



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

APR 23 2010

Honorable Nancy Pelosi
Speaker of the House
of Representatives
U.S. Capitol Building, Room H-232
Washington, D.C. 20515-0001

Dear Madam Speaker:

Section 101(b)(7) of the Water Resources Development Act of 1992 authorized a hurricane and storm damage reduction (HSDR) project in West Onslow Beach and New River Inlet (Topsail Beach), North Carolina. A General Reevaluation (GRR) of the original authorized project was prepared in response to the Energy and Water Development Appropriations Act of Fiscal Year 2001, Public Law 106-377. The Secretary of the Army supports the reauthorization and plans to implement the project through the normal budget process. The recommended project is described in the report of the Chief of Engineers dated September 28, 2009, which includes other pertinent reports and comments. The views of the State of North Carolina, the U.S. Departments of the Interior and Commerce, and the U.S. Environmental Protection Agency are set forth in the enclosed communications.

The project authorized in 1992, was never constructed because the non-Federal sponsor, the town of Topsail Beach determined they could not support the cost of the project or the 46 percent of the cost that would have been required as the non-Federal contribution. In March of 1993, the town of Topsail Beach decided not to execute the Project Cooperation Agreement.

Topsail Island was damaged by multiple storms in the late 1990s including hurricanes Bertha, Fran, Bonnie and Floyd between 1996 and 1999. These storms renewed the sponsor's interest in coastal storm damage reduction and a General Reevaluation Report (GRR) was directed by PL 106-377 to study and reformulate the authorized project. The GRR was completed in March 2008 and recommended the locally preferred plan (LPP). The LPP is comprised of a 26,200-foot long dune and berm system to be constructed to an elevation of 12 feet National Geodetic Vertical Datum (NGVD) fronted by a 50-foot wide berm at an elevation of 7-foot NGVD, with a main fill length of 23,200 feet and a 2,000-foot transition length on the north end into the Town of Surf City and a 1,000-foot transition on the south end. The recommended plan also includes periodic nourishment estimated at \$9,492,000 at 4-year intervals for a total cost of \$113,904,000 over the 50-year life of the project. Other associated features of the project are dune vegetation and construction of 23 dune walkover structures



*CECW-SAD-RIT
Ms. Brown*

for public access. The recommended project will reduce average annual storm damages by 84 percent and will have no significant adverse effects on fish and wildlife resources.

The recommended plan is not the National Economic Development Plan (NED), but the smaller scale locally preferred plan (LPP). The project sponsor supports this plan over the NED Plan because both plans move the shoreline significantly seaward; the LPP costs 24 per cent less, but only reduces net benefits by 2.3 percent; the LPP has the greatest HSDR benefit to cost ratio, and the second highest total benefit to cost ratio; the LPP has a lower cost to the Town and lower Congressional appropriation requirements, and the LPP extends the protection 400 feet to the Godwin Avenue area, which includes 17 remaining properties in the community that are vulnerable to coastal storm damage (funded entirely by the non-Federal sponsor). An exception to the NED plan was approved by former Secretary John Paul Woodley on May 8, 2009.

Based on October 2009 price levels, the total first cost of the recommended project is estimated at \$38,504,000. By comparison, the total project cost of the NED Plan is estimated at \$51,389,000. The total expected annual costs for the recommended plan, based on a discount rate of 4.375 percent and a 50-year period of analysis, are estimated to be \$4,468,000, including monitoring and operation, maintenance, repair, replacement, and rehabilitation. For the NED plan, the annual costs are estimated at \$5,112,000. Total expected annual benefits for the recommended plan are estimated to be \$15,103,000, with net annual benefits of \$10,635,000. The annual benefits attributed to HSDR are estimated to be \$9,516,000 with annual incidental recreation benefits estimated to be \$5,500,000 and reduced annual emergency costs at \$87,000. The benefit-cost ratio for the recommended plan is approximately 3.4 for the total project (including recreation benefits) and 2.1 for HSDR only. By comparison, the NED plan has estimated annual project costs of \$5,112,000 with annual project benefits of \$16,183,000 and net benefits of \$11,071,000. Under the NED plan, annual benefits attributed to HSDR are estimated to be \$10,596,000 with annual incidental recreation benefits estimated to be \$5,500,000 and reduced emergency costs at \$87,000, which are identical to the recommended plan. The benefit-cost ratio for the NED plan is approximately 3.2 for the total project (including recreation benefits) and 2.1 for HSDR only.

Cost sharing for the construction of the recommended project is applied in accordance with the provisions of Section 103 of WRDA 1986, as amended by Section 215 of WRDA 1999. The Federal share of the total cost for the LPP is estimated to be \$27,455,000 and the non-Federal share is estimated to be \$15,103,000, but will be based upon conditions of public ownership and use of the shore when the Project Partnership Agreement is signed. The non-Federal share of the initial construction cost is 35.6 percent and includes \$1,885,600 cash during the period of construction; \$1,481,000 creditable lands, easements,

rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) and \$320,000 for the incremental cost of the 400-foot berm and dune extension. Based on WRDA 1996, as amended, subject to the availability of funds, periodic nourishment is cost-shared 50 percent Federal and 50 percent non-Federal, based upon conditions of public ownership and use of the shore. The Federal share of each periodic nourishment cost is estimated to be \$4,846,000 (50 percent) and the non-Federal share is estimated to be \$4,846,000 (50 percent). The project also includes annual monitoring costs totaling \$281,000. The Town of Topsail Beach is legally capable of fulfilling the requirements for being the non-Federal sponsor.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. A copy of its letter is enclosed. I am providing a copy of this transmittal and the OMB letter dated April 14, 2010 to the House Committee on Appropriations' Subcommittee on Energy and Water Development and the House Committee on Transportation and Infrastructure's Subcommittee on Water Resources and Environment.

Very truly yours,

A handwritten signature in black ink that reads "jo-ellen darcy". The signature is written in a cursive style with a small dot above the "j".

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

11 Enclosures

1. Chief's Report, Sept 28, 2009
2. DOI letter, dated Sept 2, 2009
3. EPA letter, dated, Sept 12, 2009
4. USDA letter, dated Aug 11, 2009
5. North Carolina Department of Administration letter, dated Sept 15, 2009
6. North Carolina DENR letter, dated Sept 12, 2009
7. North Carolina Dept of Crime control & Public Safety –Division of Emergency Management letter, dated, Sept 7, 2009
8. Town of Topsail Beach letter, dated Mar 5, 2008
9. Record of Decision, dated, April 23, 2010
10. OMB Clearance Letter, dated, April 14, 2010
11. General Reevaluation Report, March 2008

RECORD OF DECISION

WEST ONSLOW BEACH and NEW RIVER INLET (TOPSAIL BEACH), PENDER COUNTY, NORTH CAROLINA

The Final Integrated General Reevaluation Report (GRR) and Environmental Impact Statement (EIS), dated March 2008, describes a plan of improvement for hurricane and storm damage reduction along the Topsail Beach shoreline, Pender County, North Carolina. Based on the report, the reviews of other Federal, State, and local agencies, input from the public, and the review by my staff, I find that the plan recommended by the Chief of Engineers is technically feasible, cost effective, in compliance with environmental statutes, and in the public interest.

The Final GRR and EIS was prepared under the authority provided in the Energy and Water Development Appropriations Act for Fiscal Year 2001 (Public Law 106-377). The West Onslow Beach and New River Inlet (Topsail Beach) project was originally authorized in the Water Resources Development Act of 1992 but was never constructed. The Final GRR and EIS recommends construction of the Locally Preferred Plan (LPP), which includes a sand berm and dune system along an approximately five-mile-long reach of Atlantic Ocean coastline in the community of Topsail Beach using offshore borrow material. The report will be provided to Congress for authorization because the LPP is significantly different from the previously authorized project.

The LPP would consist of construction of an approximately 26,200 foot long berm and dune system, including 23,200 feet for the main fill, 2,000 feet for a transition fill at the north end of the project, and 1,000 feet for a transition at the south end. The berm would be about 50-feet wide with an elevation of 7 feet above the National Geodetic Vertical Datum (NGVD). The sand dune would have an elevation of 12 feet above NGVD. The recommended plan also includes periodic nourishment estimated to be required at 4-year intervals over the 50-year life of the project. Other associated features are dune vegetation and construction of 23 dune walkover structures for public access. For comparison purposes to the LPP, the difference between the National Economic Development (NED) plan and the LPP is that the NED plan included the construction of a sand dune to an elevation of 15 feet above NGVD, with a transition at the south end of the project 400 feet shorter than the LPP.

A broad array of alternatives was evaluated in the development of the recommended plan, and those alternatives are hereby incorporated into this Record of Decision. In addition to a "no action" plan, numerous structural alternatives were evaluated for hurricane and storm damage reduction including constructing sand dunes at varying heights along with different configurations of beach fill, and a terminal groin structure constructed at the southern terminus of the community. Non-structural alternatives considered included relocation and demolition of homes along the coastline

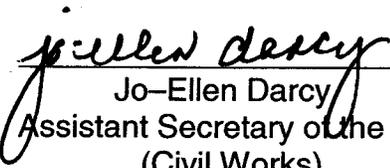
Encl 9

to reduce risk from the natural forces during hurricane and storm events. These measures were evaluated independently and in combination with each other to develop alternative plans. Both the draft and the final reports were circulated for public review and comment.

Compared to the future without project condition, the recommended plan would reduce average annual storm damages by about 84 percent in the Topsail Beach community. All practical means were employed to avoid or minimize the environmental and socio-economic harm from implementing the plan. Monitoring and adaptive management will be performed to ensure compliance with environmental laws and to confirm the expected finding of no significant negative impacts. The recommended plan is identified as the environmentally preferred alternative.

Technical, environmental, economic, and risk criteria used in the formulation of alternative plans were those specified in the Water Resource Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, Executive Orders, regulations and local government plans were considered in the evaluation of alternatives. Based on review of these evaluations, I find that the public interest would be best served by implementing the recommended plan. This Record of Decision completes the National Environmental Policy Act process.

April 22, 2010
Date



Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

April 14, 2010

The Honorable Jo-Ellen Darcy
Assistant Secretary of the Army (Civil Works)
108 Army Pentagon, Room 3E446
Washington, D.C. 20310-0108

Dear Ms. Darcy:

As required by Executive Order 12322, the Office of Management and Budget has completed its review of your recommendation of the West Onslow Beach and New River Inlet (Topsail Beach), North Carolina hurricane and storm damage risk reduction project.

Our review found that the project is consistent with the policy and programs of the President. We note that the sea level rise projections included in the Corps' analysis are based on data from the Intergovernmental Panel on Climate Change 2007 report, rather than more recent research, such as the 2009 U.S. Global Change Research Program's "Global Climate Change Impacts in the United States". However, the Corps conducted a sensitivity analysis of the project under various sea level rise assumptions, which showed that the recommended plan would continue to provide net project benefits and would continue to reduce the risk of hurricane and storm damages to the project area at much higher levels of sea level rise. As sea level rise and climate change models are updated over time, the Corps should continue to work with the National Oceanographic Atmospheric Administration and U.S. Geological Survey so that future project plans and analyses are based on the most accurate data available on sea level rise and other factors related to climate change.

The Office of Management and Budget does not object to you submitting the recommendation and report to Congress for reauthorization.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard A. Mertens".

Richard A. Mertens
Deputy Associate Director
Energy, Science, and Water

Encl 10



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

APR 23 2010

Honorable Joseph R. Biden, Jr.
President of the Senate
U.S. Capitol Building, Room S-212
Washington, D.C. 20510-0012

Dear Mr. President:

Section 101(b)(7) of the Water Resources Development Act of 1992 authorized a hurricane and storm damage reduction (HSDR) project in West Onslow Beach and New River Inlet (Topsail Beach), North Carolina. A General Reevaluation (GRR) of the original authorized project was prepared in response to the Energy and Water Development Appropriations Act of Fiscal Year 2001, Public Law 106-377. The Secretary of the Army supports the reauthorization and plans to implement the project through the normal budget process. The recommended project is described in the report of the Chief of Engineers dated September 28, 2009, which includes other pertinent reports and comments. The views of the State of North Carolina, the U.S. Departments of the Interior and Commerce, and the U.S. Environmental Protection Agency are set forth in the enclosed communications.

The project authorized in 1992, was never constructed because the non-Federal sponsor, the town of Topsail Beach determined they could not support the cost of the project or the 46 percent of the cost that would have been required as the non-Federal contribution. In March of 1993, the town of Topsail Beach decided not to execute the Project Cooperation Agreement.

Topsail Island was damaged by multiple storms in the late 1990s including hurricanes Bertha, Fran, Bonnie and Floyd between 1996 and 1999. These storms renewed the sponsor's interest in coastal storm damage reduction and a General Reevaluation Report (GRR) was directed by PL 106-377 to study and reformulate the authorized project. The GRR was completed in March 2008 and recommended the locally preferred plan (LPP). The LPP is comprised of a 26,200-foot long dune and berm system to be constructed to an elevation of 12 feet National Geodetic Vertical Datum (NGVD) fronted by a 50-foot wide berm at an elevation of 7-foot NGVD, with a main fill length of 23,200 feet and a 2,000-foot transition length on the north end into the Town of Surf City and a 1,000-foot transition on the south end. The recommended plan also includes periodic nourishment estimated at \$9,492,000 at 4-year intervals for a total cost of \$113,904,000 over the 50-year life of the project. Other associated features of the project are dune vegetation and construction of 23 dune walkover structures for



public access. The recommended project will reduce average annual storm damages by 84 percent and will have no significant adverse effects on fish and wildlife resources.

The recommended plan is not the National Economic Development Plan (NED), but the smaller scale locally preferred plan (LPP). The project sponsor supports this plan over the NED Plan because both plans move the shoreline significantly seaward; the LPP costs 24 per cent less, but only reduces net benefits by 2.3 percent; the LPP has the greatest HSDR benefit to cost ratio, and the second highest total benefit to cost ratio; the LPP has a lower cost to the Town and lower Congressional appropriation requirements, and the LPP extends the protection 400 feet to the Godwin Avenue area, which includes 17 remaining properties in the community that are vulnerable to coastal storm damage (funded entirely by the non-Federal sponsor). An exception to the NED plan was approved by former Secretary John Paul Woodley on May 8, 2009.

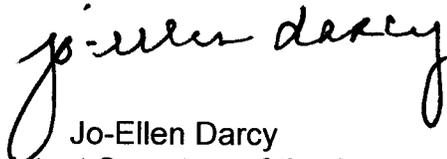
Based on October 2009 price levels, the total first cost of the recommended project is estimated at \$38,504,000. By comparison, the total project cost of the NED Plan is estimated at \$51,389,000. The total expected annual costs for the recommended plan, based on a discount rate of 4.375 percent and a 50-year period of analysis, are estimated to be \$4,468,000, including monitoring and operation, maintenance, repair, replacement, and rehabilitation. For the NED plan, the annual costs are estimated at \$5,112,000. Total expected annual benefits for the recommended plan are estimated to be \$15,103,000, with net annual benefits of \$10,635,000. The annual benefits attributed to HSDR are estimated to be \$9,516,000 with annual incidental recreation benefits estimated to be \$5,500,000 and reduced annual emergency costs at \$87,000. The benefit-cost ratio for the recommended plan is approximately 3.4 for the total project (including recreation benefits) and 2.1 for HSDR only. By comparison, the NED plan has estimated annual project costs of \$5,112,000 with annual project benefits of \$16,183,000 and net benefits of \$11,071,000. Under the NED plan, annual benefits attributed to HSDR are estimated to be \$10,596,000 with annual incidental recreation benefits estimated to be \$5,500,000 and reduced emergency costs at \$87,000, which are identical to the recommended plan. The benefit-cost ratio for the NED plan is approximately 3.2 for the total project (including recreation benefits) and 2.1 for HSDR only.

Cost sharing for the construction of the recommended project is applied in accordance with the provisions of Section 103 of WRDA 1986, as amended by Section 215 of WRDA 1999. The Federal share of the total cost for the LPP is estimated to be \$27,455,000 and the non-Federal share is estimated to be \$15,103,000, but will be based upon conditions of public ownership and use of the shore when the Project Partnership Agreement is signed. The non-Federal share of the initial construction cost is 35.6 percent and includes \$1,885,600 cash during the period of construction; \$1,481,000 creditable lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) and \$320,000 for the incremental cost of the 400-foot berm and dune extension. Based on WRDA 1996, as amended, subject to the availability of funds, periodic nourishment is cost-shared 50 percent Federal and 50 percent non-Federal, based upon conditions of public ownership and use of the shore.

The Federal share of each periodic nourishment cost is estimated to be \$4,846,000 (50 percent) and the non-Federal share is estimated to be \$4,846,000 (50 percent). The project also includes annual monitoring costs totaling \$281,000. The Town of Topsail Beach is legally capable of fulfilling the requirements for being the non-Federal sponsor.

The Office of Management and Budget (OMB) advises that there is no objection to the submission of the report to Congress and concludes that the report recommendation is consistent with the policy and programs of the President. A copy of its letter is enclosed. I am providing a copy of this transmittal and the OMB letter dated April 14, 2010 to the Senate Committee on Appropriations' Subcommittee on Energy and Water Development and the Senate Committee on Environment and Public Works' Subcommittee on Transportation and Infrastructure.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jo-Ellen Darcy". The signature is written in a cursive style with a large initial "J" and a long, sweeping tail.

Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

Enclosures

11 Enclosures

1. Chief's Report, Sept 28, 2009
2. DOI letter, dated Sept 2, 2009
3. EPA letter, dated, Sept 12, 2009
4. USDA letter, dated Aug 11, 2009
5. North Carolina Department of Administration letter, dated Sept 15, 2009
6. North Carolina DENR letter, dated Sept 12, 2009
7. North Carolina Dept of Crime control & Public Safety –Division of Emergency Management letter, dated, Sept 7, 2009
8. Town of Topsail Beach letter, dated Mar 5, 2008
9. Record of Decision, dated, April 23, 2010
10. OMB Clearance Letter, dated, April 14, 2010
11. General Reevaluation Report, March 2008