

1. Administrative Details

Proposal Name: Carolina Beach, N.C. Coastal Storm Damage Reduction Project Modification

by Agency: New Hanover County

Locations: NC

POC Name:

POC Phone:

POC Email:

Date Submitted: 09/03/2015

Confirmation Number: 8c67ced6-56ff-4240-af94-1782810f339d

Supporting Documents

File Name	Date Uploaded
Army Corp June 19 2015.pdf	09/08/2015
2015 CB Support Letter executed pdf.pdf	09/08/2015
CB 7001 Package Sept 2015.pdf	09/08/2015

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
New Hanover County, N.C.(Primary)	Please see uploaded pdf.
Town of Carolina Beach, N.C.	Carolina Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The proposal would request a two-cycle (six year) fundable extension of the CB CSDR project. The Town of Carolina Beach would like to offer our assistance with this endeavor and fully support the New Hanover County efforts to extend the life of the project.

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

Modification to an Authorized USACE Project : Carolina Beach, N.C. Coastal Storm Damage Reduction Project

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

Please see uploaded pdf.

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$0	\$0	\$0
Construction	\$12	\$4	\$16

Explanation (if necessary)

Please see uploaded pdf.

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Please see uploaded pdf.

7. *Does local support exist? If 'Yes', describe the local support for the proposal.*

Yes

Local Support Description

Please see uploaded pdf.

8. *Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?*

Yes

Primary Sponsor Letter of Support

(As uploaded)

Army Corp June 19 2015.pdf



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

June 19, 2015

Brigadier General C. David Turner, Commander
HQs, United States Army Corps of Engineers, SAD
60 Forsyth Street NW, Room 9M15
Atlanta, Georgia 30303-8801

Dear Brigadier General Turner,

I am writing with respect to the U.S. Army Corps of Engineer's Carolina Beach and Wrightsville Beach Coastal Storm Damage Reduction Projects (CSDR) located in New Hanover County, North Carolina. The State of North Carolina has historically supported the USACE's CSDR program along our NC coastline and will continue supporting the successful management of our coastal resources and infrastructure. The Corps CSDR projects have helped to limit potential loss of life and infrastructure from coastal impacting weather events during the last several decades.

Our understanding is that New Hanover County wishes to explore the continued federal participation in the Carolina Beach and Wrightsville Beach CSDR projects as authorized in the 2014 WRRDA, Section 7001. With the years of substantiated CSDR project success, the State fully supports the New Hanover County efforts to extend the life of these coastal infrastructure projects.

Sincerely,

Tom Reeder
Assistant Secretary for Environment

Cc: Colonel Kevin P. Landers, Sr., USACE - Wilmington District
Chris Coudriet, Manager, New Hanover County
Layton Bedsole, Shore Protection Coordinator, New Hanover County
Jay Zimmerman, NCDWR
Darren England, NCDWR

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-707-8600 \ Internet: www.ncdenr.gov

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Other Non-Federal Sponsors Letter(s) of Support

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2015 CB Support Letter executed pdf.pdf

Dan Wilcox
Mayor

Sarah Friede
Council Member

Steve Shuttleworth
Council Member



LeAnn Pierce
Mayor Pro Tem

Gary Doetsch
Council Member

Michael Cramer
Town Manager

TOWN OF CAROLINA BEACH
1121 N. Lake Park Boulevard
Carolina Beach, North Carolina 28428
910 458 2996
FAX 910 458 2997

June 25, 2015

Chris Coudriet
New Hanover County Manager
County Government Complex
230 Government Center Dr.
Wilmington, NC 48203

Dear Chris,

I am writing with respect to the U.S. Army Corp of Engineers Carolina Beach, Coastal Storm Damage Reduction project (CSDR) located in New Hanover County, NC. For several decades the Town of Carolina Beach, New Hanover County and the State of North Carolina have supported the USACE's CSDR program and would like to continue to support the successful management of our coastal resources and infrastructure. The Corp's CSDR project in Carolina Beach has helped to limit potential loss of life and infrastructure from coastal weather events during the last several decades.

Carolina Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The proposal would request a two-cycle (six year) fundable extension of the CB CSDR project. The Town of Carolina Beach would like to offer our assistance with this endeavor and fully support the New Hanover County efforts to extend the life of the project. Please let us know how we can participate in this effort.

Sincerely,

A handwritten signature in blue ink that reads "Michael Cramer". The signature is fluid and cursive.

Michael Cramer

Cc: Colonel Kevin Landers, SAW
Tom Reeder, NCDWR
Layton Bedsloe, NHC Shore Protection Coordinator

Additional Proposal Information

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CB 7001 Package Sept 2015.pdf



NEW HANOVER COUNTY

Engineering Department
230 Government Center Drive · Suite 160
Wilmington, North Carolina 28403
TELEPHONE (910)-798-7139
FAX (910) 798-7051

James P. Iannucci, PE, CFM
County Engineer

H. Layton Bedsole Jr., REM
Shore Protection Coordinator

US Army Corps of Engineers
Headquarters, Washington, DC
WRRDA Section 7001, Project Proposals

3 September 2015 (email transmittal)

<http://www.usace.army.mil/Missions/CivilWorks/ProjectPlanning/WRRDA7001Proposals.aspx>.

Re: Carolina Beach, North Carolina
Coastal Storm Damage Reduction Project
Section 7001, Proposed Modification

Please accept this proposal as Noticed by the US Army Corps of Engineers (USACE) on 26 May 2015 in the Federal Register and as instructed by the USACE Headquarters' Implementation Guidance for Section 7001 of the Water Resources Reform and Development Act of 2014 (WRRDA 2014) - Annual Report to Congress.

This proposal is being submitted by New Hanover County in a coordinated effort with the Town of Carolina Beach and the North Carolina Division of Water Resources (The Stakeholders).

The Stakeholders propose a modification to WRRDA 2014 Section 1037 for projects with similar timelines as the existing Carolina Beach (CB) Coastal Storm Damage Reduction (CSDR) Project. The proposed modification would be applicable to those CSDR projects nationwide whose authorizations are approaching the end of the 50-year period for federal cost-sharing. The Stakeholders are proposing a two-cycle maintenance extension calculated from the projects' current maintenance schedules (6-year extension from FY 2017 in the case of CB). The proposed modification would provide current projects nationwide the potential maintenance continuity during their Beach Renourishment Evaluation Report (BRER) process periods. The proposed modification would allow the CB CSDR project and others nationwide the entirety of the potential 15-year extension as opposed to a truncated extension inclusive of the USACE process.

Specific to the CB CSDR:

- The Project Cooperation Agreement (PCA) contract will expire in December 2016;
- BRER implementing guidance was released in July 2015;
- The BRER will require more than 16 months inclusive of General Investigation (GI) funding, production, vertical approval, potential Congressional authorization followed by potential Congressional appropriation;
- The earliest potential GI funding would likely be the FY 2016 workplan routinely released in the spring of the fiscal year;
- An aggressive timeline could have the BRER completed and authorized within a potential maximum six-year planning horizon as described below;

Process Element	Process Period	Process Timeline	Calendar Timeline
General Investigation Funding	FY16 Work Plan	1 Year	2016
BRER	2016 - 2019	3 Year	2019
WRDA Bill	2020	1 Year	2020
Appropriations Bill	2021	1 Year	2022

- Considering such a process timeline and the inferred 15-year extension beginning year 51 of a project's ending life cycle; the CB CSDR project would glean only half the potential authorized extension intended by Congress and
- Subject to Federal appropriations, the proposed modification would give the CB CSDR project the assurance of two periodic nourishments; maintain its level of protection for lives and property and provide the additional 15-year extension, subject to congressional authorization, that the Stakeholders believe Congress clearly intended.

The Carolina Beach project represents the first federal shore protection project to go through the BRER process. The Carolina Beach project is experiencing the unintended consequences of Section 1037 for those projects nationwide approaching their PCA contracted dates. Section 1037 could not have anticipated all potential process timelines and realities inclusive of implementation guidance, study development, vertical approval, project authorization and appropriation.

Please accept the attached Section 7001 proposal for consideration in the USACE's 2016 Annual Report to Congress.

Please feel free to call with questions or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Layton Bedsole Jr." with a stylized flourish at the end.

H. Layton Bedsole Jr., R.E.M.
New Hanover County, Shore Protection

Cc: DC Delegation (Rep. Rouzer, Sen. Tillis, Sen. Burr, Rep. Jones)
SAW (Col. Landers)
NCDWR (T. Reeder, D. England)
NHC Mgt.
NHC BOC
CB Mgt.

Water Resource Development Project Proposed Modification

Coastal Storm Damage Reduction Carolina Beach, North Carolina



**Submitted by New Hanover County
In coordination with the Town of Carolina Beach
& the State of North Carolina**

September 2015

Executive Summary

The Water Resources Reform & Development Act of 2014 (WRRDA 2014) Section 7001 provides non-Federal interests a methodology for proposing feasibility reports, studies or proposed modifications to authorized water resource development projects. If the Assistant Secretary of the Army for Civil Works [ASA (CW)] deems a proposal compliant with Congressional criteria set forth in Section 7001, the ASA (CW) may include the proposal in the US Army Corps of Engineers (USACE) annual “*Report to Congress on Future Water Resources Development.*”

WRRDA 2014, Section 1037 Hurricane and Storm Damage Reduction (a) (b) provides non-Federal stakeholders a “study” path for extending a coastal storm damage reduction (CSDR) project for a period not to exceed 15 years. USACE Headquarters and the ASA (CW) have provided the Beach Renourishment Evaluation Report (BRER) as the implementing guidance for such projects. As such, the Carolina Beach (CB) CSDR is the nation’s first potential CSDR 15-year extension. New Hanover County (NHC) in coordination with the Town of Carolina Beach (CB) and the State of North Carolina’s Division of Water Resources (the Stakeholders) propose a technical modification allowing ongoing maintenance during a USACE District’s BRER development. The Stakeholders are requesting such a modification be made applicable to the current CB CSDR project and others nationwide approaching their project 50-year life cycle. The Stakeholders are proposing a two-cycle (six year) maintenance extension for the CB CSDR project calculated from the current maintenance cycle inclusive of the 3-year extension (FY 2017) granted in WRRDA 2014 Section 1037 (e) Special Rule. The proposed two-cycle maintenance extension (CSDR specific) would provide ongoing projects nationwide the potential maintenance continuity during their BRER process periods.

The Town of CB, as the non-Federal sponsor, together with NHC and NC are proposing a two-cycle maintenance extension (FY 2023) subject to the South Atlantic District (SAW) BRER guidance implementation. The BRER results may potentially justify extending the CB CSDR Federal authorization to FY 2032 or if technically corrected 15-years beyond the BRER’s initial construction completion date for any applicable CSDR project nationwide. The proposed modification would allow the CB CSDR project and others the entirety of the potential 15-year extension as opposed to a truncated extension inclusive of the USACE process. An aggressive timeline could have the BRER completed and authorized within a 3- to 6-year planning horizon while the proposed maintenance cycles continue providing the coastal infrastructure protection and the industrial tourism support. The estimated cost of a two-cycle maintenance extension for the CB CSDR is approximated at \$8.0M/cycle.

NHC is providing the following project specific Section 7001 proposal justifying why the technical modification should be included in the USACE’s 2016 Report to Congress and made accessible to each applicable project nationwide.

Carolina Beach CSDR Project, Authorization History

- Authorized by Congress in 1962 (initial construction in 1964).
- Section 934 Re-evaluation in 1993 (WRDA 1986).
 - Federal participation authorized through FY 2014.
- Authorization extended for three years (WRRDA 2014).
 - Federal participation authorized through FY 2017.

Project Description

The CB CSDR project begins just north of the Carolina Beach Fishing Pier and extends south 14,000 linear feet to approximately Tennessee Avenue (Figure One).



Figure One: Project Bounds

The cross-sectional design template begins with a 25-foot wide dune cresting at 12.5 feet adjoined water-ward by a 50-foot wide berm at elevation 9.5 feet (Figure Two). The project also consists of a shore parallel rock revetment 2,075 feet long located at the project's northern limits. The revetment's cross-sectional design includes the revetment at elevation 9.5 feet fronted by a 130-foot berm at an elevation of 5.5 feet (Figure Three) (NHC 2011).

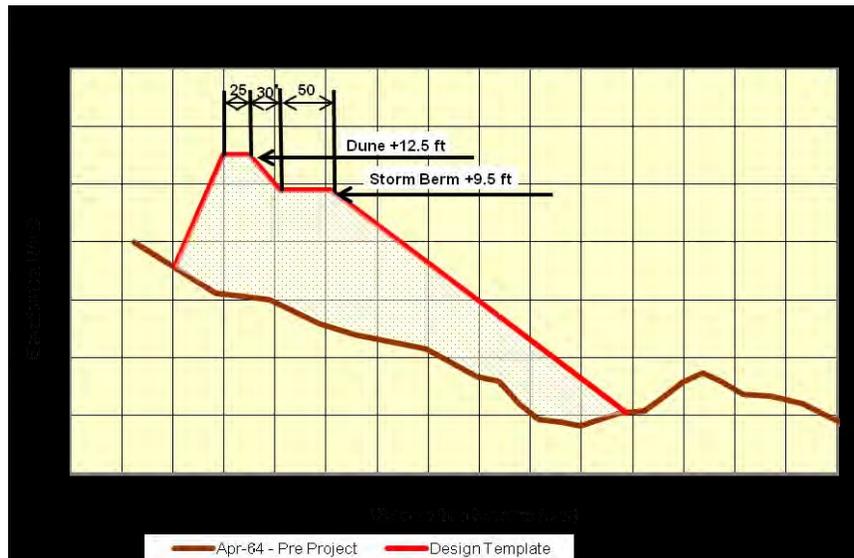


Figure Two: Typical Cross Section

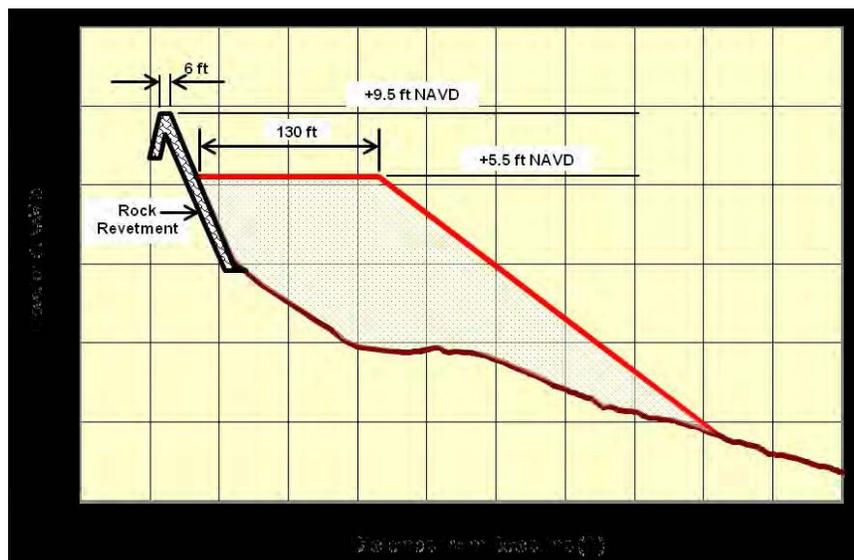


Figure Three: Typical Revetment Cross Section

The CB CSDR project has been routinely maintained on a three-year cycle using primarily the USACE engineered, self-recharging borrow site within the Carolina Beach Inlet throat. The sand within the inlet borrow site meets the NC Sediment Criteria regulated by the NC Division of Coastal Management (NCDCM) and provides the volume necessary for continuing the proposed modification's maintenance cycles. There is an adjacent offshore borrow site that also meets the NC Sediment Criteria which can be considered as a secondary borrow source for the CB CSDR project (USACE 1993).

The project has successfully reduced risk to life/infrastructure and continues to meet the USACE's designed purpose and need. The following are just two examples of storm protection and system response the CB CSDR project has provided. Hurricane *Fran*, a 120-year storm event came up the Cape Fear River in 1996 making landfall along NHC's beaches. There were no structures located behind the CB CSDR dune system which were threatened by *Fran* induced erosion. Three years later Hurricane *Floyd* a 75-year event also made landfall on the NHC coastline and again; there were no structures located behind the CB CSDR dune system threatened by *Floyd's* erosional forces (Sea Grant 2015).

Proposal Requested Information

On 26 May 2015, the USACE provided a notice in the Federal Register notifying non-Federal interests of Section 7001 proposal deadlines supporting "...modifications to authorized USACE water resources development projects..." NHC is providing the following supporting narrative as requested in the Federal notification and provided in the USACE's Section 7001 implementing guidance.

1. Provide the name of all non-Federal interests planning to act as the sponsor, including any non-Federal interest that has contributed or is expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

NHC, the Town of CB and the State of North Carolina's Division of Water Resources (the Stakeholders) have shared project responsibilities including non-Federal cost share allocations. The Town of CB is the non-Federal signatory of the USACE's Project Cooperation Agreement (PCA) (USACE 1994). This cooperative arrangement has been a solid Federal-State-Local collaboration that would likely continue if the two-cycle maintenance extension is approved by the USACE and authorized by Congress. Included are letters of support from both the State of NC and the Town of CB (NCDWR 2015, ToCB 2015).

2. State if this proposal is for a feasibility study or a modification to an authorized USACE project or feasibility study and, if a modification, specify the authorized project or study.

The Stakeholders propose a modification to the existing CB CSDR project. The project has an active and viable PCA between the Town of CB and the USACE facilitating a seamless transition into the proposed maintenance extension period.

“WHEREAS, construction of the Carolina Beach & Vicinity- Carolina Beach Portion Hurricane Wave and Shore Protection Project at Carolina Beach, North Carolina was authorized by Public Law 87-874;

WHEREAS, Section 934 of the Water Resources Development Act of 1986, Public Law 99-662, authorized the Government to extend Federal participation in continued beach nourishment at Carolina Beach & Vicinity- Carolina Beach Portion until 2014;” (USACE 1994).

As allowed in WRRDA 2014, the Stakeholders propose a two-cycle maintenance modification with no changes to the project design nor its operation and maintenance. The two-cycle maintenance extension would bridge the project’s continuity during USACE guidance implementation assessing the potential for a 15-year extension. The project has demonstrated a half century of success in accomplishing its mission of reducing erosional forces, minimizing flooding effects and supporting recreational/ecological uses.

3. State the project purpose of the proposed study or modification.

The proposed modification would provide an interim bridge of continued maintenance during a project’s BRER development and authorization. An aggressive timeline could have the BRER completed and authorized within a potential maximum six-year planning horizon as described in following table.

Process Element	Process Period	Process Timeline	Calendar Timeline
General Investigation Funding	FY16 Work Plan	1 Year	2016
BRER	2016 - 2019	3 Year	2019
WRDA Bill	2020	1 Year	2020
Appropriations Bill	2021	1 Year	2022

The CB CSDR project has been on a routine three-year maintenance cycle since the mid-1980s. The proposed two-cycle (six year) maintenance extension would act as a conduit or interim step allowing continued coastal infrastructure maintenance (CB specific FY 2019 and FY 2022) during BRER implementation. The two-cycle extension would allow the project to compete for USACE construction general (CG) funds while the USACE implements the BRER guidance through general investigation (GI) funds. The proposed modification’s approach would allow the CB CSDR project and others the potential of a 15-year extension as opposed to a truncated extension inclusive of the USACE process.

The CB CSDR has successfully reduced public health risks and public/private infrastructure exposure from coastal storms and hurricanes. The project has minimized direct and indirect effects from *Hugo, Fran, Bonnie, Bertha, Floyd, Irene, Sandy* and several other hurricanes over the last 50 years. The CB CSDR project has served as a significant and effective measure to protect lives while also protecting the public and private infrastructure that supports a vibrant tourism industry, tax bases, small businesses and important natural resources’ habitats. The proposed two-cycle maintenance extension would span the time frame necessary to ensure the ongoing principles of “Smart Planning” are implemented within the BRER assessing the project’s potential 15- year extension.

4. Provide an estimate, to the extent practicable, of the total cost of the proposed study or modification.

Facilitating the current PCA's cost sharing formulation of 65% Federal and 35% non-Federal, the estimated Federal costs of the proposed two-cycle maintenance extension through 2023 (FY 2019 and FY 2022) are approximated at \$5.2M/cycle. Annualized over six years, the Federal project costs are estimated at approximately \$1.7M/year. The non-Federal cost share as calculated from the Federal participation estimate above would be approximately \$2.8M/cycle or \$933K/year over the project's two-cycle extension. In total, the cost per maintenance cycle is estimated at \$8.0M annualized over the six years at \$2.6M/year. This participation level has historically been achieved by the project's stakeholder representation. In 2008, direct expenditures in the Town of CB were documented within the North Carolina Beach Inlet Management Plan at \$48.9M (NCDCM 2011). This economic analysis indicates a \$19.00 return on a \$1.00 CSDR investment. The proposed two-cycle maintenance extension portends a continued and significant economic return for NC and the Nation.

Please recognize there are no design or template changes requested. The existing borrow source appears sufficient, historical maintenance cycles remain adequate, cost sharing percentages are supported and no detrimental ecological effects have been documented. With uninterrupted maintenance, the project's ongoing attributes will continue maintaining the area's coastal storm damage protection. With the proposed two-cycle maintenance extension, the coastal protection characteristics as well as the recreational and environmental benefits will retain their attributes. The BRER's tasks, fees and man-hours may be applicable within the USACE's three by three by three planning approach possibly bracketing the study's process maximums (USACE 2013).

5. Describe, to the extent practicable, the anticipated monetary and non-monetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

In February 1993, the USACE produced a Section 934 Re-evaluation Report and Environmental Assessment for the CB CSDR project. In the 1993 re-evaluation, a commercial/residential property summary indicated a potential loss of nearly 800 structures including infrastructure (transportation/utility) features. The total present worth (1993) of potential losses was approximately \$54.2M. The total expected annual project benefits were approximately \$5.3M and total annual project costs were approximately \$2.7M. The 1993 benefit cost ratio (BCR) was determined as 1.98 and the project's authorization was justified through FY 2014. Supporting the most recent FY 2013 maintenance event and calculated at a 7% interest rate, the average annual benefits were approximately \$10.6M and the average annual costs were approximately \$3.0M for a BCR of 3.5 (USACE 2015a). USACE Policy Guidance Letter No. 22 dated November 1991 stipulates "Federal participation in periodic beach nourishment at existing projects may be extended if it is determined that based on current evaluation guidelines and policy, the existing project is economically justified" (USACE 1991).

Today's "without-project risks" have grown both in terms of life safety, small business development and public/private structural investment. The Town of CB has an approximate 6,000 year-round population and an approximate 30,000 seasonal population with a 2015/2016 projected tax base of \$1.7B. The tax base estimate is inclusive of real property estimated at \$1.6B, business personal property at \$21.8M and personal property at \$17.4M (NHC 2015). Considering routinely used economic analyses, indirect and induced multipliers track the ripple effects from direct expenditures. As such, direct expenditures in the Town of CB for the year 2008 were documented at \$48.9M (NCDCM 2011) and the annualized CSDR project costs (2011) as computed from Western Carolina University's Beach Nourishment Viewer equated to a cost of \$1.5M/year over the project's construction history (WCU 2014). This expenditure and cost analysis provides a \$33.00 return on a \$1.00 CSDR investment. Based on recent NHC tax records, over 40 States and the District of Columbia are either residentially and/or commercially represented in the Town of CB and have benefited from the USACE's CB CSDR project (NHC 2015). The "with-project" economic multipliers extend from the Town of CB businesses/owners throughout the State and Nation.

Coastal and intra-coastal access of navigable waters is paramount to North Carolina's commercial, recreational and industrial boating community. Carolina Beach Inlet has an USACE designed and maintained borrow site within the inlet complex. This system of recycling long-shore driven sand from the inlet back to the ocean front shoreline has been successful in beneficially reusing sand as well as supporting safe harbor access by waterborne transportation. Allowing this continued sand recycling ensures both shoreline benefits and support for waterborne transportation benefits.

The CB CSDR project has successfully co-existed with NC's natural resources including several listed species and their critical habitat. By continuing to maintain the Town of CB's coastal infrastructure, species such as the loggerhead sea turtle (*Caretta caretta*), piping plover (*Charadrius melodus*) and the red knot (*Calidris canutus*) will continue to have access to habitats conducive to their continued existence.

Similar USACE CSDR projects within the region have addressed sea level rise effects with and without project conditions. When assessed against historical rates as well as intermediate/high rates predicted by the National Research Council or the Intergovernmental Panel on Climate Change; the accelerated sea level rise scenarios resulted in minimal increases to project costs. Assuming an accelerated sea level rise, project net benefits were also modeled as increasing while the project remained economically justified. Such results may support the position of CSDR projects systematically adapting to sea level rise oscillations (USACE 2014).

6. Describe if local support exists for the proposal.

Concurrence has been received from the Town of CB and the State. Both entities have supplied input for the proposal as well as letters of support (NCDWR 2015, ToCB 2015). NHC Management and NHC's Board of Commissioners support the proposed modification recognizing the project's success and the needed continuance of Federal participation.

7. State if the non-Federal interest has the financial ability to provide for the required cost share.

Since the project's inception, the Stakeholders have successfully co-sponsored the CB CSDR project at various fiscal percentages. NHC, through a room occupancy tax (ROT), and the Town of CB, by independent local methods, have dedicated CSDR funding sources. Each will continue to support the project's non-Federal cost share allocations. NC recognizes the importance of coastal risk reduction and resiliency as well as the statewide benefits tourism and our natural resources represent in supporting our coastal infrastructures' industrial base. NC will continue supporting the successful management of the CB CSDR project.

8. Submit a letter or statement of support from each associated non-Federal interest. (Attachments)

Process Considerations

The Stakeholders requests the ASA (CW) to consider the following project attributes during the deliberation of the Congressional criteria.

- (1) The CB CSDR project was the first coastal shoreline damage control project to successfully complete a 50-year USACE project mission. The project has without a doubt met and/or exceeded the project's purpose/need and the USACE's mission statement.

“The Corps of Engineers' flood and coastal storm damage reduction mission is to provide safe and reliable projects that reduce economic and environmental damages, and prevent loss of life from both inland flooding and coastal storms.”
(USACE 2015b).

The CB CSDR project has encouraged a diverse variety of habitats ranging from an oceanfront sandy beach supporting regulated species such as loggerhead sea turtles, red knots, piping plovers and various migrating shorebirds. The project has also resulted in a healthy well vegetated dune system supporting multiple species' usage while providing the public and private infrastructure the shoreline protection as designed. The project has indirectly through long-shore transport positively influenced undeveloped shoreline areas facilitating public access and use. In WRRDA 2014, Section 7001; the CB CSDR project and others were granted an opportunity to put forward proposals as non-federal stakeholders. The proposed two-cycle maintenance extension would provide continuity between future maintenance efforts; would continue preserving the coastal infrastructure; would provide for ongoing recreational/ecological resources and would bridge the USACE process between guidance implementation and the potential 15-year extension authorization. The proposed technical modification would allow the CB CSDR project and others potential access to the entire 15-year extension as put forth in the WRRDA 2014 legislation.

(2) NHC, the Town of CB and NC support this modification to an existing and very successful USACE CSDR project. The Town of CB's coastal infrastructure underpins the community's resiliency and safety as well as providing for the coastal ecosystems and associated species. The Stakeholders appreciate and support the USACE's need to ensure continued Federal interests in justifying the project's potential 15-year extension. The Stakeholders also recognize the importance of the ASA (CW) required concurrence as well as that of Congress, potentially within future WRRDA legislation.

(3) The Stakeholders request for a two-cycle maintenance extension of Federal participation has not been included in previous USACE Annual Reports.

(4) The CB CSDR project has maintained compliance with NEPA guidelines, the Endangered Species Act, the Coastal Zone Management Act, the Magnuson Stevens Act and the National Historic Preservation Act. The CB CSDR project has successfully co-existed with various regulated species and their critical habitats as defined by the US Fish and Wildlife Service and the National Marine Fisheries Service. The project has also resulted in a healthy well vegetated primary and secondary dune system supporting multiple species' usage while providing the public and private infrastructure the flooding and erosional protection as designed.

As discussed previously, economic viability was demonstrated through multiple uses of estimated private sector expenditures as well as academia's tracking of historical outlays. Industrial sector projections were also exercised in demonstrating an ongoing positive benefit/cost exposure to the Federal and non-Federal stakeholders.

(5) Considering the CB CSDR's multiple stakeholder relationship and project history, there is no doubt the USACE would continue providing the same level of project success with a two-cycle maintenance extension modification. The CB CSDR has minimized erosional losses, minimized potential flood damage losses to life and property and maximized the recreational uses advancing North Carolina's small businesses and tourism industry.

Attachments:

North Carolina Letter of Support
Town of Carolina Beach Letter of Support

References:

New Hanover County (NHC). 2015. NHC Tax Department. Wilmington, NC. June 2015.

NHC. 2011. NHC Beach Nourishment Contingency Plan, prepared by CPE. Wilmington, NC. May 2011.

North Carolina Division of Coastal Management (NCDCM). 2011. NC Beach Inlet and Management Plan (BIMP). Final Report, April 2011. Prepared by Moffatt & Nichol. Raleigh, NC. April 2011.

North Carolina Division of Water Resources (NCDWR). 2015. Personal communication with Staff Project Manager, D. England. June 2015.

Sea Grant. 2015. Personal communication with Coastal Geologist/Engineer, S. Rogers. Wilmington NC. June 2015.

Town of Carolina Beach. 2015. Personal communication with Town Manager, M. Cramer. June 2015.

United States Army Corps of Engineers (USACE). 2015a. Personal communication with Wilmington District USACE. J. Medlock. Wilmington NC. July 2015.

USACE. 2015b. Coastal and Hydraulics Laboratory - Engineer Research and Development Center, Waterways Experiment Station - Vicksburg, Mississippi. Accessible on line at <http://chl.erdc.usace.army.mil/fcsdr>. June 2015.

USACE. 2014. Final Integrated Feasibility Report and Environmental Impact Statement. Coastal Storm Damage Reduction Bogue Banks, Carteret County, North Carolina. August 2014.

USACE. 2013. Army Corps of Engineers to transform civil works program, Posted 8 January 2013. Accessible on line at <http://www.usace.army.mil/Media/NewsArchive/tabid/204/Article/478012/army-corps-of-engineers-to-transform-civil-works-program.aspx> . June 2015.

USACE. 1994. Project Cooperation Agreement between the Department of the Army and the Town of Carolina Beach. The Carolina Beach & Vicinity – Carolina Beach Portion Hurricane Wave and Shore Protection Project. Carolina Beach, NC. 29 July 1994.

USACE. 1993. Section 934 Re-evaluation Report and Environmental Assessment. Carolina Beach & Vicinity – Carolina Beach Portion, Carolina Beach, NC. February 1993.

USACE. 1991. CECW-PA/CECW-PE 22 November 1991 MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS AND DISTRICT COMMANDS SUBJECT: Policy Guidance Letter (PGL) No. 22, Guidance for Placement of Materials on Beaches. November 1991.

Western Carolina University. 2014. Beach Nourishment Viewer. Accessible on line at <http://beachnourishment.wcu.edu/results.php?state=NC>. August 2014.



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

June 19, 2015

Brigadier General C. David Turner, Commander
HQs, United States Army Corps of Engineers, SAD
60 Forsyth Street NW, Room 9M15
Atlanta, Georgia 30303-8801

Dear Brigadier General Turner,

I am writing with respect to the U.S. Army Corps of Engineer's Carolina Beach and Wrightsville Beach Coastal Storm Damage Reduction Projects (CSDR) located in New Hanover County, North Carolina. The State of North Carolina has historically supported the USACE's CSDR program along our NC coastline and will continue supporting the successful management of our coastal resources and infrastructure. The Corps CSDR projects have helped to limit potential loss of life and infrastructure from coastal impacting weather events during the last several decades.

Our understanding is that New Hanover County wishes to explore the continued federal participation in the Carolina Beach and Wrightsville Beach CSDR projects as authorized in the 2014 WRRDA, Section 7001. With the years of substantiated CSDR project success, the State fully supports the New Hanover County efforts to extend the life of these coastal infrastructure projects.

Sincerely,

Tom Reeder
Assistant Secretary for Environment

Cc: Colonel Kevin P. Landers, Sr., USACE - Wilmington District
Chris Coudriet, Manager, New Hanover County
Layton Bedsole, Shore Protection Coordinator, New Hanover County
Jay Zimmerman, NCDWR
Darren England, NCDWR

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Mayor

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Council Member



LeAnn Pierce
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Council Member

Michael Cramer
Town Manager

TOWN OF CAROLINA BEACH
1121 N. Lake Park Boulevard
Carolina Beach, North Carolina 28428
910 458 2996
FAX 910 458 2997

June 25, 2015

Chris Coudriet
New Hanover County Manager
County Government Complex
230 Government Center Dr.
Wilmington, NC 48203

Dear Chris,

I am writing with respect to the U.S. Army Corp of Engineers Carolina Beach, Coastal Storm Damage Reduction project (CSDR) located in New Hanover County, NC. For several decades the Town of Carolina Beach, New Hanover County and the State of North Carolina have supported the USACE's CSDR program and would like to continue to support the successful management of our coastal resources and infrastructure. The Corp's CSDR project in Carolina Beach has helped to limit potential loss of life and infrastructure from coastal weather events during the last several decades.

Carolina Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The proposal would request a two-cycle (six year) fundable extension of the CB CSDR project. The Town of Carolina Beach would like to offer our assistance with this endeavor and fully support the New Hanover County efforts to extend the life of the project. Please let us know how we can participate in this effort.

Sincerely,

A handwritten signature in blue ink that reads "Michael Cramer". The signature is fluid and cursive.

Michael Cramer

Cc: Colonel Kevin Landers, SAW
Tom Reeder, NCDWR
Layton Bedsloe, NHC Shore Protection Coordinator