

"Vanishing Beaches: Coastal Erosion and its Impact on Coastal Communities"

**Written Testimony of
The Honorable Harry Simmons
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and
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before the

**Subcommittee on Fisheries, Wildlife and Oceans
Committee on Natural Resources
U.S. House of Representatives
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Thank you, Chairwoman Bordallo for allowing me to appear before the Subcommittee today and for holding a hearing on such an important issue. I would also like to thank Congressman Ortiz for hosting this hearing and for holding it along this beautiful shoreline – a perfect setting for the subject of this hearing. The Gulf Coast beaches along Texas are an excellent example of many of the erosion issues facing beaches on the Atlantic and Pacific as well. Erosion of our beaches not only threatens the environmental wellbeing of this nation's shorelines, but it also endangers the economic welfare and public safety of coastal communities, counties, and states.

In addition to being Mayor of Caswell Beach, North Carolina, and Executive Director of the North Carolina Beach, Inlet, and Waterway Association, I appear before you today as President of the American Shore and Beach Preservation Association, ASBPA, which has been working for more than 80 years to protect and restore these resources. As an elected public official in a beach town, I truly appreciate the commitment Chairwoman Bordallo and the members of this Subcommittee have shown towards addressing this critical issue.

Unfortunately, despite the good work of this committee, the House Transportation and Infrastructure Committee, and the Senate Environment and Public Works Committee, Congress as a whole undervalues the importance of beaches in providing protection against natural disasters and as a reliable generator of jobs and tax dollars. True, beaches and ecosystems connected to beaches are in a very fragile state, but our sandy shoreline has also become an invaluable tool for environmental habitat, economic growth and natural disaster protection.

Our nation's beaches and coastal communities are in the midst of another summer of fun and record crowds. Americans have a strong attachment to our beaches – they truly are a national treasure. However, our coastal resources are facing critical threats to their survival like at no other time in recent history. Almost 50 percent of Americans over age 16 go to the beach each year according to a study done by NOAA in 2000. Equally, if not more important, over 50% of the total American population lives near the coast, in a coastal county. In the next 25 years the population of such coastal states as California, Texas and Florida is expected by to grow by more than 36 percent.

And yet our nation's shorelines are eroding, beaches are continually being closed because of

poor water quality, and coastal inlets are being closed or are dangerous to navigate as a result of inadequate maintenance. The sad truth is that Congress is far more eager to build new roads that get people to the coast than in restoring and nurturing America's beaches, waterways, and environmental habitat.

The United States has over 12,000 miles of ocean coastline. Of these, about 367 miles are located along the Texas coast. These sandy shorelines are a major attraction for both domestic and foreign tourists. The people and the economies of these areas, though, are vulnerable to severe storms. Along the East and Gulf coasts alone erosion, flooding, hurricanes and winter storms threaten more than \$3 trillion in infrastructure adjacent to shorelines each year.

The United States does not have a coherent national strategy to deal with shoreline erosion. The federal government has had a shoreline protection program since the 1930's. However, as that program was revised in the Water Resources Development Act of 1986, "storm damage reduction" replaced "beach erosion" as the primary factor motivating federal participation in such projects. Ironically, the policies implementing the federal shore protection program since passage of WRDA '86 actually reward communities that permit dense coastal development. They are assured of a full federal cost-share and a higher benefit-cost ratio, while those with ordinances that assure open space and less development get punished with less of a federal cost-share and a lower benefit-cost ratio. We must find a way to reward rather than punish those communities that adopt sensible land use policies along the oceanfront.

The Army Corps of Engineers, the federal agency charged with implementing the federal shore protection program has no policy function or power. It makes no recommendations to Congress on coastal erosion policies because it has no power to do so. It interacts with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Environmental Protection Agency, NOAA, and a variety of other agencies – each of whom has the ability to recommend policies related to the coast. Given its critical role in combating coastal erosion, the Corps must be given the ability to make policy recommendations to Congress.

Other countries, especially those in Europe, have adopted national coastal policies and have invested far more in implementing those policies annually than the U.S. spends in well over a decade on its approximately 95,000-mile coastline. Under our Constitution and our federal system of government, Congress cannot dictate land use policies to local governments. However, under the leadership of Congress and the White House, we can develop a national coastal strategy that will be embraced by all levels of government.

We must continue to invest in beach restoration. Healthy beaches are the best protection against storm surges. This statement is best supported by a Corps study of damages to communities along the North Carolina coast following Hurricane Fran in 1996.¹ Following the category 3 hurricane, the study found that the communities of Carolina Beach, Wrightsville Beach, and Kure Beach, all of which have federal beach nourishment projects, fared far better than those communities on Topsail Island and the Outer Banks without beach nourishment projects. The beaches with nourishment projects took a harder hit from the hurricane and had less damage than

¹ U.S. Army Corps of Engineers, Institute for Water Resources, 2000, "Hurricane Fran Effects on Communities With and Without Shore Protection: A Case Study at Six North Carolina Beaches"
<http://www.iwr.usace.army.mil/inside/products/pub/iwrreports/00-R-6.pdf>

the two beaches that did not have nourishment projects. The Executive Summary of the study concludes that:

“Beach nourishment projects similar to the ones at Carolina Beach, Wrightsville Beach, and now at Kure Beach do reduce hurricane storm damages, which, in turn, reduce Federal disaster recovery costs.”

Interest in shore protection in the U.S. began in the latter part of the 19th century and in the early decades of the 20th century primarily due to significant beach erosion resulting from both intense coastal development and storm activity in the northeast. By 1926, ASBPA was formed and began urging the federal government to unify and coordinate the efforts of states concerning shoreline erosion. By 1946, Congress declared it to be a national policy to prevent beach erosion and promote public recreation. In 1976 and again in 1986, Congress enacted an ever-expanding program to combat coastal erosion through beach nourishment projects that are cost-shared between the federal government and non-federal (state, county, municipal) governments.

In general, the federal government will, at the request of a non-federal interest, undertake a study to determine whether federal fiscal participation in a proposed beach nourishment project is warranted. That decision is made after extensive studies followed by a recommendation that Congress approve the project. At that point, a new project becomes eligible for federal funding. This “initial construction” is cost-shared 65% federal and 35% non-federal. The project is designed to take account of the fact that most beaches will continue to erode permanently once the erosion process begins. For example, much beach erosion is caused by navigation channels which suck sand in and prevent sand from migrating to adjacent shorelines. Therefore, the project that is approved by Congress provides for periodic renourishments over a period of 50 years, generally referred to as “continuing construction.” There are currently over 80 authorized federal beach nourishment projects. Most of these are in the Southeast, followed by New Jersey and New York. Here in Texas, there is a federal feasibility study being conducted of over 80 miles of the coastline of Jefferson and Galveston counties. If that shore protection project were to move forward with federal participation, it would be the second largest project in the United States.

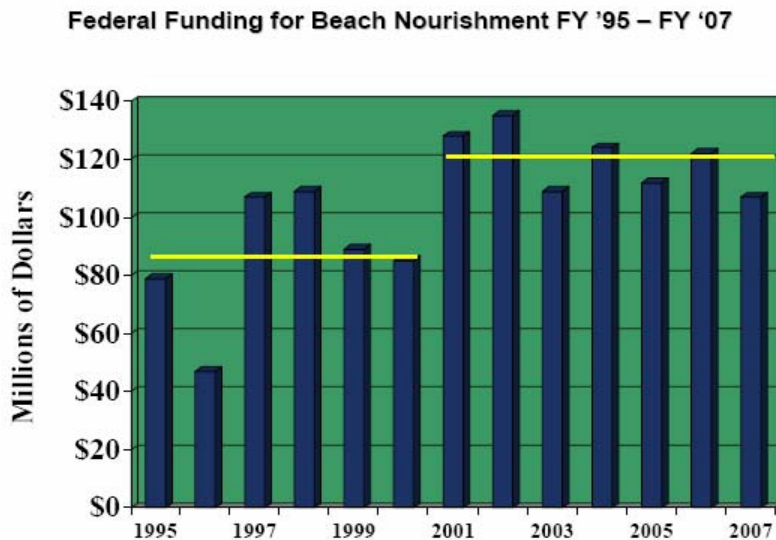
The primary reason why a majority of federal beach nourishment projects have been constructed in Florida, New Jersey, North Carolina, New York and other East coast states is because there is a strong commitment at the state level to come up with significant matching dollars. In New York and New Jersey the state natural resources department is usually the lead local sponsor, while in Florida and North Carolina it is usually the local community or county. Either way, in most cases a portion of property taxes or accommodation taxes is specifically reserved for beach nourishment efforts. In North Carolina, usually a percentage of the counties accommodation tax is set aside for the next beach nourishment cycle. In some cases, when the federal government is not providing the funding on cycle or emergency funds following a severe weather event, the local partner has been willing to partially or fully fund the portion of the project that needs immediate attention.

Since 1995, the White House has attempted to cripple the federal beach nourishment program through a series of policy proposals. Currently, the Administration does not support federal funding for the periodic renourishment portion of a beach project. It says this should be a local

responsibility. While Congress has rejected this proposal, the Administration’s position has still had a negative impact.

1. The President does not include funding for periodic renourishment projects in his annual budget recommendations sent to Congress.
2. This forces Congress to try to find the funding to fill the vacuum through “adds” to the President’s budget.
3. It also prevents the Corps of Engineers from advising Congress about which projects need funding for periodic renourishment, leaving local sponsors to carry the burden of seeking funds through their congressional delegations.
4. It also undermines the confidence local project sponsors have in the federal government. States and localities plan years in advance to make money available for periodic renourishments following the schedule established by the Corps. However, they cannot make up for the federal share (usually 65 percent of the cost) if Congress does not appropriate sufficient funds.

The amount of federal funding for beach nourishment studies and projects is shown in the chart below. Variations from year-to-year reflect both the availability of funds and the demand (need) for funding for beach studies and projects.



Florida is the largest recipient of federal beach nourishment appropriations (both emergency and regular appropriations) and has the most federal shore protection projects with 24. New Jersey has the second most number of projects with 11, followed by New York at seven, North Carolina at six, and California at 5. Both the Mississippi and Louisiana coastlines are undergoing significant post-Katrina/Rita coastal restoration, which may involve the initiation of new beach nourishment projects (including some done for the purpose of environmental restoration).

A tool Texas already has at its disposal to aid in their future beach nourishment efforts is the

Coastal Erosion Planning and Response Program (CEPRA) in Commissioner Jerry Patterson's General Land Office. This program has been administered well and is a good model for other states to develop partnerships between federal, state, and local governments, as well as interested community organizations. The State of Texas should continue to give CEPRA support and funding.

In 2007, ASBPA conducted a survey of the nation, resulting in an accurate listing of federal beach nourishment funding needs. Overall, the survey showed a need in FY 2008 for \$280 million of federal funding. In reality, Congress will likely appropriate about \$100 million for the Corps' coastline erosion program for FY 2008. That will not meet the combined needs of Florida and New Jersey, let alone any of the other coastal states. While the FY 2008 federal dollar need for Texas is less than half a million dollars, this amount will increase substantially once the project currently under study is authorized for construction by Congress.

The country has been fortunate enough to have experienced a calm 2007 hurricane season thus far and a mild one in 2006. Nevertheless, we are all aware of how quickly storms can form and gain strength and momentum. For this reason, it was extremely disappointing that the Senate failed to fund a number of important beach renourishment projects in the FY 2008 Energy & Water Appropriations Bill. Placing more sand on the beach is one of the main defenses against storm damages that result from hurricanes and powerful tropical storms. A wide beach acts as a buffer between storm surge and residential and commercial properties. I can assure you that coastal communities across the country are waiting to see how the House responds in its version of the funding bill.

The federal-local partnerships established under the federal coastal erosion program have been very successful in protecting lives and the financial interests of local, state and federal government. While it is impossible to estimate the number of lives these projects have saved, it is easy to understand the economic impact healthy beaches mean have on government coffers. According to James Houston of the U.S. Army Engineer and Research Center, federal returns from investment in beach nourishment are astounding. Based on data showing that the State of California received \$2 million from the federal government for beach projects for the four years between 1995 and 1999² and data showing federal tax revenue from California beaches is \$14 billion annually, the federal government is "receiving 7,000 times as much in tax revenues from California beach tourists as it spends on beach nourishment in California."³ Dr. Houston concludes that beach nourishment is producing billions of dollars of federal revenues from taxes on wages and business profits for an annual expenditure that averages about \$100 million.

Similar studies have been conducted throughout the nation. A recent study was conducted in my home state of North Carolina to measure the economic impact that climate change (i.e., sea level rise and increasingly intense hurricanes) could have on tourism and business operations in our state. The study⁴, which was conducted by three North Carolina universities and a foreign

² King, Philip, 1999, "The Fiscal Impact of Beaches in California," Public Research Institute, University of San Francisco, <http://online.sfsu.edu/~pgking/handouts/thefiscalimpactofbeaches.pdf>.

³ Houston, James, 2002, "The Economic Value of Beaches – A 2002 Update," U.S. Army Engineer Research and Development Center, http://www.marloweco.com/files/pdf/value_of_beaches2.pdf.

⁴ Bin, Okmyung; Dumas, Chris; Poulter, Ben; Whitehead, John, 2007, "Measuring the Impacts of Climate Change on North Carolina Coastal Resources," <http://econ.appstate.edu/climate/NC-NCEP%20final%20report.031507.pdf>.

institute, concluded that climate change could cost the state billions of dollars. Of note is a particularly under-publicized result of the study that respondents preferred a “wider beach.” A wider beach means higher dune, more sand protecting against storm surge, and reduced costs to the federal and local governments following a major storm. An equally important benefit is the tourism created which is the economic engine for most coastal regions. The NC study went on to state, “The costs of climate change-induced sea level rise are substantial whether they materialize in the form of lost property value and lost recreation opportunities or beach nourishment costs.” It seems to me that if, as suggested, the costs are similar between losing the coast or preserving the coast, the obvious choice is to preserve it.

One of the most compelling economic arguments for beach nourishment is the importance of foreign tourism in the United States. The tourism/travel industry is the nation’s largest employer and foreign revenue earner. While tourism is beneficial at the local and regional levels, it clearly also provides national benefits. Foreign travelers spend over \$80 billion (1995) in the United States, which creates a \$26 billion dollar tourism surplus. The most popular destinations among foreign visitors are beaches. More foreign tourists visit Miami Beach alone than to any National Park, and three times more than our three most popular Parks combined. The amount of money spent by these beach tourists creates a huge tax boon, most of which goes to the federal government. The tax revenue that the federal government receives each year from beach related spending is more than 180 times the amount it spends on beach replenishment annually. If our beaches disappear from erosion, these tourists will go elsewhere, reducing our tax revenue and endangering the 1.4 million tourism related small businesses in the United States.⁵

Despite the economic data supporting the natural disaster prevention and recreational cost-effectiveness of these projects and strong support from Congress, the Executive Branch continues to attack the rationale for federal involvement. In FY 2003, the Administration suggested reversing current policy regarding the federal cost-share for periodic renourishment of beaches from 65 percent federal/35 percent local to 65 percent local/35 percent federal. In a preliminary report performed by the U.S. Army Corps of Engineers at the request of the White House Office of Management and Budget on this proposal, which I am submitting for the record, the Corps of Engineers determined that local tax revenues are unlikely to be able to fund the proposed increases, “even if the State participates by paying as much as 75 percent of the non-Federal cost-share.”⁶ The report concludes that only a very small percentage of local sponsors (those in urban areas) would potentially be able to cover the increased cost-share. It also concludes that approximately 65% of the economic benefits of a federal shore protection project accrue to the federal government. OMB never allowed this report to be released because they didn’t like its conclusions. The fact is that it is time for Congress to tell OMB to stop playing political football with the lives and livelihoods of coastal residents. Their annual efforts to kill the federal shore protection program will inevitably cost the lives of hundreds, if not thousands, of Americans living along the coast and result in a catastrophic loss of irreplaceable environmental habitat.

⁵ Houston, James R. “International Tourism and U.S. Beaches” in *Journal of the American Shore and Beach Preservation Association* Volume 64, Number 2. April 1996

⁶ U.S. Army Corps of Engineers, Institute for Water Resources, 2001, “The Distribution of Shore Protection Benefits: A Preliminary Examination,”

http://www.marloweco.com/files/IWR_Report_on_Economic_Value_of_Beaches.pdf.

ASBPA estimates that fully funding storm damage reduction projects and environmental restoration projects specific to beaches would cost the federal government less than \$300 million annually. In FY2007, \$122 million was appropriated for that purpose which translates into an average cost of \$0.65 per federal taxpayer, about the cost of a bag of M&M's. At what ASBPA considers to be a bare minimum annual appropriation level of \$150 million, the cost is a mere \$0.80 per taxpayer. This truly is a worthwhile investment considering the amount of return the federal government receives on its dollar. When compared to other federal expenditures like fighting forest fires (\$1.78 billion, \$9.49 per taxpayer), investing in our beaches is the smart thing to do considering that beaches are so popular among tourists. To illustrate this point, California beaches alone have more tourist visits (567 million) than the combined tourist visits (286 million) to all 346 National Park Service properties (including national seashores and monuments such as the Lincoln Memorial and Washington Monument) and visits (106 million) to all Bureau of Land Management properties that cover 287 million acres, about one-eighth of the land of the United States.⁷

In addition to a strong federal commitment to fund these projects, ASBPA supports alternative measures that have the potential to create dynamic shorelines that can be managed regionally instead of individually. The process I am referring to is Regional Sediment Management (RSM). Over the past seven years, Congress and the Administration have included funding to study RSM, but the authority to implement it has not yet been enacted (RSM is included in the pending Water Resources Development Act of 2007). Over the long term, RSM could save local and federal governments billions of dollars in costs associated with mobilization and project management. ASBPA has been a leader on this particular subject, and has actively worked with both the House and the Senate to move it forward as quickly as possible.

In conclusion, the U.S. is facing a coastal erosion crisis. In areas of the Gulf as well as southern California where the federal program has yet to take hold, that crisis poses an even more serious threat than on the East Coast, where there are already many federal projects in place to combat erosion. The economic and environmental benefits of a healthy and well maintained beach bring growth and prosperity to the local region, protect human lives, reduce property losses from severe storms, and produce significant revenues for all levels of government.. Finally, ASBPA believes that a national coastal erosion policy needs to be developed that will preserve the environmental, economic, and recreational benefits of the coast while reducing hazards to human lives. America's Beaches are America's Coastal Parks. They will survive only with a national commitment to fostering sound coastal policies coupled with ample federal, state, and local funding. I urge you to take this message to your colleagues and offer our assistance in helping make these coastal treasures a priority for America.

⁷ King, Philip, 1999, "The Fiscal Impact of Beaches in California," Public Research Institute, University of San Francisco, <http://online.sfsu.edu/~pgking/handouts/thefiscalimpactofbeaches.pdf>.