT MOVING FORWARD

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

TOM REED, RESIDENT OF MT. PLEASANT

Name / Title / Business / Individual / Organization

1573 APRIL DRIVE MT. PLEASANT, SC 29464

Mailing Address / Telephone / E-mail address

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

I am a law student at the Charleston School of Law & I am writing a law review article about dredging ports on the East Coast of the United States. I am focusing on the legal interpretations used by the Corps in the 404 exemptions and I am planning to endorse dredging the Charleston Port. If someone could answer a few of my questions I would appreciate it. Thank you!

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Caroline Bion / Charleston School of Law

Name / Title / Business / Individual / Organization

9 Wraggborough Ln, Charleston SC 29403

Mailing Address / Telephone / E-mail address

(843) 870-2206, carolinebion@me.com

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

Interested in using the soil for  
Protection of the Morris Island Light  
Please consider this in the study and  
to protect the old dike in front of M. Isl.

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

John D. O'Leary SAULTER LIGHT

Name / Title / Business / Individual / Organization

John O'Leary

Mailing Address / Telephone / E-mail address

## CHARLESTON HARBOR DEEPENING STUDY

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For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

FORESTRY is a major economic engine in South Carolina and access to global markets are critical. IN 2010, \$1.3 Billion in forest products were exported out of state. Key markets included the EU, Canada, and Asian markets, especially China. In terms of economic development, many projects hinge on efficient operation of Charleston port facility.

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Tim Adams, Resource Development Div Dir, SC Forestry Comm.  
~~Bob~~ tadams@forestry.state.sc.us  
Name / Title / Business / Individual / Organization  
Mailing Address / Telephone / E-mail address

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

I THINK THAT IT IS CRITICAL TO INCLUDE TOWN CREEK'S  
UPPER REACHES, WHICH SERVES THE 168 ACRE LAMAR ISLAND  
PROPERTY, AND THE UPPER REACHES OF SHIPYARD CREEK, WHICH  
SERVES THE 130 ACRE MACALLOM PROPERTY, IN THE HARBOR  
DEEPENING SCOPE.

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Stuart Covert / CC+T

Name / Title / Business / Individual / Organization

stuart@cctre.com

Mailing Address / Telephone / E-mail address



## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
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- 1) will new channel be also considered
- 2) Salt water intrusion?
- 3) Dissolved ~~oxygen~~ oxygen?
- 4) Changes to hydrodynamic regime?
- 5) How will underpinning studies be performed? Contractors / in-house?

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Name / Title / Business / Individual / Organization



Mailing Address / Telephone / E-mail address

## CHARLESTON HARBOR DEEPENING STUDY

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For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

What will be the impact on Castle Pinckney?  
The Castle is now owned by Ft. Sumter Camp 1269,  
Sons of Confederate Veterans - Our purpose is the  
restore the Castle as a viable historical monument

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Thomas P. Lowmeyer JR, Attorney Ft. Sumter Camp 1269 SCV  
128 Meeting St. Charleston SC (843) 723-1688  
tomlowmeyer@att.net



## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

THE HARBOR SHOULD BE DEEPENED TO A DEPTH OF 52' TO ALLOW THE  
LARGE VESSELS CARRYING EXPORT (HEAVY) CARGO TO FOREIGN COUNTRIES  
CHARLESTON SHOULD REMAIN A MAJOR INTERNATIONAL PORT

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

J. MICHAEL MORRIS VP EXPORT INTERNATIONAL FORWARDERS  
Name / Title / Business / Individual / Organization  
843-769-7030 TMIKEMORRIS@ODYSSEYLOGISTICS.COM  
Mailing Address / Telephone / E-mail address

# SOUTHERN ENVIRONMENTAL LAW CENTER

Telephone 843-720-5270

43 BROAD STREET, SUITE 300  
CHARLESTON, SC 29401-3051

Facsimile 843-720-5240

February 10, 2012

## VIA E-MAIL

Mark Messersmith  
Planning and Environmental Branch  
Charleston District, U.S. Army Corps of Engineers  
69-A Hagood Avenue  
Charleston, SC 29403  
Chas-Post45-Comments@usace.army.mil

**Re: Charleston Harbor Navigation Improvement Project, Charleston, SC**

Dear Mr. Messersmith:

On behalf of the Coastal Conservation League (League), the Southern Environmental Law Center (SELC) submits these comments in response to the Notice of Intent to Prepare a Draft Environmental Impact Statement (DEIS) for a Study on the Feasibility of Deepening Charleston Harbor. As the Corps is aware, the League, which has thousands of members in the Charleston area, and SELC were very involved in the South Carolina State Ports Authority's (SPA) proposals for a "Global Gateway" terminal on Daniel Island and the Container Terminal at the Charleston Naval Complex. We appreciate the opportunity to submit these comments, and look forward to remaining engaged in this process, which has significant implications for Charleston and the South Atlantic region.

The U.S. Army Corps of Engineers (Corps) has announced its intention to prepare a draft environmental impact statement (DEIS) for the Charleston Harbor deepening study. According to the Notice of Intent, the purpose of the DEIS and feasibility study is to investigate modifications of the existing Charleston Harbor to accommodate larger container vessels. The Corps anticipates increasing deployment of larger container ships, including "Super Post-Panamax" vessels, due to the Panama Canal Expansion Project. The Corps explains further in its Notice of Intent that it expects the transition to larger vessels to occur rapidly and that additional depth in Charleston Harbor will, in the Corps' view, be needed by 2024 when the transition from the current Panamax fleet is complete.

## **Project Purpose**

Under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 C.F.R. §§1500-1508), an EIS must be prepared by the responsible agency where an approved action would constitute a "major Federal action[s] significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). The public scoping process is used to determine the range of issues to be addressed in the EIS and which issues are of greatest concern to the public; scoping also keeps interested parties informed and gives them an opportunity to participate in this process. See 40 C.F.R. § 1501.7.

NEPA requires that an EIS contain a statement of purpose and need for the proposed action. Courts regularly have held that the statement of purpose and need should be defined to reflect the objective, general need for the proposed activity rather than the specific, narrow course of action preferred by the applicant or agency. The statement of purpose and need in an EIS must not be defined too restrictively, and may not be so narrowly defined as to reflect the Corps' preferred course of action rather than its underlying basic need and purpose. The Corps should remain vigilant in guarding against an overly restrictive statement of purpose as the agency begins to develop the DEIS.

In light of the significance of the project here, to implement NEPA, the Corps should "consider and express th[e] activity's underlying purpose and need from a public interest perspective . . . ." 33 C.F.R. § 325, App'x B(9)(b)(4). The Corps must not select a statement of project purpose that artificially restricts its analysis to alternatives that benefit SPA to the exclusion of other reasonable alternatives beyond deepening the Charleston Port for accommodating the larger class of container ships. Such an approach would violate NEPA and would frustrate a true alternatives analysis, which must include an evaluation of whether another port or ports in the South Atlantic or the nation (or some other alternative) could accommodate the larger class of container ships with a higher cost benefit ratio and fewer impacts on the environment. In other words, a general objective of the project might be to accommodate the larger class of Post-Panamax vessels in the Southeast as opposed to simply evaluating alternative depths of deepening the Charleston Harbor. Without a clear purpose and need statement and a true "Multi-Port Analysis" that evaluates the relative costs and benefits of achieving the general objective of the deepening project from a public interest perspective, the Corps, would be unable to comply with NEPA.

## **Reasonable Alternatives and Related Projects**

The alternatives analysis is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. It requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E). And in conducting this analysis, the agencies must "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a). The level of scrutiny required by NEPA in the

alternatives analysis is proportional to the scope of the proposed project and the nature of the environmental impacts associated with it. See Brooks v. Volpe, 350 F. Supp. 269, 275-76 (W.D. Wash. 1972).

At present time, the Corps is evaluating (and will continue to evaluate) deepenings of multiple channels in the Atlantic and Gulf regions for the same purpose of accommodating larger container ships and creating transportation efficiencies that will allegedly benefit the nation. The competition to accommodate the Post-Panamax and Super Post-Panamax ships amongst ports in these regions is fierce, yet industry observers have explained that not all of these proposed port expansions are necessary. Nevertheless, even in these difficult economic times, the Corps is evaluating each proposal in isolation from one another, which will lead to duplicative and costly overcapacity.

To rationally evaluate the Charleston Port deepening, the Corps must evaluate whether another harbor could be deepened and improved for a lesser amount of money and fewer environmental impacts. Only by considering related and similar projects together will true cumulative environmental impacts be exposed, and only then will all reasonable alternatives emerge, along with the proper, region-wide criteria for evaluating them.

In fact, under NEPA, where “several proposals for [projects] that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together.” Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976). Accordingly, a comprehensive or programmatic analysis is appropriate where the proposal itself is regional or systemic in scope, or where the proposal is one of a series of interrelated proposals that will produce cumulative system-wide effects that can be meaningfully evaluated together. Georgia River Network v. U.S. Army Corps of Engineers, 334 F. Supp. 2d 1329, 1342 (N.D. Ga. 2003) (citing Izaak Walton League of America v. Marsh, 655 F.2d 346, 374 (D.C. Cir. 1981)).

The potential cumulative and synergistic environmental effects of the port expansion projects demand a systemic or programmatic analysis. The projects in the South Atlantic together, such as Charleston, Savannah, and Jacksonville, present heightened risks to endangered species such as the right whale and shortnose sturgeon. Additionally, these projects are proposed in multiple rivers and marine systems on the East Coast and would cumulatively alter and destroy rare tidal areas, including wetlands and marshes of national importance. The projects would also degrade estuarine wildlife values, fisheries, and disrupt coastal sediment flows. Considering the potential adverse impacts the projects would have on coastal resources and marine life, it is imperative that the Corps analyze the adverse impacts of deepening Charleston in conjunction with the impacts of the other suite of deepening projects in the region.

We have encouraged this systematic approach to the Savannah District in its evaluation of the proposed Savannah Harbor Expansion project and to the Charleston District in our comments on the Global Gateway and the Charleston Naval Complex. The allocation of public

resources proposed for meeting regional needs requires that the Corps take a serious look at all possible ways of meeting those needs at the least environmental and fiscal costs.

### **Environmental Impacts**

In addition to scoping issues related to purpose and need and alternatives, we urge that the impact analysis be suitably broad to be able to fully and fairly compare the potential location, mode, and functional alternatives. To ensure that an EIS fulfills the purposes underlying NEPA it “shall provide a full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R § 1502.1. A full and fair discussion of environmental impacts includes a discussion of direct, indirect, and cumulative impacts for a given project. *Id.* at § 1508.25(c)(3).

In this case, there are a wide range of environmental impacts that require thorough examination in the DEIS and feasibility study. These impacts include, but are not limited to, the following:

- **Saltwater Intrusion.** Repeated deepenings of estuaries cause saltwater from the Atlantic Ocean to intrude upstream in ways that can significantly alter a waterbody’s natural interface of saltwater and freshwater. Saltwater intrusion can result in a number of serious problems, including contamination of surface waters and groundwater supplies. As the Section 905(b) Analysis for this project notes, a larger wedge of saltwater in this case could contaminate sources of freshwater as chlorides are allowed to reach upstream water intakes.

Deepening the harbor also threatens to contaminate groundwater supplies by increasing salinity and reducing the thickness of the confining layer separating the bottom of the harbor and groundwater supplies thereby facilitating saltwater intrusion into the aquifer under the navigation channel.

- The DEIS must carefully investigate potential impacts from this proposed deepening to surface and groundwater supplies of freshwater.
- **Water Quality Impacts.** Deepenings, such as this, can contribute to the reduction of dissolved oxygen levels to unnaturally low levels on a river’s bottom. Dissolved oxygen declines imperil aquatic species and must be studied carefully in the DEIS. In addition, the activity of dredging itself can negatively impact water quality by stirring up sediments and toxic materials that may be found on the bottom of the harbor.
- **Deposit of dredged material.** Deepenings and channel maintenance activities can directly destroy and disrupt wildlife habitat via the emplacement of millions of cubic yards of dredged spoil. In addition to studying dredged material for the presence of contaminants that can be harmful to human health and wildlife, the DEIS must carefully study how the

deposit of large quantities of dredged material in confined disposal facilities (CDFs) will affect the surrounding environment. In addition, we agree with the statement in the Section 905(b) Analysis that careful attention must also be paid to the disposal of additional dredged materials at the Charleston Ocean Dredged Material Disposal Site (ODMDS).

For purposes of evaluating this proposal, the DEIS should also contain a thorough discussion and assessment of the current state of CDFs and ODMDS sites utilized in connection with the Charleston Port and should include a robust monitoring plan relating to the deposit of additional dredged materials in these facilities.

- Impacts to Important Bird Habitat. An important area to conserve and protect in connection with this proposal is Crab Bank, a seabird nesting island critical for South Carolina seabird populations. Wakes from ships in the harbor may already be contributing to the erosion and decline of this important habitat, and the DEIS should take care to study the impact of larger wakes from larger ships on Crab Bank, which provides vital resting and feeding habitat for shorebirds and wading birds.

The DEIS should also include a discussion of the ways in which dredged materials from the harbor have been used in the past to create or protect bird habitats, and the DEIS should include and discuss all related monitoring data collected with respect to the use of dredged materials for these purposes.

- Impacts to Threatened and Endangered Species. We are concerned about the statement made in the Section 905(b) Analysis that “[p]otential effects on threatened and endangered species . . . [are] not believed to be a significant issue.” Section 905(b) Analysis at p. 22. We believe there are significant issues here related to threatened and endangered species that require serious consideration under NEPA and appropriate consultation under the federal Endangered Species Act.

In addition to the effects of this proposal on species such as North Atlantic right whales, manatees, and sea turtles, impacts to federally-protected shortnose and Atlantic sturgeon deserve careful attention. Not only will impacts on water quality and changes in salinity threaten these aquatic species, but other, reasonably foreseeable actions in the basin, including (as described below) the relicensing of the Santee Cooper Hydroelectric Project, must be evaluated in connection with the deepening. See, e.g., 40 C.F.R. § 1508.7 (saying NEPA requires the consideration of cumulative impacts, which are “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions”).

- Air Quality. The DEIS must carefully examine impacts to air quality from the proposed project. The DEIS must study how the deepening would impact the mix of ships visiting the Charleston Port and how this new composition of ships calling on Charleston will

impact air quality. In addition, the DEIS must also examine the indirect impacts of this proposal, including how increased truck trips would contribute to air quality problems in the region. Specifically, we recommend that additional truck emissions and congestion be evaluated for the entire Charleston Port.

It should be noted that marine shipping operations constitute a major source of harmful air pollutants. Ocean-going vessels, land-side equipment, and secondary emissions from port development have significant impacts to air quality. For that reason, EPA recently produced an Evaluation Report, addressing these emissions.<sup>1</sup> The report explains that air pollution from port activities “impact[s] communities surrounding port areas” and has “significant environmental and human health impacts, such as cancer and asthma.” *Id.* at 1. Emissions of greatest concern include nitrogen oxides (NOx), particulate matter (PM), sulfur oxide (SOx), carbon monoxide (CO), hydrocarbons (HC), and air toxics, especially diesel exhaust. *Id.* at 2.

The Report goes on to explain that “[d]iesel and other emissions from port activities” harm onshore communities through “increased cancer rates, asthma, other respiratory and cardiovascular diseases, and premature death.” *Id.* at 3. EPA has recognized that impacts of diesel emissions from ports extend beyond local communities to “contribute significantly to regional air pollution.” *Id.* at 2, 3. Similarly, a 2008 study by the National Oceanic and Atmospheric Administration found that commercial shipping results in “a significant impact on air quality and health on both local and regional scales.” *Id.* at 3.

The DEIS should include detailed dispersion modeling to accurately assess and disclose impacts to local communities and to account for the fact that those nearest the source face the greatest threat from air toxics, as well as the potential for “hot spots” of aggravated effects to occur. Similarly, given the wide and growing recognition of the significant harm port-generated air pollution can do to human health, the Corps should include a risk-based health impact study.

Finally, the DEIS should assess the project’s impacts to the region’s status under the Clean Air Act (“CAA”), 42 U.S.C. §§ 7401-7671q (2011). The DEIS should analyze and disclose whether the project would push impacted areas into non-attainment or maintenance status and what the project’s incremental impacts on compliance, or lack thereof, with applicable National Ambient Air Quality Standards will be.

- **Ballast Water and Invasive Species.** The expansion of the harbor has the potential to facilitate the introduction of invasive species through the discharge of ballast water from deep-draft vessels. The DEIS must examine whether increasing the amount of ballast water exchange within Charleston Harbor could adversely affect the environment.

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<sup>1</sup> See EPA Needs to Improve Its Efforts to Reduce Air Emissions at U.S. Ports, Report No. 09-P-0125 (Mar. 23, 2009), available at <http://www.epa.gov/oig/reports/2009/20090323-09-P-0125.pdf> (last visited Feb. 10, 2012).

- **Socioeconomic Impacts.** The CEQ Guidelines point out that the “human environment” is to be “interpreted comprehensively” to include “the natural and physical environment and the relationship of people with that environment.” 40 C.F.R. § 1508.14. Agencies need to assess not only so-called, “direct” effects, but also “aesthetic, historic, cultural, economic, social, or health” effects, “whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.8. When an EIS is prepared “and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.” 40 C.F.R. § 1508.14. The impact of the deepening with its potential for attracting larger ships for causing more truck traffic needs to be evaluated for the whole harbor and all the SPA Terminals within.

### **Cumulative Impacts**

Under NEPA, the Corps is required to thoroughly assess the cumulative effects of the proposed deepening. 40 C.F.R. § 1508.7 & 1508.25. NEPA’s implementing regulations define cumulative effects as “impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.” 40 C.F.R. § 1508.7. The cumulative impact analysis “must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects. . . . [A] cumulative impact analysis must be timely. It is not appropriate to defer consideration of cumulative impacts to a future date when meaningful consideration can be given now.” *Kern v. U.S. BLM*, 284 F.3d 1062, 1075 (9th Cir. 2002) (citation and internal quotation marks omitted).

To properly assess the cumulative effects of the proposed deepening here, the DEIS should carefully evaluate the effects of deepening in combination with the relicensing of the Santee Cooper Hydroelectric Project. At present time, Santee Cooper is going through the relicensing process for the Santee Cooper Hydroelectric Project, which is a system of dams, canals, and two very large lakes that have profoundly altered the natural functioning of the Santee River ecosystem in South Carolina. The uppermost dam of this project, Santee Dam (now known as Wilson Dam), impounds the Santee River to form Lake Marion. That dam’s outflow, rather than discharging into the Lower Santee, is diverted into the Cooper basin for reasons related to navigation and power production. The water diverted into the Cooper basin is impounded by a second dam (Pinopolis), forming Lake Moultrie. By diverting the Santee’s flow into the Cooper River basin, the original project converted the Lower Santee River beneath Santee Dam into a dewatered “dead river” with high salinity levels caused sea water encroachment. An attempt to remedy that ecological damage came nearly forty years later in the form of a Corps project designed to “re-divert” water back into the Santee. In the 1980s, the Corps constructed a new canal connecting Lake Moultrie to the Santee River basin, with the canal’s outfall occurring tens of river miles below the Santee Dam. This canal powers a third hydroelectric facility, St. Stephen Station.



The relicensing of the Santee Cooper Hydroelectric Project in combination with the proposed deepening could have profound and synergistic impacts on the interface of freshwater / saltwater interface in the harbor. The combined impact of these two proposals will affect water quality, fisheries, and other resources in the basin, and the DEIS for the deepening must evaluate the combined effects of these interrelated activities.

### **Economic Considerations**

- In the Section 905(b) Analysis, the Corps concludes that there are National Economic Development benefits associated with modifications of the Charleston Harbor. Also, Table 2 in the 905(b) Analysis summarizes the calculation of potential benefits of transportation cost savings. In addition to attempting to quantify these benefits in the DEIS and feasibility study, the Corps should address who is going to benefit from the harbor deepening. In other words, in the event the Corps concludes that this proposal will generate transportation efficiencies, will these cost savings be passed on to the American consumer in the form of lower consumer prices or will they be absorbed by foreign manufacturers or foreign shipping lines? The answer to this question is critical because if foreign interests are going to be the beneficiaries of the harbor deepening, all the United States will be doing by deepening the harbor is increasing our foreign trade deficit. The Corps' economic analysis will not be complete until it addresses this fundamental question.
- In the 905(b) Analysis, the Corps relies in part on international trade data that predates the recession and is subject to dispute in industry and other publications. See 905(b) Analysis at § 5.2.2. We recommend that the DEIS and feasibility study include updated and relevant economic data.
- The 905(b) Analysis includes assumptions about growth trends in container traffic in the South Atlantic Region that are questionable and currently subject to dispute in industry and other publications. See 905(b) Analysis at § 5.2.1. The DEIS and feasibility study should test these assumption and include analysis and consideration of realistic benefits to the Charleston region.

### **Additional Comments on Section 905(b) (WRDA 86) Analysis**

In addition to the comments supplied above, we have the following questions and recommendations with respect to the Section 905(b) Analysis:

- Prior Reports and Studies (Section 4.2 at p. 5) – The 905(b) Analysis explains that based on a 1996 feasibility study, Congress authorized deepening of the channel to its present configuration, which includes a 47-foot deep entrance channel and a 45-foot deep inner harbor channel. 905(b) Analysis at § 4.2. The Corps explains that all of the changes authorized in 1996 have been completed with the exception of the Daniel Island Turning Basin, as construction of the turning basin was contingent upon the construction of a new

six-berth terminal on Daniel Island. The Corps states further that it is evaluating relocation of this unconstructed turning basin. The DEIS and feasibility study should include an evaluation of the relocation of this turning basin.

- Project Area Conditions Existing (Section 5.7.2 at p. 12) – The Corps explains that it expects draft of vessels to increase in coming years and that these larger ships will be restricted to certain tide conditions, creating delays and possible diversions “to more distant ports.” 905(b) Analysis at § 5.7.2. The DEIS and feasibility study should determine whether it is cheaper or more expensive for cargo to move through these “distant ports.” Is it possible that these distant ports might provide a more efficient way of transporting cargo to the Piedmont Atlantic MegaRegion? The DEIS and feasibility study should include a Multi-Port Analysis, which answers these questions in addition to studying which port in the South Atlantic region makes the most sense to deepen from an economic and environmental perspective.
- The 905(b) Analysis relies on the SPA’s Strategic Plan, and it is our understanding that such plan has not been made available to the public. As such, the public will not be able to determine the alignment (if any) between the Corps’ alternatives and SPA’s strategic plan, including detailed, per terminal capital expenditures. To the extent the DEIS relies on the SPA’s strategic plan, that information should be released to the public.
- The DEIS and feasibility study should take into consideration the South Carolina State Rail Plan and “port to rail” plans. For example, the alternatives analysis and evaluation of environmental impacts, such as air quality, should include consideration of which terminals within the Charleston Port will have rail access.
- Economic Considerations (Section 5.7.4 at p. 18) – The Corps concludes in this section that by increasing the speed and size of containerships, shipping firms are able to realize economies of scale. In the DEIS and feasibility study, we request that the Corps explain whether speed limits relating to federally-endangered right whales and the current trend of “Slow Steaming” by ocean carriers on trans-Pacific routes were taken into consideration for purposes of this analysis.
- Preliminary Analysis of Alternative Plans (Section 5.7.5 at p. 18) – In calculating the cost of transporting Twenty Foot Equivalent Units (TEU), it is unclear if the Corps in its 905(b) Analysis included the new costs associated with cleaner fuels now being used as mandated by emission control policies by the International Maritime Organization (IMO) and Environmental Protection Agency (EPA). If not, the DEIS and feasibility study should include the cost of these new fuels.
- Preliminary Analysis of Alternative Plans (Section 5.7.5 at pp. 18-19) – In this section of the 905(b) Analysis, the Corps uses a cost per mile analysis to evaluate transportation benefits of the proposed deepening. It is worth noting that the steam time from Shanghai

to Charleston is approximately 35 days, and the steam time from Shanghai to the Port of Los Angeles/Long Beach is approximately 17 days. Any comparison using “sailing distance” in the DEIS and feasibility study should include origin to destination (e.g. from Shanghai to Piedmont MegaRegion) sensitivity analysis to arrive at alternative plans in order to take account of all viable alternatives, including the U.S. West Coast rail land bridge.

In addition, it is unclear what base year the Corps relied on in determining benefits for the calculations included in Section 5.7.5 of the 905(b) Analysis. It is also unclear if this estimate is consistent with the SPA strategic plan. We request that the Corps provide the base year used for this calculation and clearly explain the methodology relied on in making economic calculations and projections contained in the DEIS and feasibility study.

Thank you for the opportunity to submit these comments. Please do not hesitate to contact us if you would like to discuss our comments in greater detail. We look forward to remaining engaged in this process as it moves forward.

Very truly yours,



Christopher K. DeScherer  
Senior Attorney

cc: Steve Eames, League  
Katie Zimmerman, League  
Blan Holman, SELC

**From:** [Cornelia](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** spoils to Crab Bank  
**Date:** Thursday, February 09, 2012 8:43:35 AM

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I am asking the corps to incorporate into its plan the deposition of spoils on Crab Bank. The little island is washing away, and spoil deposition would serve as re-nourishment that is crucial to keep the island from disappearing.

Yours truly,

Cornelia Carrier  
201 Broad St.  
Charleston, SC 29401

**From:** [Tim & Kate Kiel](#)  
**To:** [Chas-Post45-Comments](#)  
**Subject:** SUPPORT FOR CHARLESTON HARBOR DEEPENING  
**Date:** Thursday, December 15, 2011 9:31:32 AM

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I had the pleasure of attending the presentation this past Tuesday at the Citadel and found the program to be presented in a professional manner and very informative of the issues that lay before us in making this project happen.

Simply stated without the deepening of the harbor and the terminals it supports, the Port of Charleston will become a backwater of commerce and directly negatively effect the lives and jobs of over a quarter of million residents of South Carolina. Once all the posturing is completed the bottom line is that shipping companies need the deeper harbors to make their operations cost effective and we need those shipping companies. The sooner this project gets going the sooner the business climate in South Carolina will get better.

All that being said the quality of life and environmental issues included in this project must be addressed and agreements (aka: compromises) reached early on in the process (nothing new here, just encouragement).

Once again I do appreciate the professionalism the Corps of Engineers has show on this project so far and look forward successful completion of this undertaking.

Timothy C. Kiel

605 Pelzer Dr.

Mount Pleasant, SC 29464



**US Army Corps  
Of Engineers®**  
Charleston District

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# **AGENCY COMMENTS**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

October 21, 2011

Mark Messersmith  
Project Manager  
Charleston District  
U.S. Army Corps of Engineers  
69 A Hagood Avenue  
Charleston, SC 29403

**Subject: Invitation to join NEPA Scoping Process and serve on the Interagency Coordination Team (ICT) for the Draft Environmental Impact Statement (DEIS) for the Charleston Harbor Deepening Study (Post-45 study)**

Dear Mr. Messersmith:

This letter is in response to Mr. Patrick O'Donnell's recent letter (August 11, 2011) requesting the U.S. Environmental Protection Agency (EPA) participate in the NEPA scoping process and serve on an eventual ICT once it is established for the Charleston Harbor Deepening Study. EPA understands that the Corps of Engineers is looking at deepening the navigation channel (deeper than -45 MLLW) at Charleston Harbor to accommodate larger container vessels. These larger vessels, commonly referred to in the shipping industry as the "Super Post-Panamax" vessels, are expected to comprise greater percentages of vessel fleet composition over the next several decades. This transition to larger vessels is expected to occur rapidly and current Panamax vessels are expected to no longer be used in the Asia service by 2024. Additional depth would therefore be required to serve existing users of Charleston Harbor by that time.

Consistent with our other obligations and responsibilities as outlined in Section 102(2)(c) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA agrees to participate with the Corps of Engineers on the NEPA scoping process and to serve on the ICT. Specifically, EPA agrees to attend the initial meeting of the Resource Agencies, as well as future meetings with other stakeholders. As our NEPA Program Office has recent experience with similar proposed harbor deepening projects in other Southeastern ports, we suggest the following are some of the more substantive issues that will need to be addressed to some degree during the NEPA process:

- Analyses will be needed to study various channel designs to minimize saltwater encroachment. Modifications may be needed to the existing flows to reduce these effects, including potential modifications to tidal creeks in the upper harbor areas.

- Ship simulations should be conducted to aid in channel design, including a vertical ship motion study.
- Depending on the depth selected, the project may convert significant amounts of freshwater wetlands into brackish marsh. These impacts will have to be mitigated.
- Saltwater marsh may be impacted by the project, and avoidance/minimization and mitigation for these impacts (such as restoring marsh on nearby islands) may be required.
- Increased salinity may be an issue for fish such as the Shortnose sturgeon (*Acipenser brevirostrum*). The harbor deepening may allow additional saltwater to enter the harbor and travel further upstream into areas currently used by certain species.
- The Coastal Zone Management Act (CZMA) is intended to address increasing stresses on the nation's coastal areas, and this act, which is administered by the Dept of Commerce, is implemented by SC's Coastal Zone Management Office. The Charleston District should coordinate this project with SC to ensure consistency with the SC Coastal Zone Management Plan.
- Protecting the right whale is another issue/concern. The Charleston District should conduct any deepening project and future maintenance activities in accordance with the NOAA Fisheries' South Atlantic Regional Biological Opinion (SARBO) in effect at that time.
- Historic ship wrecks and Revolutionary and Civil War-era forts in the area are also issues/concerns, and these sensitive cultural and historical resources will need to be inventoried and protected. The Charleston District should fully coordinate with the South Carolina State Historic Preservation Officer (SHPO) to ensure that the proposed project complies with Section 106 of the National Historic Preservation Act and South Carolina's cultural resource management laws, including South Carolina's "Standards and Guidelines for Archaeological Investigations."
- Ship wake analysis will be needed to develop shoreline erosion estimates.
- Ample soil borings will be needed for physical characterization of materials to be dredged.
- Slope stability analysis will be needed to determine impacts to side slopes and banks. Other geologic field investigation and modeling may be needed to determine groundwater impacts to the aquifer.
- Coastal erosion analysis will be needed to determine impacts to area islands.
- Nearshore placement of dredged material options to provide a beneficial use may need to be explored.
- Shoaling and sedimentation analysis will be needed.
- Hydrodynamic and water quality modeling for impact determination and mitigation plan development will be needed.
- Analysis of chloride impacts to the local water supply may be needed.
- Analysis of dredged material, including physical and chemical analysis will be needed.



- Impacts to Charleston Harbor Operation & Maintenance practices, including a dredged material management plan, will be needed.
- An economic study approved by HQUSACE, as well as accurate cost estimates and cost risk analysis for all depth alternatives, will be needed.
- The Charleston District may need a Value Engineering study.
- Sea level rise risk analysis should be included as well.
- Air toxics source and emissions inventories and a tiered analysis of potential health impacts of the alternatives will be needed.

We appreciate the opportunity to participate on your ICT during the upcoming NEPA process. I have assigned CDR Paul Gagliano, P.E., as EPA's NEPA Project Manager. Kelly Laycock will serve as EPA's Clean Water Act Section 404 Permit Manager, while Craig Hesterlee will serve as EPA's TMDL and Modeling Expert and Gary Collins will serve as the Ocean Dumping and Sediments Expert. Paul Wagner will serve as our Air Toxics Expert and will review your air toxics health impacts analysis. Should you have NEPA questions, feel free to coordinate with Paul Gagliano at 404/562-9373 or at [gagliano.paul@epa.gov](mailto:gagliano.paul@epa.gov). The NEPA Program will be coordinating this project with many other programs here at EPA as required or needed.

Sincerely,



Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

cc Kelly Laycock, USEPA Region 4 Wetlands and Marine Regulatory Section  
(phone: 404-562-9132)  
Gary Collins, USEPA Region 4 Ocean Dumping (and ODMDS)  
(phone: 404-562-9395)  
Jennifer Derby (Chief) USEPA Region 4 Wetlands and Marine Regulatory Section  
(phone: 404-562-9401)  
Craig Hesterlee, USEPA Region 4 TMDL Development and Modeling Section  
(phone: 404-562-9749)  
Shawneille Campbell-Dunbar (Chief) USEPA Region 4 TMDL Development Section  
(phone: 404-562-9324)  
Paul Wagner, USEPA Region 4 Air Toxics Section  
(phone: 404-562-9100)  
Alan Powell, USEPA Region 4 Ports Lead and Mobile Source Team  
(404) 562-9045



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

Southeast Regional Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, Florida 33701-5505  
(727) 824-5317; FAX (727) 824-5300  
<http://sero.nmfs.noaa.gov/>

November 2, 2011

F/SER47:JD/pw

(Sent via Electronic Mail)

Lt. Col. Edward P. Chamberlayne, Commander  
Charleston District, Corps of Engineers  
69A Hagood Avenue  
Charleston, South Carolina 29403-5107

Attention: Mark Messersmith

Dear Lt. Colonel Chamberlayne:

NOAA's National Marine Fisheries Service (NMFS) reviewed the Federal Register Notice (76 FR 50187), dated August 12, 2011, indicating the Charleston District is examining the feasibility of navigation improvements for Charleston Harbor; the feasibility study would likely include an Environmental Impact Statement (EIS). Improvements currently under consideration include: (1) deepening channels to 50 feet MLLW or more, (2) widening channels, (3) adjusting alignments of channels and bend easing, and (4) widening or lengthening turning basins. Under the National Environmental Policy Act, the Charleston District has requested NMFS provide scoping comments for the feasibility study and EIS. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are provided pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). We recommend the Charleston District contact our Protected Resources Division for input regarding the requirements of the Endangered Species Act (ESA) and Marine Mammal Protection Act.

*Coordination History*

On March 2, 2011, NMFS and other resource agencies provided the Charleston District with informal comments outlining environmental issues the District should consider when examining project alternatives and feasibility; these comments followed the organizational framework in the District's Section 905(b) report for Charleston Harbor. NMFS continues to support the items identified in those comments (enclosed), and we are pleased the District used them to foster discussions during the interagency meeting on October 4, 2011, which the Charleston District hosted to begin formal discussions of the information needed for all agencies to fully evaluate study alternatives with respect to their individual authorities. The comments below augment those provided in March.

*Freshwater/Saltwater Flow Management*

The Charleston District should investigate the movement of the salt wedge up the Ashley and Wando Rivers and especially the Cooper River. If the proposed improvements to Charleston Harbor would



require additional releases of freshwater from the Pinopolis Dam to maintain desired salinities in the Cooper River and Charleston Harbor, effects on releases from the Wilson Dam and flows needed for operation of the St. Stephen Fish Lift would need to be considered. All three of these structures share the same water source (Lakes Marion and Moultrie) and affect habitat used by NOAA trust resources, including shortnose sturgeon (which is protected under ESA), Atlantic sturgeon (which also is likely to soon be protected under ESA), and a suite of estuarine dependent species. In formulating a plan for examining how freshwater releases from these three, inter-related facilities might be affected by deepening the navigation channel within the Cooper River, the Charleston District should fully consider the flows like to be required by the Federal Energy Regulatory Commission and the Biological Opinions being finalized by our Protected Resources Division for projects in Santee-Cooper basin. Based on our current understanding of the District's study, specific concerns include:

- 1) Harbor deepening will likely result in the salt wedge intruding farther up the Cooper River than at present. The up-river extent of the salt wedge will also be affected by sea level rise and climate change (e.g., rainfall and evaporation rates from the lakes). The hydrodynamic models used to examine the extent of the salt wedge should be run under a range of climate and sea level rise scenarios to capture the range of conditions forecasted for the planning period. We also note that the North and South Santee Rivers and Santee Bay may also need to be included in the study because of the linkage to flows from the Wilson Dam and redirection canal.
- 2) The Santee-Cooper Diversion Project shows release of large amounts of freshwater from the Pinopolis Dam can increase sedimentation within the harbor and the need for maintenance dredging. Because deepening the Cooper River navigation channel may lead to more freshwater released from Pinopolis Dam (to prevent salt water intrusion into the Bushy Park Reservoir), strategies to reduce increases in maintenance dredging may be necessary (e.g., relocation of intake structures to more upriver locations of the reservoir).

#### *EFDC Models*

During the scoping October meeting, the Charleston District indicated the Environmental Fluid Dynamics Computer Code (EFDC) would likely be used to model hydrological flow, water quality, sedimentation, and salinity intrusion from project alternatives. Before finalizing selection of this model, NMFS recommends the Charleston District work with the agencies to develop clear performance criteria for the models so that this information can be used to guide selection of boundary conditions, development of model grids, and collection of field data that will be used for model calibration and verification. A decision about which model to use should reflect all of these considerations. NMFS looks forward to working with the Charleston District and resources agencies in development of these criteria.

#### *Water Quality*

Impacts to water quality for harbor expansion projects are typically examined with models that focus on turbidity and the concentrations of dissolved oxygen (DO) and total suspended solids (TSS). NMFS recommends the Charleston District work with the resource agencies to identify the locations with harbor and its water column where the impacts to resources would be most detrimental and use the locations identified to guide the tailoring of the model grids, parameters, and output. It will also be important to understand the impact of combinations of these parameters on fish and invertebrates. For example, low concentrations of DO may slightly impair fish respiration but the combination of low DO and high concentrations of TSS may cause significant impacts. The Charleston District may need to sponsor studies to determine the combined effects of these stressors so that adequate interpretations of modeled data can be made.

#### *Sediments*

Harbor sediments may have high concentrations of heavy metals and organic contaminants that may be released into the water column when dredging moves or exposes sediments to new chemical environments. The Charleston District should investigate sediment contaminant loads in known polluted

areas (e.g., dioxin levels in the upper harbor and Shipyard Creek are known to be high; Shipyard Creek also carries a high load of hexavalent chromium) throughout the dredging area, and it may be beneficial to combine these studies with investigations of areas outside the channels that might benefit from capping with clean dredged material. Biological responses to exposure could be examined through bioaccumulation studies with an adequate number of samples and proper statistical analysis.

#### *Marshes/Wetlands*

The Charleston District anticipates the impacts to wetlands and salt marsh will primarily occur via altered salinity regimes. Because these types of impacts can be difficult to define and detect, NMFS recommends the District work closely with the resource agencies to determine how to best categorize marshes by their salinity regimes and how to best tailor the modeling studies to focus on the salinity regimes that are collectively believed to drive marsh vegetation and use by fish and other organisms.

#### *Dredging Windows*

The Charleston District should investigate whether dredging windows for portions of the project would minimize impacts to larval and young juvenile fish. NMFS is currently refining the dredging windows it recommends for projects within South Carolina, and we would welcome participation by the District.

#### *Benthic Resources*

If the proposed project would require dredging in new areas (e.g., extension of the entrance channel) or disposal into new areas, baseline studies should characterize the benthic communities. NMFS generally recommends surveys of benthic communities include a 500-foot buffer around the proposed work areas.

#### *Essential Fish Habitat*

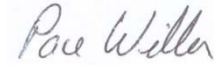
Essential Fish Habitat (EFH) within the project area includes estuarine and marine emergent vegetation, tidal freshwater wetlands, tidal creeks, oyster reefs, water column, intertidal and subtidal mudflats (unconsolidated bottom), coastal inlets, coral and artificial reefs, and hardbottom. Many of these habitats foster growth and provide food and protection from predators and integral to producing healthy populations of commercially and recreationally important species. NMFS and the South Atlantic Fisheries Management Council (SAFMC) are beginning to refine EFH designations for the early life stages (eggs, larvae) of federally managed species; we will keep the District abreast of the status of these efforts. The Charleston District should investigate the distribution (temporally and spatially) of early life stages of such species throughout the impact area. In addition, the impact of the project on the marsh-complex (i.e., relationship between oysters, marsh vegetation, mudbanks) should be investigated. The required components of an EFH assessment are described at 50 CFR 600.920(e); and may be part of the EIS, an appendix to the EIS, or a separate, stand-alone document. NMFS would be happy to assist the District in preparation of the assessment, and we recommend early coordination on its development.

#### *Compensatory Mitigation and Beneficial Uses of Dredged Material*

Should the proposed project require compensatory mitigation, NMFS is developing an inventory of tidal creeks in the Charleston Harbor watershed that could be restored or enhanced. While mitigation actions will be dependent upon the amount and severity of impacts, we believe this inventory would provide the Charleston District with significant leads should compensatory mitigation be necessary, and we would be happy to begin sharing the early results of that inventory with the District. Beneficial use option for the dredged material potentially include restoring and protecting Crab Bank, feeder berms for the barrier islands, offshore fishery habitat berms, and augmenting the berms used to manage material at the Charleston ODMDS. Each of these options likely presents a habitat tradeoff that would require careful examination, but the concepts are generally viable.

We appreciate the opportunity to provide these comments. Please direct related correspondence to the attention of Ms. Jaclyn Daly at our Charleston Area Office. She may be reached at (843) 762-8610 or by e-mail at [Jaclyn.Daly@noaa.gov](mailto:Jaclyn.Daly@noaa.gov).

Sincerely,



/ for

Virginia M. Fay  
Assistant Regional Admin. (Acting)  
Habitat Conservation Division

Enclosure: Memorandum for Record dated March 2, 2011

cc:

COE, Mark.J.Messersmith@usace.army.mil  
DHEC, owenen@dhec.sc.gov  
SCDNR, DavidS@dnr.sc.gov;WendtP@dnr.sc.gov  
SAFMC, Roger.Pugliese@safmc.net  
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F/SER4, David.Dale@noaa.gov  
F/SER47, Jaclyn.Daly@noaa.gov

## Memorandum for Record

Date: March 2, 2011  
Subject: Environmental Considerations for Deepening Charleston Harbor

On February 16, 2011, staff from NOAA's National Marine Fisheries Service, U.S. Fish and Wildlife Service, and SC Department of Natural Resources met briefly and informally to discuss the proposal to investigate deepening the federal navigation channels within Charleston Harbor. Because the proposal is at an early stage of development, the goals of the meeting were simply to see how much thought each agency was giving to the topic and whether there was interest to continuing the discussion in a more regular fashion with the U.S. Army Corps of Engineers Charleston District and other interested parties. Notes from the meeting are captured below. While a copy of the District's 905(b) analysis<sup>1</sup> for the project was not obtained until after the meeting, the report was used to organize presentation of the notes so that future communications with the Charleston District might be facilitated. General environmental considerations are listed in section 5.8 of the analysis (pages 21 to 23). The reporting below begins with excerpts from the 905(b) report (*italics*) and follows each excerpt with comments from the meeting that were most germane to the excerpt. At the end of the meeting, there was a consensus that additional discussion with the Charleston District and other interested parties would be beneficial.

### Issues Discussed that Are Also Discussed in the 905(b) Report

*Potential movement of the freshwater/saltwater wedge further up the Cooper River as a result of deepening the channel and the resulting impacts to freshwater intakes. This is a potentially significant issue in the upper Cooper River and will require modeling to determine if this will be a problem, and will be a factor in determining the proposed new channel depth.*

- Movement of freshwater/saltwater wedge up the Cooper River is clearly an important issue, but the movement of the wedge up the Ashley River and Wando Rivers should not be dismissed.
- Not only are important freshwater intakes present within the rivers, the salinity regime of the estuary will affect the distribution of freshwater, tidal freshwater, and estuarine marsh habitats and the species that rely upon these marshes. Understanding the net change in the extent and distribution of these habitats due to additional salinity intrusion is necessary.
- Protecting managed marshes along the Cooper, Ashley, and Wando River is important.
- Monitoring data collected in association with the Cooper River Rediversion Project (circa 1985) and deepening of most of the harbor's interior federal channels from 40 feet to 45 feet after 1998 are likely a good source of information for guiding selection and development of the hydrodynamic models that the Charleston District would use to examine further deepening.
- Selecting appropriate rates of sea level rise and river discharge scenarios will be important, as will ensuring those river discharge scenarios reflect the competing water uses and withdrawals placed on the Santee-Cooper basin.

*Potential seepage of saltwater into the freshwater aquifer below the Cooper Marl as a result of deepening the channel. Based on previous studies, this is not believed to be a significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

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<sup>1</sup> In July 210, the US Army Corps of Engineers Charleston District completed a 905(b) analysis to determine whether there is a federal interest in improving the federal navigation channels within Charleston Harbor. Assessment of the federal interest is done through a graduated series of investigations with each level of study determining if the next, more costly level of study is warranted. On February 25, 2011, the Charleston District provided SC Department of Natural Resources with a copy of the 905(b) report.

*Potential effects on threatened and endangered species from both the dredging operations and the larger ships calling on the port. While this will require consultation with F&WS and NMFS, this is not believed to be a significant issue.*

- Contrary to the 905(b) analysis, impacts to threatened and endangered species may be significant.
- Since the 905(b) analysis was completed, NMFS has proposed ESA listing of Atlantic sturgeon within the vicinity of Charleston Harbor as endangered and released a draft jeopardy opinion for the impacts from the Santee Cooper hydropower project, which affects flows in the Cooper River, for shortnose sturgeon.
- The recent Biological Opinion for addition of a port terminal at the former Naval Base also should be examined for issues that may apply to the deepening the federal navigation channels.

*Potential impacts at the Charleston Ocean Dredged Material Disposal Site (ODMDS) as a result of disposal of large quantities of dredged material during the channel deepening/widening operations, and the need for additional testing/monitoring at the ODMDS. This will require coordination with EPA, SCNDR, and SCDHEC, and likely will result in a detailed monitoring program to ensure sensitive resources in the area of the ODMDS are not impacted.*

- Effects of deepening the harbor should consider effects upon the long-term capacity of the Charleston ODMDS and the management measures that are in place to protect hardbottom habitat within the vicinity of the site.
- Project planning should include a complete disposal budget that allows examination of the effects of deepening on all other harbor maintenance actions.

*Potential impacts at confined upland disposal sites as a result of disposal of large quantities of dredged material during the channel deepening/widening operations. This will require coordination with many of the resource agencies and the issuance of a Water Quality Certification by SCDHEC; however, this is not expected to be a significant issue.*

- This issue was not discussed much during the meeting other than to note that Upper Harbor, Shipyard Creek, and others areas have contaminated sediments that may require special management measures and that a thorough assessment of the capacity of existing upland disposal sites would be needed to ensure adequate capacity without the creation of additional disposal areas. Close coordination on sediment sampling and testing is needed.

*Potential impacts of increased sedimentation within the navigation channel as a result of deepening/widening the channel. This will require modeling to determine the increased sedimentation rates. Increased sedimentation and the associated costs of maintenance dredging will be a factor in determining the proposed new channel depth.*

- Sedimentation studies should be done broadly to examine how the Cooper River Rediversion Project and previous deepening of the navigation channels have altered the patterns of erosion and deposition throughout the harbor, for example along South Channel and the shoreline and nearshore area of James Island.
- Should include examination of the relative contributions of the flux of sediments from the ocean, river, and upland areas to the harbor.
- Should include impacts of increased sedimentation outside of the navigation channel during dredging on filtering organisms (e.g., oysters) and fish.

*Potential need for additional testing/monitoring before, during, and after deepening/widening the channel. This will be coordinated with all the resource agencies. Based on the previous deepening project, the only significant monitoring that is expected to be necessary is at the ODMDS.*

- The monitoring needed for the project will be driven by the impacts that are forecasted during the planning studies. An adaptive management program similar to what is proposed for the Savannah

Harbor Expansion Project (SHEP) seems a prudent way to proceed when faced with uncertainty about project effects. Using the key features of SHEP's adaptive management program as a springboard, key elements for Charleston would be predictions about the effects of the project on the estuary, pre- and post-construction monitoring to gauge the effects, and pre-approved and funded actions that would be triggered if the monitoring shows adverse impacts are occurring beyond those built into the base plan.

*Potential impacts to cultural resources from the dredging operations. This will require coordination with SHPO; however, based on previous studies and previous deepening efforts, this is not believed to be a significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

*Potential indirect and/or cumulative impacts as a result of the larger ships calling on the port. The most likely indirect/cumulative impacts resulting from the deepening project are related to increased truck traffic entering and leaving the port terminals. This increased truck traffic may result in traffic congestion and degradation of air quality. These issues are part of the basis for the lawsuit over the Regulatory permit issued to SCSPA for their new terminal; therefore, this is a potentially significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

*Potential effect that sea level rise due to climate change would have on the project. This is not believed to be a significant issue for this project.*

- Contrary to the 905(b) analysis, impacts from sea level rise may be significant, for example, tide gauges show sea level rise in Charleston Harbor has risen about 1.03 feet in the last 100 years and this rate is forecasted to increase.
- The Cooper River Rediversion Project, previous deepening of the navigation channels, and climate fluctuations all provide potential opportunities to empirically examine how salinity patterns within the harbor may change with a deeper federal navigation channel and climate change. A study that combines these empirical results with robust hydrodynamic models would provide a great opportunity to examine how deepening the federal navigation channel would affect the harbor ecosystem.

*Potential impacts to wetlands and marsh caused by the dredging operations. Since the channel is located near the center of the river, deepening the channel is not expected to have a significant impact on wetlands and marsh.*

- Contrary to the 905(b) analysis, impacts to wetlands and marshes (including managed marshes) from changes to the salinity regime may be considerable.
- Goal should be no net loss of hardbottom, marsh, intertidal, or shallow subtidal habitat.
- Compensatory mitigation would be needed to offset unavoidable impacts. This mitigation should be based on a watershed approach includes studies that quantify historical habitat losses within the harbor and the habitats that currently are under significant threat for future loss. Thinking creatively will be important, and final recommendations should be based on quantitative analysis of habitat function (e.g., habitat equivalency analysis).

*Potential impacts to essential fish habitat from the dredging operations. This will require coordination with NMFS; however, since dredging is routinely performed in Charleston Harbor, this is not believed to be a significant issue.*



- Contrary to the 905(b) analysis, impacts to essential fish habitat from changes to the salinity regime may be considerable.
- Issues that would require close examination include:
  - Effects of altered salinity regimes on the distribution and persistence of salinity zones.
  - Effects on fish spawning areas and migration pathways.
  - Effects on the distribution and recruitment of oysters.
  - Effects on the distribution of the larvae and early juveniles stages of fish and shellfish, especially managed species and their prey.
- Options should be examined for adjusting project schedules to ameliorate impacts to fish and shellfish; this may require baseline studies to identify the locations and temporal distributions of the more vulnerable resources.

*Potential erosion of an existing bird nesting island (i.e., Crab Bank) in Charleston Harbor resulting from the deeper/wider channel and the larger ships calling on the port. This will require coordination with SCDNR and F&WS, and is a potentially significant issue that will need to be evaluated. Beneficial use of dredged material to protect Crab Bank is a potential solution to this issue.*

- The group had a similar discussion on February 16; additional discussion should occur.

*Potential opportunities for beneficial use of dredged material for shorebird and/or colonial waterbird habitat creation, marsh creation, or beach nourishment. Charleston District will evaluate all possible beneficial uses of dredged material during the Feasibility Study and will coordinate this evaluation with SCDHEC, SCDNR, F&WS, and NMFS. Attempts to beneficially use dredged material during the previous deepening project were unsuccessful; however, successful projects at other navigation channels have since demonstrated that dredged material can be a resource rather than a “waste product.”*

- The group had a similar discussion on February 16; additional discussion should occur.

*Potential for HTRW or unexploded ordinance in the areas to be dredged. Sediment testing and electro-magnetic surveys will be conducted as part of the Feasibility Study. However, based on previous testing and current maintenance dredging operations (i.e., the channel is dredged every 12 to 18 months), this is not believed to be a significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

*Potential environmental justice issues as a result of the dredging operations or the larger ships calling on the port. Since the deepening/widening project will utilize existing infrastructure (i.e., existing disposal areas will be used for dredged material disposal, the ships will call on existing (or currently under construction) port terminal facilities, and any channel re-alignment is expected to be minor), environmental justice issues are expected to be minimal.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

#### Issues Discussed that Are Not Discussed in the 905(b) Report

The 905(b) analysis does not list effects of the project on the concentrations of dissolved oxygen as an environmental consideration, but does provide a placeholder for this issue by indicating in section 5.8.1 that the SC Department of Natural Resources raised this issue with the Charleston District during coordination. The group that met February 16 also is concerned about: (1) The effects of the project on the concentrations of dissolved oxygen within the harbor system, especially during summer months and droughts when hypoxic conditions are prone to occur. (2) Hydrological changes due to channel deepening (e.g., increased flow, erosion, shoaling). Choosing an appropriate means to examine these issues will be important and likely would affect decisions about hydrodynamic models used for

examining the project. (3) Sediment contaminant levels (sediments around Navy Base recently failed chemical analysis tests for offshore disposal). Sediment contaminant mapping in the Ashley River has provided excellent insights into the extent and distribution of these sediments that may affect sediment disposal. Similar mapping of the harbor basin and Cooper River could be very instructive. (4) The feasibility study should also include in-kind mitigation opportunities.

Attendees:

NMFS	Jaclyn Daly Pace Wilber
FWS	Mark Leao
SCDNR	Stacie Crowe Peter Kingsley-Smith Marty Levisen Marcel Reichert Bob Van Dolah Priscilla Wendt



# United States Department of the Interior



IN REPLY REFER TO:

(SER-PC)

NATIONAL PARK SERVICE  
Southeast Regional Office  
Atlanta Federal Center  
1924 Building  
100 Alabama St., SW.  
Atlanta, Georgia 30303

SEP 29 2011

Mr. Mark Messersmith  
Planning and Environmental Branch, Charleston District  
U.S. Army Corps of Engineers  
69A Hagood Avenue  
Charleston, South Carolina 29403

Dear Mr. Messersmith:

The National Park Service (NPS) has reviewed the Notice of Intent to Prepare a Draft Environmental Impact Statement (DEIS) for the Charleston Harbor Deepening Study prepared by the U.S. Army Corps of Engineers (USACE) and offers the following comments for consideration (ER -11/0725).

The NPS is concerned about potential impacts from a deepening of Charleston Harbor on Fort Sumter National Monument, a unit of the NPS. The historic Fort Sumter sits on a man-made island near the entrance to Charleston Harbor. The shores of the island are presently only about 1200 yards from the edge of the main navigation channel.

## **Background**

Three separate congressional acts contributed to Fort Sumter National Monument as it is known today, including the original designation in 1948 by a joint resolution of Congress. The principle purpose is to commemorate the historical events at and surrounding Fort Sumter. Fort Sumter and Fort Moultrie, located on the shore opposite Fort Sumter Island, are listed in the National Register of Historic Places.

Fort Sumter is an icon of American history. It is where one of our Nation's critical defining moments, the American Civil War, began. The historical significance of the resource is of inestimable value to American culture.

Fort Sumter (fort) is a focal point of Charleston's tourism industry. Annual visitation to the site is approximately 350,000. Visits by local, state, and national dignitaries are a regular occurrence. The fort has been, and continues to be, the subject of thousands of scholarly articles,

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IN AMERICA 

popular studies, video and photographic shoots, and other tourism based productions. Requests for permits and access by entities from other countries are common.

The island upon which the fort is located was constructed between 1829 and 1840. It is made of gravel, sand, and relatively small rough granite blocks. On top of this substrate the USACE placed very large cut granite blocks to serve as the foundation of the fort. The brick masonry of the fort proper then was set on these massive granite blocks.

In 1972, the NPS constructed the existing stone breakwater or revetment around the fort. This existing stone was placed against the outer wall, with a gap in the stone along a section of the left face of the fort. The island and the fort itself are exposed to both wind-generated waves and large waves produced by passing cargo ships. Both the left and right faces of the fort are particularly exposed to this wave action. The gap in the existing stone breakwater allows waves to crash directly against the fort's brick masonry walls especially at high tides. Over the years, the hydraulic forces of the waves have moved the breakwater boulders, and some of them now are directly impacting the masonry.

### **NPS Concerns**

The purpose of the planned DEIS and feasibility study is to investigate modification of the existing Charleston Harbor project in the interest of navigation improvements. Specifically, alternatives for modification to be examined in the feasibility study might include deepening of the navigation channel(s) up to 50 feet mean lower low water (MLLW) or more, widening channel(s), adjusting existing channel alignments/bend easing, and widening and/or lengthening turning basins. These navigation channel improvements are being considered in response to the growing numbers of larger cargo [container] ships, and these numbers are anticipated to increase even more as the current expansion of the Panama Canal lock capacity is completed in 2014.

The NPS is concerned that the wave action from an increase in ship size, speed, and traffic resulting from widening and deepening of the Charleston Harbor navigation channels will cause impacts that are detrimental to the stability and performance of the stone breakwater around the fort, and more importantly, to the integrity of the masonry walls of the fort. We are concerned that these larger, more frequent waves may potentially destabilize stones in the breakwater as well as erode sediment at the toe and undermine the breakwater against the fort's walls, further compromising its protective performance. We are also concerned that this wave action may have cumulative impacts when combined with the potential effects of sea level rise, wave action and storm surge from more frequent, intense tropical storms [associated with climate change].

The NPS requests that the DEIS for the Charleston Harbor Deepening Study include a full analysis of potential environmental effects on Fort Sumter National Monument from all alternatives considered in the document. The analysis should include compliance with Section 106 of the National Historic Preservation Act. We also request the opportunity to discuss options to mitigate any adverse impacts that the fort may experience as a result of the implementation of the Charleston Harbor project. The NPS currently is conducting an engineering assessment of structural integrity and implementing a sophisticated program of structural health monitoring. As the responsible management organization for Fort Moultrie and associated NPS properties along the shoreline of Sullivan's Island, we have concerns over increased erosion of approximately 1500 feet of shoreline that protect the integrity of the historic

structures. We would like the Study to address the amount of any anticipated additional erosion of the barrier shoreline over time from increased boat traffic and wave action on the shoreline.

The NPS would like to participate in the development of impact topics and alternatives to be addressed in the DEIS. Please add Timothy Stone, Linda York, and Anita Barnett to your mailing list for all future notification regarding this project and development of the DEIS.

Fort Sumter National Monument  
Timothy Stone, Superintendent  
Fort Sumter National Monument  
1214 Middle Street, Sullivan's Island  
South Carolina 29482  
e-mail: [Timothy\\_Stone@nps.gov](mailto:Timothy_Stone@nps.gov)

National Park Service  
Attention: Linda L. York, Ph.D.  
Coastal Geomorphologist  
100 Alabama Street  
1924 Building  
Atlanta, Georgia 30303  
e-mail: [Linda\\_York@nps.gov](mailto:Linda_York@nps.gov)

National Park Service  
Attention: Anita Barnett  
Planning and Compliance Division  
100 Alabama Street  
1924 Building  
Atlanta, Georgia 30303  
e-mail: [Anita\\_Barnett@nps.gov](mailto:Anita_Barnett@nps.gov)

If you have questions or need further information, please contact Anita Barnett at 404-507-5706. Thank you for the opportunity to provide comments.

Sincerely,

  
David Vela  
Regional Director  
Southeast Region

# South Carolina Department of Natural Resources



PO Box 12559  
Charleston, SC 29422  
843.953.9305 Office  
843.953.9399 Fax  
[WendtP@dnr.sc.gov](mailto:WendtP@dnr.sc.gov)

John E. Frampton  
Director  
Robert D. Perry  
Director, Office of  
Environmental Programs

October 31, 2011

Mr. Mark Messersmith  
U.S. Army Corps of Engineers  
69A Hagood Avenue  
Charleston, S.C. 29403

RE: Notice of Intent (NOI) to Prepare a Draft Environmental Impact Statement (DEIS)  
for a Study on the Feasibility of Deepening Charleston Harbor

Dear Mr. Messersmith:

The S.C. Department of Natural Resources (SCDNR) is submitting this letter in response to the Notice of Intent (NOI) to prepare a Draft Environmental Impact Statement (DEIS) to study the feasibility of deepening the Charleston Harbor navigation channel (Federal Register Vol. 76, No. 156, pp. 50187-50188). As stated in the NOI, the array of alternatives that would be examined in the feasibility study would likely include navigational improvements to some or all of the channels in Charleston Harbor, including (1) deepening channel(s) up to 50 feet MLLW or more, (2) widening channel(s), (3) adjusting existing channel alignments/bend easing, and (4) widening and/or lengthening turning basins. The stated purpose of the proposed project is to accommodate larger vessels, including the "Super Post-Panamax" ships, which are expected to comprise an increasing percentage of the vessel fleet following completion of the Panama Canal Expansion Project in 2014.

The U.S. Army Corps of Engineers (the Corps) initiated coordination with SCDNR on the proposed deepening project in June, 2010. Since then, SCDNR has responded informally to the USACE's request for agency comments on environmental issues that should be considered in the proposed DEIS. Several of these issues were discussed informally among staff of SCDNR, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Fish and Wildlife Service (USFWS) at a meeting in February, 2011. The agencies' preliminary recommendations were summarized in a

*Notice of Intent (NOI) to Prepare a Draft Environmental Impact Statement (DEIS) for a Study on the Feasibility of Deepening Charleston Harbor*

“Memorandum for Record” submitted to Mr. Alan Shirey with the Corps in March, 2011. More recently, SCDNR participated in a Federal/State agency NEPA Scoping Meeting sponsored by the Corps on October 4, 2011, where we provided additional verbal comments on the proposed project. These were accurately summarized in the meeting minutes you prepared and distributed in final form to the attendees on October 28, 2011. Briefly stated, SCDNR is concerned about the entire range of potential direct and indirect impacts the proposed deepening project might have on water quality, air quality, fish and wildlife habitat, threatened and endangered species, and other species of recreational, commercial, or ecological importance.

The SCDNR looks forward to continuing our coordination with the Corps on this project, and working with the other Federal and State natural resource and regulatory agencies to ensure that all relevant environmental issues are adequately addressed in the DEIS.

Sincerely,

*Priscilla H. Wendt*

Priscilla H. Wendt  
Office of Environmental Programs/ MRD

Cc: SCDHEC/ EQC  
SCDHEC/ OCRM  
NOAA/NMFS  
USFWS

## Memorandum for Record

Date: March 2, 2011  
Subject: Environmental Considerations for Deepening Charleston Harbor

On February 16, 2011, staff from NOAA's National Marine Fisheries Service, U.S. Fish and Wildlife Service, and SC Department of Natural Resources met briefly and informally to discuss the proposal to investigate deepening the federal navigation channels within Charleston Harbor. Because the proposal is at an early stage of development, the goals of the meeting were simply to see how much thought each agency was giving to the topic and whether there was interest to continuing the discussion in a more regular fashion with the U.S. Army Corps of Engineers Charleston District and other interested parties. Notes from the meeting are captured below. While a copy of the District's 905(b) analysis<sup>1</sup> for the project was not obtained until after the meeting, the report was used to organize presentation of the notes so that future communications with the Charleston District might be facilitated. General environmental considerations are listed in section 5.8 of the analysis (pages 21 to 23). The reporting below begins with excerpts from the 905(b) report (*italics*) and follows each excerpt with comments from the meeting that were most germane to the excerpt. At the end of the meeting, there was a consensus that additional discussion with the Charleston District and other interested parties would be beneficial.

### Issues Discussed that Are Also Discussed in the 905(b) Report

*Potential movement of the freshwater/saltwater wedge further up the Cooper River as a result of deepening the channel and the resulting impacts to freshwater intakes. This is a potentially significant issue in the upper Cooper River and will require modeling to determine if this will be a problem, and will be a factor in determining the proposed new channel depth.*

- Movement of freshwater/saltwater wedge up the Cooper River is clearly an important issue, but the movement of the wedge up the Ashley River and Wando Rivers should not be dismissed.
- Not only are important freshwater intakes present within the rivers, the salinity regime of the estuary will affect the distribution of freshwater, tidal freshwater, and estuarine marsh habitats and the species that rely upon these marshes. Understanding the net change in the extent and distribution of these habitats due to additional salinity intrusion is necessary.
- Protecting managed marshes along the Cooper, Ashley, and Wando River is important.
- Monitoring data collected in association with the Cooper River Rediversion Project (circa 1985) and deepening of most of the harbor's interior federal channels from 40 feet to 45 feet after 1998 are likely a good source of information for guiding selection and development of the hydrodynamic models that the Charleston District would use to examine further deepening.
- Selecting appropriate rates of sea level rise and river discharge scenarios will be important, as will ensuring those river discharge scenarios reflect the competing water uses and withdrawals placed on the Santee-Cooper basin.

*Potential seepage of saltwater into the freshwater aquifer below the Cooper Marl as a result of deepening the channel. Based on previous studies, this is not believed to be a significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

---

<sup>1</sup> In July 210, the US Army Corps of Engineers Charleston District completed a 905(b) analysis to determine whether there is a federal interest in improving the federal navigation channels within Charleston Harbor. Assessment of the federal interest is done through a graduated series of investigations with each level of study determining if the next, more costly level of study is warranted. On February 25, 2011, the Charleston District provided SC Department of Natural Resources with a copy of the 905(b) report.



*Potential effects on threatened and endangered species from both the dredging operations and the larger ships calling on the port. While this will require consultation with F&WS and NMFS, this is not believed to be a significant issue.*

- Contrary to the 905(b) analysis, impacts to threatened and endangered species may be significant.
- Since the 905(b) analysis was completed, NMFS has proposed ESA listing of Atlantic sturgeon within the vicinity of Charleston Harbor as endangered and released a draft jeopardy opinion for the impacts from the Santee Cooper hydropower project, which affects flows in the Cooper River, for shortnose sturgeon.
- The recent Biological Opinion for addition of a port terminal at the former Naval Base also should be examined for issues that may apply to the deepening the federal navigation channels.

*Potential impacts at the Charleston Ocean Dredged Material Disposal Site (ODMDS) as a result of disposal of large quantities of dredged material during the channel deepening/widening operations, and the need for additional testing/monitoring at the ODMDS. This will require coordination with EPA, SCNDR, and SCDHEC, and likely will result in a detailed monitoring program to ensure sensitive resources in the area of the ODMDS are not impacted.*

- Effects of deepening the harbor should consider effects upon the long-term capacity of the Charleston ODMDS and the management measures that are in place to protect hardbottom habitat within the vicinity of the site.
- Project planning should include a complete disposal budget that allows examination of the effects of deepening on all other harbor maintenance actions.

*Potential impacts at confined upland disposal sites as a result of disposal of large quantities of dredged material during the channel deepening/widening operations. This will require coordination with many of the resource agencies and the issuance of a Water Quality Certification by SCDHEC; however, this is not expected to be a significant issue.*

- This issue was not discussed much during the meeting other than to note that Upper Harbor, Shipyard Creek, and others areas have contaminated sediments that may require special management measures and that a thorough assessment of the capacity of existing upland disposal sites would be needed to ensure adequate capacity without the creation of additional disposal areas. Close coordination on sediment sampling and testing is needed.

*Potential impacts of increased sedimentation within the navigation channel as a result of deepening/widening the channel. This will require modeling to determine the increased sedimentation rates. Increased sedimentation and the associated costs of maintenance dredging will be a factor in determining the proposed new channel depth.*

- Sedimentation studies should be done broadly to examine how the Cooper River Rediversion Project and previous deepening of the navigation channels have altered the patterns of erosion and deposition throughout the harbor, for example along South Channel and the shoreline and nearshore area of James Island.
- Should include examination of the relative contributions of the flux of sediments from the ocean, river, and upland areas to the harbor.
- Should include impacts of increased sedimentation outside of the navigation channel during dredging on filtering organisms (e.g., oysters) and fish.

*Potential need for additional testing/monitoring before, during, and after deepening/widening the channel. This will be coordinated with all the resource agencies. Based on the previous deepening project, the only significant monitoring that is expected to be necessary is at the ODMDS.*

- The monitoring needed for the project will be driven by the impacts that are forecasted during the planning studies. An adaptive management program similar to what is proposed for the Savannah

Harbor Expansion Project (SHEP) seems a prudent way to proceed when faced with uncertainty about project effects. Using the key features of SHEP's adaptive management program as a springboard, key elements for Charleston would be predictions about the effects of the project on the estuary, pre- and post-construction monitoring to gauge the effects, and pre-approved and funded actions that would be triggered if the monitoring shows adverse impacts are occurring beyond those built into the base plan.

*Potential impacts to cultural resources from the dredging operations. This will require coordination with SHPO; however, based on previous studies and previous deepening efforts, this is not believed to be a significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

*Potential indirect and/or cumulative impacts as a result of the larger ships calling on the port. The most likely indirect/cumulative impacts resulting from the deepening project are related to increased truck traffic entering and leaving the port terminals. This increased truck traffic may result in traffic congestion and degradation of air quality. These issues are part of the basis for the lawsuit over the Regulatory permit issued to SCSPA for their new terminal; therefore, this is a potentially significant issue.*

- This issue was not discussed during the meeting February 16, but should be discussed during follow-up meetings.

*Potential effect that sea level rise due to climate change would have on the project. This is not believed to be a significant issue for this project.*

- Contrary to the 905(b) analysis, impacts from sea level rise may be significant, for example, tide gauges show sea level rise in Charleston Harbor has risen about 1.03 feet in the last 100 years and this rate is forecasted to increase.
- The Cooper River Rediversion Project, previous deepening of the navigation channels, and climate fluctuations all provide potential opportunities to empirically examine how salinity patterns within the harbor may change with a deeper federal navigation channel and climate change. A study that combines these empirical results with robust hydrodynamic models would provide a great opportunity to examine how deepening the federal navigation channel would affect the harbor ecosystem.

*Potential impacts to wetlands and marsh caused by the dredging operations. Since the channel is located near the center of the river, deepening the channel is not expected to have a significant impact on wetlands and marsh.*

- Contrary to the 905(b) analysis, impacts to wetlands and marshes (including managed marshes) from changes to the salinity regime may be considerable.
- Goal should be no net loss of hardbottom, marsh, intertidal, or shallow subtidal habitat.
- Compensatory mitigation would be needed to offset unavoidable impacts. This mitigation should be based on a watershed approach includes studies that quantify historical habitat losses within the harbor and the habitats that currently are under significant threat for future loss. Thinking creatively will be important, and final recommendations should be based on quantitative analysis of habitat function (e.g., habitat equivalency analysis).

*Potential impacts to essential fish habitat from the dredging operations. This will require coordination with NMFS; however, since dredging is routinely performed in Charleston Harbor, this is not believed to be a significant issue.*

- Contrary to the 905(b) analysis, impacts to essential fish habitat from changes to the salinity regime may be considerable.
- Issues that would require close examination include:
  - Effects of altered salinity regimes on the distribution and persistence of salinity zones.
  - Effects on fish spawning areas and migration pathways.
  - Effects on the distribution and recruitment of oysters.
  - Effects on the distribution of the larvae and early juveniles stages of fish and shellfish, especially managed species and their prey.
- Options should be examined for adjusting project schedules to ameliorate impacts to fish and shellfish; this may require baseline studies to identify the locations and temporal distributions of the more vulnerable resources.

*Potential erosion of an existing bird nesting island (i.e., Crab Bank) in Charleston Harbor resulting from the deeper/wider channel and the larger ships calling on the port. This will require coordination with SCDNR and F&WS, and is a potentially significant issue that will need to be evaluated. Beneficial use of dredged material to protect Crab Bank is a potential solution to this issue.*

- The group had a similar discussion on February 16; additional discussion should occur.

*Potential opportunities for beneficial use of dredged material for shorebird and/or colonial waterbird habitat creation, marsh creation, or beach nourishment. Charleston District will evaluate all possible beneficial uses of dredged material during the Feasibility Study and will coordinate this evaluation with SCDHEC, SCDNR, F&WS, and NMFS. Attempts to beneficially use dredged material during the previous deepening project were unsuccessful; however, successful projects at other navigation channels have since demonstrated that dredged material can be a resource rather than a “waste product.”*

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#### Issues Discussed that Are Not Discussed in the 905(b) Report

The 905(b) analysis does not list effects of the project on the concentrations of dissolved oxygen as an environmental consideration, but does provide a placeholder for this issue by indicating in section 5.8.1 that the SC Department of Natural Resources raised this issue with the Charleston District during coordination. The group that met February 16 also is concerned about: (1) The effects of the project on the concentrations of dissolved oxygen within the harbor system, especially during summer months and droughts when hypoxic conditions are prone to occur. (2) Hydrological changes due to channel deepening (e.g., increased flow, erosion, shoaling). Choosing an appropriate means to examine these issues will be important and likely would affect decisions about hydrodynamic models used for

examining the project. (3) Sediment contaminant levels (sediments around Navy Base recently failed chemical analysis tests for offshore disposal). Sediment contaminant mapping in the Ashley River has provided excellent insights into the extent and distribution of these sediments that may affect sediment disposal. Similar mapping of the harbor basin and Cooper River could be very instructive. (4) The feasibility study should also include in-kind mitigation opportunities.

Attendees:

NMFS	Jaclyn Daly
	Pace Wilber
FWS	Mark Leao
SCDNR	Stacie Crowe
	Peter Kingsley-Smith
	Marty Levisen
	Marcel Reichert
	Bob Van Dolah
	Priscilla Wendt

## CHARLESTON HARBOR DEEPENING STUDY

Comments and/or issues to be considered during the study process. Please print your issue below:  
For additional information, please visit <http://www.sac.usace.army.mil/?action=programs.Post45>

Gullah Geechee Cultural Heritage Corridor  
Emory S. Campbell, Chair  
1214 Middle St.  
Sullivan's Island, SC 29482  
(843) 881-5516 x12 → Michael Allen, NPS & GCHC Staff

Please provide contact information should a clarification and/or further information on your comment be needed (optional):

Rebekah Dobrasko, SCDAH-SHPO

Name / Title / Business / Individual / Organization

(803) 896-6183, dobrasko@scdah.state.sc.us

Mailing Address / Telephone / E-mail address





REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
CHARLESTON DISTRICT, CORPS OF ENGINEERS  
69A HAGOOD AVENUE  
CHARLESTON, SOUTH CAROLINA 29403-5107

August 11, 2011

Planning and Environmental Branch

RECEIVED AUG 18 2011

Ms. Lisa Stopp  
Tribal Historic Preservation Officer  
United Keetoowah Band of Cherokee Indians  
P.O. Box 746  
Tahlequah, OK 74465

The United Keetoowah Band of Cherokee Indians in Oklahoma has no objection to the referenced project. However, if any remains, artifacts or other items are inadvertently discovered, please cease construction immediately and contact us at 918-458-6533 or by letter.

*[Handwritten Signature]*  
Date: 8-24-11  
Lisa C. Stopp, Tribal NAGPRA POC

Dear Ms. Stopp:

The Army Corps of Engineers completed a reconnaissance level investigation for the Charleston Harbor Navigation Improvement Project in July 2010, which concluded that there is federal interest in performing a feasibility study on the project related to deepening Charleston Harbor beyond the currently authorized 45 foot depth. To view this report, entitled "Charleston Harbor Post 45 905b Analysis", please see our website at <http://www.sac.usace.army.mil/?action=programs.post45>. On June 20<sup>th</sup>, the Charleston District signed the Feasibility Cost-Sharing Agreement (FCSA) with the project's sponsor, the South Carolina State Ports Authority (SCSPA). The feasibility study will be cost-shared 50-50 with the SCSPA, but will be conducted by the Charleston District. On August 12th, a Notice of Intent will be published in the Federal Register. This NOI announces that the Corps intends to prepare a Draft Environmental Impact Statement (DEIS) for the Charleston Harbor Deepening Study (Post-45 study). The purpose of this DEIS and feasibility study is to investigate modification of the existing Charleston Harbor project in the interest of navigation improvements. The DEIS will consider the possible effects of channel deepening/widening on aquatic resources, loss of wetlands, as well as other project related impacts on protected species, water quality, fish and wildlife resources, cultural resources, essential fish habitat, socio-economic resources, coastal processes, aesthetics, and other impacts identified through scoping, public involvement, and agency coordination.

The first major step of this study includes our NEPA scoping efforts. To that effect, we propose a series of meetings (resource agencies, special interest groups, maritime community, and public) in order to inform interested parties of our progress and to obtain feedback as to significant issues to focus on throughout the project. The main thing to remember about scoping is that it is a process to initiate preparation of an EIS. It is not concerned with the ultimate decision on the proposal because one has not yet been reached. The overall goal of this process is to develop adequate environmental analyses, including a preliminary look at the reasonable alternatives and mitigation measures. We are seeking the views of interested parties on what issues and resources they believe are important to include in a thorough evaluation of both the beneficial and adverse impacts of this project.

**From:** [Hansen, William](#)  
**To:** [Messersmith, Mark J SAC](#)  
**Cc:** [Hansen, William](#); [Hafer, MaeLee](#)  
**Subject:** scoping meeting tomorrow on Charleston Harbor deepening study  
**Date:** Monday, October 03, 2011 3:03:36 PM  
**Attachments:** [\(No Name\).vcf](#)

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As mentioned in our phone conversation, I may attend portions of the webmeeting or teleconference, but doubtful that I would be able to listen to an all day meeting. If there appears no suitable time for input, I will provide written input. Here are a few comments that I had.

I am interested in this proposal as it compares to the historic channel changes in the Charleston Harbor. I think it would be beneficial in the study to include the harbor history from presettlement on - notable periods of aggradation or degradation, periods of dredging deeper or wider. It seems prudent to point out the extent of past channelization and ditching and how it has effected both sediment and water yield. Although the actual effects of gullying, channelization, ditching, rice culture and canals may be difficult to determine as to their effect on harbor conditions, many still exist and show up well on light detecting and ranging (Lidar) coverage.

It is much easier to propose and support harbor deepening if the Harbor was once deeper. So in other words, might this be restoration of past depth as opposed to increasing depth that never was. With the potential for sea level rise (which adjusts base level), even deepening may not be enough to permanently remove or flush sediment -- what would be needed to maintain the new channel dimension?

There are many past and present sources of sediment upstream, and these may have contributed to channel filling over time. On the other hand, in a web article, I read that the harbor was once 35 feet deep, now 45 feet deep through dredging, and now the need to deepen may be needed to accommodate the larger ships that will pass the Panama Canal. Identifying historic depth (presettlement) and changes through time would be helpful to your analysis and help to identify the present as well as future activities and costs.

Deepening may cause upstream and downstream channel adjustments and bank instability in Cooper and Wando Rivers. It is unlikely that harbor changes would cause channel adjustments to extend up into the Francis Marion National Forest. As I mentioned in our phone conversation, an instream mining clip was made in a demonstration on Inchannel gravel mining and bar pit capture with audio narrative by Little River Research ([http://www.emriver.com/?page\\_id=1521](http://www.emriver.com/?page_id=1521)) that shows the upstream headcut movement and also downstream clean water effects on bank erosion from excavation for mining (small scale dredging).

I hope you can make a case for restoration of harbor depth. If the data is not available, then you can fall back on historically, there have also been a lot of sediment and other modification to the harbor from the landscape activities such as farming, urbanizing, roads, railroad, dams, diversions, silviculture, development, gullies, rice culture, channelization of streams, drainage of wetlands, etc., and these have contributed to/or caused changes. Some of these activities were aggressively used throughout the low country, even in portions of what is currently National Forest. Without a doubt, activities have altered sediment and flow delivery to and through the harbor.

If this proposal extends harbor deepening beyond historic evidence, then added attention should be applied to help determine the extent of changes to expect in channel morphology, aquatic habitat, water quality, maintenance dredging and other issues. Although tackling unwanted sediment through dredging is common, you might also look for any major sediment sources within the watershed. Reducing upstream sediment sources enables water to move more sediment in the channel. Whether sediment sources could be reduced enough to improve the harbor depth is not known.

Stream morphology and dynamics can be very complex. It is important that bottomland hardwoods along Cooper and Wando Rivers, especially in the vicinity of the dredging be maintained. In many instances, the root systems of these trees are what is holding the streambanks together. A narrow channel with stable trees can hold the banks together and move water and sediment more efficiently than a wide channel. As channels widen due to loss of bank stability, they become less effective in moving their sediment load.

As a side note, with increased in Harbor deepening and potential cargo activity, there is concern about potential for traffic increases in container and other trucking through or across the National Forest, with effects to forest resources and conditions such as wildlife habitat, safety, noise, air quality, recreation quality and other traffic based issues. These are ongoing concerns we face in managing sensitive forest resources within the expanding urban interface.





# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

176 Croghan Spur Road, Suite 200  
Charleston, South Carolina 29407

September 1, 2011

Lt Colonel Edward P. Chamberlayne  
District Engineer  
US Army Corps of Engineers  
69A Hagood Avenue  
Charleston, SC 29403-5107

Attn: Mark Messersmith

Re: Notice of Intent, Feasibility of Deepening Charleston Harbor, Charleston, SC  
FWS Log No. 2011-CPA-0183

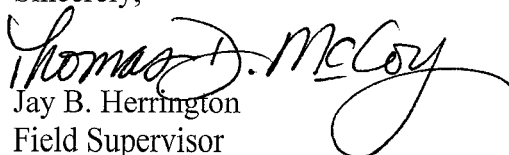
Dear Colonel Chamberlayne:

The U.S. Fish and Wildlife Service (Service) has received the Department of the Army, Corps of Engineers (Corps) Notice of Intent (NOI) to prepare a Draft Environmental Impact Statement (EIS) for a study on the feasibility of deepening the Charleston Harbor, Charleston, SC. The Corps refers this project as the Post-45 Study. The Corps intends to evaluate the feasibility of widening and deepening the existing navigation channels in the Charleston Harbor to accommodate future shipping traffic. The NOI was published in the Federal Register on August 12, 2011.

Service personnel have already provided correspondence (July 19, 2009) to relay potential concerns with the deepening project. We have also met with other resource agencies to address similar, potential issues associated with the deepening project. We are currently in discussion with the Corps to facilitate a Fish and Wildlife Coordination Act (FWCA) report for the project. Future Service involvement with multi-agencies will include scoping meetings toward the development of the Draft EIS as well as continued coordination through the FWCA.

If you have any questions regarding Service comments, please contact Mr. Mark Caldwell. He may be reached at (843) 727-4707 ext. 215.

Sincerely,

*for*   
Jay B. Herrington  
Field Supervisor

JBH/MAC