

1. Administrative Details

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

by Agency: New Hanover County, N.C.

Locations: NC

POC Name:

POC Phone:

POC Email:

Date Submitted: 09/09/2015

Confirmation Number: c8bf173c-fb79-4a57-a2e4-1acec1b62ed0

Supporting Documents

File Name	Date Uploaded
Army Corp June 19 2015.pdf	09/09/2015
WB 7001 Package Sept 2015.pdf	09/09/2015
WB 7001 support letter.pdf	09/09/2015

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)	Concurrence has been received from the Town of WB and the State. Both entities have supplied input for this proposal as well as letters of support (Attachments). NHC Management and NHC’s Board of Commissioners support the proposal’s effort recognizing the success and needed continuance of Federal participation in the WB CSDR project.
Town of Wrightsville Beach	The Town of Wrightsville Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The Town of Wrightsville Beach would like to offer our assistance with this endeavor and fully support the efforts of New Hanover County 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.

[x] Modification to an Authorized USACE Project : Wrightsville 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.

The proposed modification would allow 40 to 50 USACE project's a construction cost capacity increase while continuing USACE "Smart Planning". The proposed modification would align today's costs reflecting current market sectors. The WB CSDR project has reduced public health risks and public/private infrastructure exposure including effects of several hurricanes. The WB CSDR project has protected lives and protected the public and private infrastructure of a successful tourism industry, tax bases, small businesses and natural resources' habitats. The 1986 approved life-cycle project cost limit was set at \$34M through 2036. Today, dredging costs are in the \$6/cy range and mobilization routinely exceeds \$4M. The WB CSDR stakeholders are requesting the capacity cost limit be increased to \$88M through the current PCA life-cycle (2036). The proposed action would not impinge on Congresses' budgeting independence and would retain the USACE's Federal project marketplace. There are no design or template changes requested. Masonboro Inlet's jetty system includes a submerged weir which allows long- shore bypassing of sand into the inlet complex. This system of recycling long-shore driven sand from the inlet back to the ocean front shoreline has been successful in reusing sand, maintaining a safe harbor of refuge and providing for the loggerhead sea turtle (*Caretta caretta*), the piping plover (*Charadrius melodus*) and the red knot (*Calidris canutus*). When assessed against rates portended by the National Research Council (NRC) or the Intergovernmental Panel on Climate Change (IPCC); the accelerated sea level rise scenarios resulted in minimal cost increases. Assuming an accelerated sea level rise, project net benefits were also modeled as increasing while the projects remained economically justified.

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	\$35,000,000	\$19,000,000	\$54,000,000

Explanation (if necessary)

Ensuring the project's planned lifecycle through 2036 (five events on four-year cycles), subsequent maintenance cycles are approximated at a Federal outlay of \$5.2M/event. Annualized over the remaining 20 years of the current PCA, the Federal project costs are estimated at approximately \$1.3M/year. The non-Federal cost share as calculated from the Federal participation estimate above would be \$2.8M/event or \$700K/year over the project's lifecycle. In total, the cost per maintenance event is estimated at \$8.0M annualized over the remaining lifecycle at \$2M/year. This participation level has historically been achieved by the project's stakeholder representation. In 2008, direct expenditures from the Town of WB were documented within the North Carolina Beach Inlet Management Plan at \$100M. Considering these economics, the project yields a \$50.00 return on a \$1.00 CSDR investment. The proposed construction cost capacity update portends a continued significant economic return for NC and the Nation. Supporting the most recent FY 2014 maintenance event and calculated at a 7% interest rate, the average annual benefits were approximately \$1.9M and the average annual costs were approximately \$579K for a benefit cost ratio (BCR) of 3.3.

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.

The USACE 1982 Feasibility Report called out a commercial/residential property summary of over 500 structures including infrastructure (transportation/utility) features. Today's "without-project risks" have grown in terms of life safety, small business development, public and private infrastructure and public and private structural investments. Direct expenditures for the year 2008 were documented at \$100M and the annualized CSDR project costs (2011) as computed from Western Carolina University's Beach Nourishment Viewer equated to a cost of \$1.1M/year. This analysis provides a \$91.00 return on a \$1.00 CSDR investment. Over 40 States and the District of Columbia are either residentially and/or commercially represented on Wrightsville Beach. The "with-project" economic multipliers extend from the Town of WB businesses/owners throughout the State and Nation. Masonboro Inlet's jetty system design includes a submerged weir which allows long-shore bypassing of sand into the inlet complex. This system of recycling long-shore driven sand from the inlet back to the ocean front shoreline has been successful in reusing sand, maintaining a safe harbor of refuge and providing for listed species and their critical habitat, such as the loggerhead sea turtle (*Caretta caretta*), the piping plover (*Charadrius melodus*) and the red knot (*Calidris canutus*). When assessed against rates portended by the National Research Council (NRC) or the Intergovernmental Panel on Climate Change (IPCC); the accelerated sea level rise scenarios resulted in minimal increases to project costs. Likewise assuming an accelerated sea level rise, project net benefits were also modeled as increasing while the projects remained economically justified. Such results may support the position of CSDR projects systematically adapting to sea level rise oscillations.

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

Yes

Local Support Description

NHC Management and NHC's Board of Commissioners support the proposal's effort recognizing the success and needed continuance of Federal participation in the WB CSDR project.

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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WB 7001 support letter.pdf

William Blair, III
Mayor

Elizabeth King
Alderman

Lisa Weeks
Alderman



Darryl Mills
Mayor Pro Tem

Hank Miller
Alderman

Tim Owens
Town Manager

TOWN OF WRIGHTSVILLE BEACH

Post Office Box 626
321 Causeway Drive
Wrightsville Beach, North Carolina 28480
(910)239-1700
FAX (910)256-7910

July 29, 2015

Mr. Chris Coudriet
New Hanover County Manager
County Government Center
230 Government Center Drive
Wilmington, NC 48203

Dear Chris,

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

The Town of Wrightsville Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The proposal would request an increase in the Section 902 construction cost capacity for the project's life-cycle (2036). The Town of Wrightsville Beach would like to offer our assistance with this endeavor and fully support the efforts of New Hanover County to extend the life of the project. Please let us know if we can assist you in the process.

Sincerely,

Timothy W. Owens
Town Manager

Additional Proposal Information

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

Please accept this proposal as Noticed in the Federal Register by the US Army Corps of Engineers (USACE) on 26 May 2015 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 Wrightsville Beach and the North Carolina Division of Water Resources (The Stakeholders).

The Stakeholders propose a project modification allowing cost updates to current market (2016) price estimates. The proposed modification would allow the Wrightsville Beach (WB) Coastal Storm Damage Reduction (CSDR) project and others nationwide an administrative correction to their Project Cooperation Agreement's (PCA) life cycle construction cost capacities. The proposed modification administratively corrects dated cost estimates and does not jeopardize the funding autonomy of current or future US Congresses.

Specific to the WB CSDR:

- The USACE project's PCA contract will expire in 2036;
- The project's current construction capacity potentially defaults in 2022;
- The project's 1982 life cycle construction estimate requires a market adjustment and
- Considering NC's tourism industry, local and regional small businesses, public and private infrastructure and natural resources; such project successes nationwide should be allowed full potential access to the USACE's and the Stakeholders' current PCA contracting periods.

The Town of Wrightsville Beach's project exemplifies one of the first federal shore protection projects in the nation. The WB CSDR project represents a nationwide challenge of 1980's cost estimates jeopardizing currently authorized and very successful USACE projects. Implementing the modification nationwide would allow the potential planning of maintenance efforts through current PCAs' contracting periods. Today's market prices could not have been reasonably forecasted in the 1980s. The proposed modification would not impinge on current or future Congresses' budgeting autonomy and would retain the projects' competitive requirements within the USACE's Federal marketplace.

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,

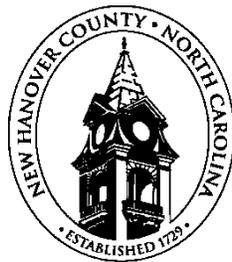
A handwritten signature in black ink, appearing to read "H. Layton Bedsole Jr.", written in a cursive style.

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
WB Mgt.

Water Resource Development Project Proposed Modification

Coastal Storm Damage Reduction Wrightsville Beach, North Carolina



**Submitted by New Hanover County
In coordination with the Town of Wrightsville 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.*”

New Hanover County (NHC), the Town of Wrightsville Beach (WB) and the State of North Carolina Division of Water Resources (NCDWR) (the Stakeholders) propose an administrative action modifying construction cost capacity limits implemented in previous WRDA legislation. The existing WB coastal storm damage reduction (CSDR) project is one of the 40 to 50 USACE projects nationwide that are facing this issue; many of these projects are non-coastal. The proposed modification would allow updates to the dated total project cost capacities previously estimated, as with the WB CSDR project, in the September 1982 Feasibility Report and Environmental Assessment on Shore and Hurricane Wave Protection (USACE 1982). The proposed modification would allow the WB CSDR project a modification update to the authorized construction cost capacity through the project’s 50-year (2036) life cycle (USACE 1990).

Implementing the modification nationwide would allow the potential planning of maintenance efforts through current Project Cooperation Agreements’ (PCA) contracting periods. Today’s market prices, in terms of price/cubic yard as well as mobilization costs for an ocean certified dredge, could not have been reasonably forecasted in 1982. With the modification, project maintenance cycles would remain viable and project goals would be retained. Again as an example, the WB CSDR project would continue reductions in potential erosion and potential flooding while ecological/recreational benefits are protected. The requested modification would update the total estimated project cost (Federal and non-Federal) by adjusting construction cost capacity estimates originally provided and authorized in previous WRDA legislation.

The Town of WB, as the non- Federal sponsor, together with NHC and NC are proposing an administrative modification updating construction cost capacities. Again, the WB CSDR project’s 1982 capacity estimate was \$34M for the project’s 50-year life-cycle costs (USACE 1982). This current capacity estimate (1982) will default 12 years before the project’s PCA contract expires. The proposed 2016 adjustment in total estimated construction costs is \$88M including a 20% contingency (USACE 2015a). The proposed modification’s flexibility for the 40 to 50 similar USACE projects would not threaten the budgeting autonomy of current or future US Congresses and the projects would continue to compete within the USACE Federal marketplace. With such a modification, the WB CSDR project would continue protecting coastal infrastructure, local/regional small businesses and NC’s tourism industry. NHC is providing this project specific Section 7001 proposal justifying why a total cost capacity modification should be included in the USACE’s 2016 Report to Congress.

WB CSDR Project, Authorization History

Authorized by Congress in 1962 (initial construction in 1964).

Feasibility Report and Environmental Assessment (September 1982).

Federal participation authorized through FY2036 (WRDA 1986).

Project Description

The WB CSDR project begins just north of Moore's Inlet Drive and extends south 14,000 linear feet to Masonboro Inlet (Figure One). 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) (NHC 2011).



Figure One: Project Bounds



Figure Two: Typical Cross Section

The WB CSDR project has been routinely maintained on a four-year cycle using primarily an engineered, self-recharging borrow site within and adjacent to Masonboro Inlet. The sand within the inlet borrow site meets the NC Sediment Criteria regulated by the NC Division of Coastal Management (NCDCM) and appears adequate to provide the volume necessary for continuing the project's maintenance cycles.

The project has successfully reduced risk to life and 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 WB 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 WB 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 WB 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 proposal deadlines supporting "...modifications to authorized USACE water resources development projects..." NHC is providing the following supporting narrative as requested in the notification and as provided in the USACE's Section 7001 implementing guidance.

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

NHC, the Town of WB and the State of NC's Division of Water Resources (the Stakeholders) have shared project responsibilities including non-Federal cost share allocations. The Town of WB is the non-Federal signatory of the USACE's PCA. This cooperative arrangement has been a solid Federal-State-Local collaboration that would likely continue if the requested construction cost capacity modification is implemented reflecting 2016 cost estimates. Included are letters of support from both the State and the Town of WB (NCDWR 2015, ToWB 2015).

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

The Stakeholders propose an administrative action modifying the project's total construction cost capacity within the currently authorized WB CSDR project contract. There are no changes to the project design nor its operation and maintenance. The existing PCA could facilitate the administrative modification of updating the total (Federal and non-Federal) cost through the Federal contract's 50-year lifecycle.

"WHEREAS, a report entitled "Wrightsville Beach, North Carolina Renourishment Report and Supplement to the Environmental Assessment and Finding of No Significant Impact," prepared by the U.S. Army Engineer District, Wilmington, North Carolina, dated September 1989, was approved by the Office of the Chief of Engineers on the 2nd day of May, 1990, (hereinafter referred to as the "Renourishment Report") [USACE 1990].

The project has demonstrated success in accomplishing the mission of reducing erosional forces, minimizing coastal flooding impacts to people/property while supporting recreational and ecological uses. The proposed modification does not relieve the project's competitive requirements within the USACE's Federal marketplace. The proposed modification administratively corrects dated cost estimates and does not jeopardize the funding autonomy of current or future US Congresses.

3. State the specific project purpose(s) of the proposed study or modification.

The proposed administrative modification would allow the update of 40 to 50 USACE project's total construction cost capacity allowing the ongoing performance through the continued principles of USACE "Smart Planning". The proposed construction cost capacity increase would align current estimated costs reflecting today's private sector participation. The WB CSDR project has successfully reduced public health risks and public/private infrastructure exposure including direct and indirect effects of *Hugo, Fran, Bonnie, Bertha, Floyd, Irene, Sandy* and several other hurricanes over the last decades. The WB CSDR project has served as a significant and effective measure to protect lives while also protecting the public and private infrastructure which supports a successful tourism industry, tax bases, small businesses and important natural resources' habitats.

4. Provide an estimate, to the extent practicable, 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.

Authorized in WRDA 1986, the approved life-cycle project cost limit (Federal and non-Federal) was set at \$34M through 2036. The 1982 private sector dredging costs/cubic yard (cy) were in the \$4/cy range and mobilization costs were in the \$250K range (USACE 1982). Today, dredging costs are in the \$6/cy range and mobilization routinely exceeds \$4M. Total life-cycle cost estimates made in 1982 could not have been reasonably expected to anticipate today's dredging market costs.

Ensuring the project's planned lifecycle through 2036 (five events on four-year cycles), subsequent maintenance cycles are approximated at a Federal outlay of \$5.2M/event. Annualized over the remaining 20 years of the current PCA, the Federal project costs are estimated at approximately \$1.3M/year. The non-Federal cost share as calculated from the Federal participation estimate above would be \$2.8M/event or \$700K/year over the project's lifecycle. In total, the cost per maintenance event is estimated at \$8.0M annualized over the remaining lifecycle at \$2M/year. This participation level has historically been achieved by the project's stakeholder representation. In 2008, direct expenditures from the Town of WB were documented within the North Carolina Beach Inlet Management Plan at \$100M (NCDCM 2011). Considering these economics, the project yields a \$50.00 return on a \$1.00 CSDR investment. The proposed construction cost capacity update portends a continued significant economic return for NC and the Nation.

The WB CSDR stakeholders are requesting the capacity cost limit (Federal and non-Federal) be increased to \$88M through the current PCA life-cycle (2036). This level of estimated construction cost capacity reflects anticipated dredging costs plus a 20% contingency (USACE 2015a). This proposal supports the ongoing economic partnership as does the attached letters from the Stakeholders. The proposed administrative action would not impinge on current or future Congresses' budgeting independence and would retain the project's competitive requirements within the USACE's Federal marketplace.

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 the authorized potential of uninterrupted maintenance cycles, the project attributes will substantiate the ongoing project goals of maintaining the areas' coastal storm damage reduction through continued erosion and flood damage protection as well as with ongoing recreational and ecological benefits.

5. Describe, to the extent applicable and practicable, an estimate of the anticipated monetary and nonmonetary benefits of the proposal with regard to 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 September 1982, the USACE produced a Feasibility Report and Environmental Assessment for the WB CSDR project. In the 1982 Feasibility Report, a commercial/residential property summary indicated a potential loss of over 500 structures including infrastructure (transportation/utility) features. The total present worth (1982) of potential losses was approximately \$51M (USACE 1982). Supporting the most recent FY 2014 maintenance event and calculated at a 7% interest rate, the average annual benefits were approximately \$1.9M and the average annual costs were approximately \$579K for a benefit cost ratio (BCR) of 3.3 (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, public and private infrastructure as well as public and private structural investments. The Town of WB has an approximate 2,600 year-round population and an approximate 30,000 seasonal population with a 2015/2016 projected tax base estimated at \$2.5B. The tax base is inclusive of real property estimated at \$2.4B, business personal property at \$15.7M and personal property at \$30.4M (NHC 2015). Considering routinely used economic analyses, indirect and induced multipliers track the ripple effects from direct expenditures. As such, direct expenditures from the Town of WB for the year 2008 were documented at \$100M (NCDCM 2011) and the annualized CSDR project costs (2011) as computed from Western Carolina University's Beach Nourishment Viewer equated to a cost of \$1.1M/year over the project's construction history (WCU 2014). This expenditure and cost analysis provides a \$91.00 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 on Wrightsville Beach and have benefited from the USACE's WB CSDR project (NHC 2015). The "with-project" economic multipliers extend from the Town of WB 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. Masonboro Inlet is the only structured (jetties) inlet in NC. The jetty system design includes a submerged weir which was engineered to allow long-shore bypassing of sand into a designated location 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 reusing sand as well as maintaining a safe harbor of refuge for waterborne transportation. Allowing this continued sand recycling ensures shoreline benefits, waterborne transportation benefits and continued access to a safe harbor of refuge.

Wrightsville Beach and the adjacent barrier islands are known for their ecological diversity and abundance. The WB 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 WB's coastal infrastructure, species such as the loggerhead sea turtle (*Caretta caretta*), piping plover (*Charadrius melodus*) and the red knot (*Calidris canutus*) will continue having access to habitats conducive to their continued existence.

Similar USACE CSDR projects within the region have addressed potential sea level rise effects with and without project conditions. When assessed against historical rates, as well as intermediate/high rates portended by the National Research Council (NRC) or the Intergovernmental Panel on Climate Change (IPCC); the accelerated sea level rise scenarios resulted in minimal increases to project costs. Likewise assuming an accelerated sea level rise, project net benefits were also modeled as increasing while the projects 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 WB and the State. Both entities have supplied input for this proposal as well as letters of support (Attachments). NHC Management and NHC's Board of Commissioners support the proposal's effort recognizing the success and needed continuance of Federal participation in the WB CSDR project.

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

The Stakeholders have successfully co-sponsored the WB CSDR project at various fiscal percentages since the project's inception. NHC, through a room occupancy tax (ROT), and the Town of WB, by independent local means, have dedicated funding sources which will continue supporting the project's non-Federal cost share allocations. NC recognizes the importance of coastal risk reduction and resiliency as well as the benefits tourism and our natural resources represent in supporting our coastal infrastructures' industrial base. NC supports the continued successful management of the WB 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 specifics during the deliberation of the Congressional criteria.

- (1) The WB CSDR project was one of the first coastal shoreline damage control project's within the USACE's mission. The project has without a doubt met and/or exceeded the USACE's primary purpose and need of flood and storm damage reduction as reflected in their 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 WB CSDR project also compliments shallow draft navigation within a designated safe harbor of refuge while maintaining shoreline habitats frequented by threatened and endangered species (loggerhead sea turtle, piping plover, red knot and various migrating shorebirds). In WRRDA 2014 Section 7001, the WB CSDR project and others were granted an opportunity to put forward proposals as non-Federal stakeholders. The proposed construction cost capacity update would provide the administrative continuity between ongoing maintenance efforts while the project competes for Federal dollars. WB's CSDR project underpins our coastal tourism industry, our community resiliency and safety as well as providing for the coastal ecosystems and associated species.

(2) The Stakeholders are supporting this administrative action modifying an existing and very successful USACE CSDR project. The CSDR project's construction cost capacity update would allow stability of the project's potential ongoing maintenance cycles; continue coastal infrastructure protection and the support of NC's industrial tourism. The administrative action would not impinge on current or future Congresses' budgeting autonomy and would retain the project's competitive requirements within the USACE Federal marketplace. The stakeholders also recognize the importance of the ASA (CW) required concurrence as well as that of Congress, potentially within future WRDA legislation.

(3) The Stakeholder's modification request to update the total construction cost capacity has not been included in previous USACE Annual Reports to Congress.

(4) The WB 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 WB CSDR project has encouraged a diverse variety of habitats supporting regulated species managed 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 various species while providing the designed coastal infrastructure protection.

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. The proposed administrative modification would not impinge on current or future Congresses' budgeting sovereignty nor remove the WB CSDR project from the competitive Federal marketplace.

(5) Considering the WB 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 2016 construction cost capacity update/increase. The WB 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 Wrightsville 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. Raleigh, NC. June 2015.

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

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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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Alderman

Tim Owens
Town Manager

TOWN OF WRIGHTSVILLE BEACH

Post Office Box 626
321 Causeway Drive
Wrightsville Beach, North Carolina 28480
(910)239-1700
FAX (910)256-7910

July 29, 2015

Mr. Chris Coudriet
New Hanover County Manager
County Government Center
230 Government Center Drive
Wilmington, NC 48203

Dear Chris,

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

The Town of Wrightsville Beach understands that New Hanover County wishes to explore a Section 7001 proposal as provided within WRRDA 2014. The proposal would request an increase in the Section 902 construction cost capacity for the project's life-cycle (2036). The Town of Wrightsville Beach would like to offer our assistance with this endeavor and fully support the efforts of New Hanover County to extend the life of the project. Please let us know if we can assist you in the process.

Sincerely,

Timothy W. Owens
Town Manager