

Washed Out to Sea:

How Congress Prioritizes Beach Pork Over National Needs

United States Senate 111th Congress Congressional Oversight & Investigation Report Office of Senator Tom Coburn, M.D.

May 2009 coburn.senate.gov

Dear Taxpayers,

Unfortunately, taxpayers are not surprised when they learn how Congress wastes billions of dollars on questionable programs and projects each year, but it may still shock taxpayers to know that Congress has literally dumped nearly \$3 billion into beach projects that have washed out to sea.

In light of infrastructure failures in the past five years, many have questioned Congress' ability to prioritize federal funds wisely and ensure national needs are addressed. The U.S. Army Corps of Engineers (Corps) found there are at least 985 levees within its Levee Safety Program at significant risk of failure from flooding. It is expected that these levees will be overwhelmed by a flood in the next 100 years. This means there is a one percent chance every year that these levees will fail – an average of 10 levees will fail every year over the next 100 years.

Additionally, a continuous stream of new congressionally authorized infrastructure projects has created a backlog of Corps projects totaling more than \$80 billion, even though annual construction funding is less than \$3 billion. Consequently, many important projects have stalled due to the misprioritization of federal funds.

Several years ago I was surprised to learn that "beach nourishment" projects, which seek to maintain or enhance beaches by pumping sand-type sediment onto beaches, are one of these diversions that siphon funding from other infrastructure priotities. Roughly \$100 million every year in federal funds is appropriated to ensuring coastal towns benefitting from lobbying and political influence on Capitol Hill maintain picturesque beaches for property owners and tourists.

Congress has subverted the Corps by pushing its own parochial initiatives such as beach projects to the front of the line even as major infrastructure in our county deteriorates and continues to fail.

As part of my commitment to question how Washington spends your money, this report is one in a series of ongoing oversight reports on federal spending and management by government agencies. I hope agencies and other congressional committees alike will welcome this oversight and work with us to help identify even more areas of waste, fraud, and abuse, as well as new ways to better prioritize our nation's limited financial resources.

Congress has a shaky record of making sound financial decisions and requiring measurable results from those entrusted with billions of hard-earned tax dollars. I believe that you, the American taxpayer, deserve better. I encourage anyone with examples of government waste, fraud, or abuse to let us know about it.

To submit a tip, please visit my tip page: http://coburn.senate.gov, or by clicking <u>HERE</u>. Or, to submit a tip by mail to my office, please mail to Senator Tom Coburn, 172 Russell Senate Office Building, Washington, D.C. 20510.

With your help, we can make a difference and change the way Washington works.

Sincerely,

Tom Coburn, M.D.

Washed Out to Sea How Congress Prioritizes Beach Pork Over National Needs

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EXECUTIVE SUMMARY

Many Americans are unaware that their government has spent billions of dollars on beach projects knowing they will simply wash out to sea. Known as beach nourishment," this misplaced "priority" is an effort at various beach locations that pumps offshore sand-type sediment onto beaches.

This investigative report examines why federal funding of beach nourishment is a short-sighted and inefficient use of taxpayer dollars.

Specifically, this report finds that these costly beach projects:

- can divert scarce financial and human resources away from more vital infrastructure needs;
- are temporary and require perpetual upkeep;
- encourage risky coastal construction which in turn necessitates more beach nourishment and hinders implementing permanent solutions to coastal erosion;
- are primarily secured by Members of Congress on behalf of beach-front communities represented by influential lobbying firms;
- primarily benefit local and wealthy coastal property owners and businesses;
- often negatively impact the environment and certain species;
- are linked to human health problems; and
- can restrict private property rights.

Misplaced priorities

While enhancing beaches for storm damage reduction, recreation, and economic benefits may be a laudable goal, beach nourishment projects have diverted scarce financial and human resources away from more vital infrastructure needs. Congress should put its limited resources behind critical national infrastructure projects that protect hundreds of thousands of lives.

The popularity of these beach projects has meant that more pressing national needs lose valuable, but limited federal resources – a consequence that can lead to the deterioration of our nation's infrastructure.

According to the National Oceanic and Atmospheric Administration (NOAA), federal beach nourishment spending has increased from almost \$40 million from 1950 to 1959,¹ to almost \$836 million between 1990 and 1999 – an almost 21-fold increase. On average, Congress has spent more than \$100 million every year since 1997 for beach replenishment.² In total, NOAA estimates that as of 2002, \$2.5 billion had been spent

¹ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Historical Expenditures for Beach Nourishment Projects: Geographical Distribution of Projects and Sources of Funding," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/geodist.htm</u> – accessed April 15, 2009 ² Marlowe & Company Government Affairs Consultants, "How Much Federal Money is Available, for Beach Restoration?," February 5, 2008

in federal funds on beach nourishment.³ Combined with the Corps figure from 2002-2007, the total comes to \$2.9 billion.4

While Congress continues to build gold-plated beach projects, at least 985 levees within the Corps of Engineer's Levee Safety Program are still at significant risk of failure because of flooding. These 985 levees carry a rating which predicts their failure due to flooding within a 100-year time frame. In other words, there is a one percent chance every year that the levees in question will fail. The National Committee on Levee Safety estimates a 500-year level of flood protection is necessary to ensure a "relatively small chance" of a flood.⁵

A recent USA Today story also found there are 177 levees nationwide with "unacceptable' maintenance ratings in [Corps] inspections, meaning their deficiencies are so severe that it can be 'reasonably foreseen' that they will not perform properly in a major flood." In fact, these levees are so poorly maintained that they do not qualify for federal rehabilitation.⁶

The average age of levees within the federal levee safety program is approximately 50 years, and the age of many non-federal levees can reach more than 100 years. The estimated cost to repair and update these levees is almost \$2.5 billion.⁷

Special interest boondoggles

Most communities that secure federal beach replenishment earmarks appear to do so primarily because of political connections in Washington, D.C., further illustrating the degree to which federal funding for these projects is questionable.

Following Hurricane Katrina – a tragic natural disaster that resulted in the loss of more than 1,800 lives, more than \$200 billion dollars in economic damages,⁸ and more than \$127 billion in federal assistance⁹ – the National Academy of Public Administration concluded that in "questions about the Corps of Engineers' priorities grew more urgent."10

A 2007 article by USA Today summarizes how scarce federal dollars are being allocated for regional and temporary projects such as beach nourishment when other national needs remain unmet:

http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report 012009 DRAFT.pdf

³ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Historical Expenditures for Beach Nourishment Projects: Geographical Distribution of Projects and Sources of Funding, Undated, http://www.csc.noaa.gov/beachnourishment/html/human/socio/geodist.htm - accessed April 15, 2009

⁴ Correspondence to the office of Senator Coburn, Corps Office of Congressional Relations, April 11, 2008

⁵ National Committee on Levee Safety, "Recommendations for a National Levee Safety Program," January 15, 2009,

http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report 012009 DRAFT.pdf

⁶ Peter Eisler, "Army Corps cracks down on flunking levees," February 23, 2009, USA Today, <u>http://www.usatoday.com/news/nation/2009-02-23-</u> levees N.htm

⁷ National Committee on Levee Safety, "Recommendations for a National Levee Safety Program," January 15, 2009,

http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report 012009 DRAFT.pdf

⁸ National Committee on Levee Safety, "Recommendations for a National Levee Safety Program," January 15, 2009,

[&]quot;Continuing Progress: A 2-Year Update on Hurricane Recovery and Rebuilding," Department of Homeland Security, http://www.dhs.gov/xprepresp/programs/gc_1188338502848.shtm - accessed March 25, 2009

¹⁰ National Academy of Public Administration, "Prioritizing America's Water Resources Investments: Budget Reform for Civil Works Construction Projects at the U.S. Army Corps of Engineers," February 2007, http://www.napawash.org/pc management studies/Corps Summary Report 03-02-07.pdf

"Among lawmakers, beaches are popular. Thus, the Corps may spend as much as \$80 million on 48 beach-nourishment projects [in 2008], according to [a lobbyist's] tally of appropriations bills, even though many flood-protection projects, including the New Orleans levees, are not as strong as some experts think they should be" (emphasis added)¹¹.

Over the last four years, Americans have witnessed several devastating flood events: Hurricane Katrina in 2005; the Midwest Flood in 2008, which resulted in 24 deaths, \$15 billion in property, agricultural, and other damages,¹² and more than two billion dollars in economic losses and federal assistance;¹³ and Hurricane Ike in 2008, which resulted in 100 deaths, and \$27 billion in economic damages.¹⁴

"Among lawmakers, beaches are popular. Thus, the Corps may spend as much as \$80 million on 48 beach-nourishment projects [in 2008], according to [a lobbyist's] tally of appropriations bills, even though many floodprotection projects, including the New Orleans levees, are not as strong as some experts think they should be."

Tragically, it is likely that future floods will have similar impacts. At least nine million homes and \$390 billion in property are at risk from a flood with a one percent annual probability of occurring.¹⁵

As Congressional Research Services reports:

"National flood damages, which averaged \$3.9 billion annually in the 1980s, nearly doubled in the decade 1995 through 2004. Total disaster assistance for emergency flood response operations, and subsequent long-term recovery efforts, increased from an average of \$444 million [per year] during the 1980s to \$3.75 billion [per year] from 1995 to 2004... Although federal programs have improved through congressional and agency action since 1993, the fundamental direction and approach of national flood policies and programs remain largely unchanged."¹⁶

President George W. Bush¹⁷ and President Bill Clinton proposed to reduce the federal cost-share for initial beach nourishment projects¹⁸ and eliminate all new beach nourishment projects.¹⁹ Yet, Congress has continued to prioritize these beach projects.²⁰

¹¹ Ken Dilanian, "He's the Sand-a Claus of Beaches," USA Today, August 29, 2007, <u>http://www.usatoday.com/news/washington/2007-08-29-sandman_N.htm</u>

¹² Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

¹³ National Committee on Levee Safety, "Recommendations for a National Levee Safety Program," January 15, 2009,

http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report 012009 DRAFT.pdf

¹⁴ Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

¹⁵ Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

¹⁶ Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

¹⁷ Terry Kivlan, "White House Wants Projects Removed From WRDA Bill," CongressDailyPM, May 11, 2007,

http://www.nationaljournal.com/congressdaily/dj_20070511_6.php?related=true&story1=null&story2=null&story3=null

¹⁸ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml

¹⁹ Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999

²⁰ One example is the defeat of Senate Amendment 1090 to H.R. 1495 (The Water Resources Development Act of 2007) to prioritize levee construction over a new beach nourishment commitment, May 15, 2007, Roll Call Vote Number 163,

http://senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=110&session=1&vote=00163

Environmental and health concerns

Politics, not science, tends to govern decisions about beach nourishment. Scientists have long noted that beach nourishment does not prevent beach erosion, but in fact may exacerbate it. In their analysis of the cost of beach nourishment projects, coastal experts Orrin Pilkey and Andy Coburn²¹ write, "Almost, without exception, nourished beaches disappear faster than natural beaches (2 to 12 times faster by our estimate) ... [and nourished] beaches recover poorly after storms compared to natural beaches...^{"22}

The process of beach nourishment involves pumping sediment (often consisting of sand, mud, rocks and shell fragments) collected offshore onto beaches, where it is bulldozed.²³ This is an unnatural process that disrupts local ecosystems both off- and onshore.

The beach at Cape May, New Jersey, was renourished 10 times between 1962 and 1995, at a total cost of \$24.7 million. Another beach at Ocean City, New Jersey, was renourished 22 times between 1952 and 1995 at a total cost of more than \$83.1 million.²⁴

While a recent beach replenishment project carried out by the Corps for Long Beach Island, New Jersey, resulted in more than 1,100 World War I-era military munitions being pumped onto the beach,²⁵ in most instances the environmental impact of beach nourishment is less visible to the common eye. It has become increasingly clear this process is harmful to much of the plant and sea life along the coast line.

A beach nourishment project carried out in early 2007 for Long Beach Island in New Jersey was declared ineffective by the local mayor within a year. A considerable amount of added sediment washed away, leading the town's mayor to conclude about the coast line, "It's right back to where we started."²⁶

According to NOAA, beach nourishment may actually *increase* the potential damage toll of floods by encouraging further risky and costly coastal construction.²⁷

This trend in federal funding has led researchers to conclude, "over-reliance on federal assistance reduces the incentive for state and local governments to make strong commitments to disaster mitigation. This again encourages development of high-risk and environmentally sensitive areas."²⁸

Today more Americans than ever before live in flood-prone regions, which drives up individual risk and increases the stress on the flood insurance program. In 2008, the Associated Press reported, "Some 153 million people live in coastal counties, an increase of 33 million since 1980. An additional 12 million are expected [by 2015]."²⁹

A 2002 John H. Heinz Center report stated:

http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf

²¹ No relation to Senator Tom Coburn

²² Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Perspective," Undated, NOAA, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1a.htm</u> – accessed April 15, 2009

 ²³ Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf
²⁴Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA,

²⁵ Donna Weaver, "Surf City beach replenishment project appears to be a wipeout, locals say," Press of Atlantic City, March 31, 2008, http://www.pressofatlanticcity.com/183/story/119809.html

²⁶ Donna Weaver, "Surf City beach replenishment project appears to be a wipeout, locals say," Citing Mayor Leonard Connors, Press of Atlantic City, March 31, 2008, http://www.pressofatlanticcity.com/183/story/119809.html

²⁷ Correspondence to the office of Senator Coburn, NOAA Office of Congressional Relations, March 17, 2008

²⁸ Kenneth J. Bagstad, Kevin Stapleton, John R. D'Agostino, "Taxes, subsidies, and insurance as drivers of United States coastal development," December 2006, *Ecological Economics*

²⁹ Randolph E. Schmid, "Disaster Worries Grow as More Americans Live Near Coasts," Associated Press, March 1, 2005,

http://www.livescience.com/environment/ap_050301_coastal_pop.html

"These capital improvements often are made possible by the aggressive efforts of congressional representatives from coastal states and districts to secure funding for a variety of infrastructure and growth-inducing projects, from new highways to flood control to beach re-nourishment. Often, these projects are supported by a specific member of Congress and his or her local constituents, but not necessarily by the federal agency in charge of implementing and administering the politically mandated 'pork barrel' project."³⁰

Renourished beaches have also been linked to an increase in beach spinal cord injuries.

The beaches at Cape May, New Jersey, have been replenished numerous times and are slated for another 10 million beach replenishment. But over the past couple of years, local officials have seen a large increase in the number of serious injuries that can result in paralysis. In 2008, 22 spinal cord injuries were reported – twice as many as in 2007. Six cases required the patients to be airlifted to hospitals out of the area.³¹

According to both Cape May City Mayor Edward Mahaney and local Fire Chief Jerry Inderwies, this increase is the result of recent beach replenishment projects that leave a steep drop off, instead of the previous gentle decline, when the dredged sand erodes.³²

³⁰ H. John Heinz III Center for Science, Economics and the Environment, "Human Links to Coastal Disasters," 2002, <u>http://www.heinzctr.org/NEW_WEB/PDF/Full_report_human_links.pdf</u>

³¹ Jennifer Husko, "Call For Investigation Into Spinal Cord Injuries at Cape May Beaches," September 3, 2008, NBC40 (NJ), http://www.nbc40.net/view_story.php?id=6747

³² Jennifer Husko, "Call For Investigation Into Spinal Cord Injuries at Cape May Beaches," September 3, 2008, NBC40 (NJ), http://www.nbc40.net/view_story.php?id=6747

BACKGROUND

Beach renourishment is the practice of taking sand and other sediment from one location and dumping it on a beach to widen and enhance its shoreline.

To secure federal money for these projects, members of Congress must first earmark project authorizations in the Water Resources Development Act (WRDA) – a biennial water infrastructure bill. Since WRDA is not a spending bill, project sponsors must then seek funding for these projects in the annual energy and water appropriations bill. Every new beach renourishment authorization comes with a 50-year time commitment, which includes a cost-benefit study, the initial beach nourishment, and periodic "re-nourishment" over the following 50-year period.

There are several federal agencies and offices involved in coastal management and beach nourishment activities.

The U.S. Army Corps of Engineers (Corps) is the federal agency tasked with completing beach nourishment projects. First, the Corps carries out a congressionally authorized study on the need for, and possible effect of, a beach restoration project. This benefit-cost study must determine a benefit to cost ratio of at least 1:1.³³ According to the Corps, "In calculating the benefits of beach nourishment projects, the primary categories include prevention of physical damages and associated land loss; reduction in maintenance costs of existing protection works; reduction of emergency costs to residences, businesses, and governmental entities; increased recreational usage, and where appropriate, relief of overcrowding for existing recreational usage; and changes in maintenance costs associated with navigation projects. In calculating the costs of beach nourishment projects, the primary categories include the expected costs of construction, the present value of periodic maintenance and nourishment costs, and any external costs such as environmental costs associated with mitigation."³⁴

This study must also provide direction on how to minimize the negative environmental impacts and maximize the effectiveness of the proposed initiative. Following the study's completion and the Corp's determination that the cost ratio is at least 1:1, Congress must authorize the project and then appropriate funds for the initial and subsequent nourishments. Once federal funds are secured, the Corps contracts all the work to one of a handful of private dredging firms.³⁵ Funds are often prioritized for these projects based not on merit, but on political influence.³⁶

The National Oceanic and Atmospheric Administration (NOAA), an agency in the Department of Commerce, is tasked with monitoring coastal management – including coastal restoration efforts – and seeks to aid state and local coastal resource management programs through its Coastal Service Center. NOAA funds low cost beach construction projects such as paths, trails, and dune walkovers that facilitate public access to beaches, however, NOAA does not fund any beach nourishment activities. According to NOAA, these projects are not funded in part because of "current scientific and public policy considerations … [including] the limited amount of … funds and the high cost of such projects including the anticipated maintenance costs." ³⁷

³³ NOAA, "Beach Nourishment: A Guide for Local Government Officials, Benefit-Cost Analysis," Undated,

http://www.csc.noaa.gov/beachnourishment/html/human/socio/part2.htm - accessed March 26, 2009

³⁴ Correspondence to the office of Senator Coburn, Corps Office of Congressional Relations, May 14, 2009

³⁵ Correspondence to the office of Senator Coburn, Corps Office of Congressional Relations, August 28, 2008

³⁶ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002 http://www.stiines.com/2009/05/12/Windowskie/You househt this beach shared

^{2002,} http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml

³⁷ Correspondence to the office of Senator Coburn, NOAA Office of Congressional Relations, March 17, 2008

In addition, the Federal Emergency Management Agency (FEMA) is authorized to fund beach restoration efforts, but only following coastal emergencies. According to FEMA, "Emergency placement of sand on a natural or engineered beach may be eligible when necessary to protect improved property from an immediate threat... A beach is considered eligible for permanent repair if it is an 'improved beach' and has been routinely maintained prior to the disaster." An improved beach is one that has been periodically "renourished" at least every five years using non-federal funds.³⁸ In other words, FEMA can spend taxpayer dollars to restore only those beaches that have previously received state and local funding routinely for beach nourishment projects. Over the last five years, FEMA has spent over \$35 million on so-called beach "restoration."³⁹

The Minerals Management Service (MMS) at the Department of the Interior is also involved, as it conveys the rights to offshore sand to various coastal restoration projects. Through its cooperative sand evaluation program with coastal states, MMS is involved in identifying offshore sand that is most compatible with the sand at the beach being restored. This is intended to help minimize harmful negative environmental impacts and future coastal erosion of the restored beach.⁴⁰



BEACH NOURISHMENT (PHOTOGRAPH BY THE COURIER POST)

Beach Nourishment Has Evolved Into a Federal Activity

Before 1946, the federal government was not authorized to spend money on shoreline erosion projects, and instead, these projects were funded by state and local communities.

Although a 1946 law⁴¹ created a federal funding stream for beach projects along public beaches, Congress limited federal support to 33 percent of the total project costs and states were required to fund the remainder of the project. Projects for private beaches were not eligible for federal funding until 1956, at

³⁸ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, April 16, 2008

³⁹ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, April 17, 2008

⁴⁰ Correspondence to the office of Senator Coburn, MMS Office of Congressional Relations, December 8, 2008

⁴¹ P.L. 79-727

which time private beach nourishment projects were required to demonstrate substantial public benefits. The River and Harbor Act of 1962 increased the federal cost-share to 50 percent for public and private beaches, yet total federal spending on beach nourishment projects remained limited.⁴² More than 20 years later, the Water Resources and Development Act of 1986 increased the federal cost-share to 65 percent of the

"Decades ago, beachfront property owners and state governments paid for the work, but the federal government has steadily played a larger role. Depending on the type of project, the feds today pay up to 65 percent of the cost, with state or local governments paying the remainder." projects. The Water Resources Development Act of 1999 limited the federal cost share to 50 percent for beach renourishment but kept the federal share at 65 percent for the initial nourishment.⁴³

This increase in funding has not gone unnoticed. As the St. Petersburg Times reported, "Decades ago, beachfront property owners and state governments paid for the work, but the federal government has steadily played a larger role. Depending on the type of project, the feds today pay up to 65 percent of the cost, with state or local governments paying the remainder."⁴⁴

Industry experts have also commented on this trend. North Carolina erosion specialist Spencer Rogers found that, "historically, North Carolina has often used house movers as a solution for erosion control. Just pick up the house and move it somewhere else to a safer lot. That's done less lately in the last 10 years or so. More common ... has been beach nourishment where it's not a cure for beach erosion, but it's a treatment to the illness."⁴⁵

A professor of earth sciences at the University of California at Santa Cruz noted, while commenting on beach erosion at California's Monterey Bay:

"Historically, retreat was the most common reaction to the rising sea. People who lived near the ocean picked up their homes and moved them inland, or simply abandoned buildings to the oncoming tides... Most people now don't want to do that... Today, residents' homes are far more expensive and permanent than the coastal dwellings of earlier civilizations."⁴⁶

Between 1920 and 1929 only two beach nourishment projects were listed in a federal database of these projects. In contrast, 131 projects were listed between 1992 and 2001.⁴⁷ Coastal communities and states that recognized the benefits of maintaining beaches for their local economies initially paid, at least in large part, for these types of projects on their own.

⁴² NOAA, "Beach Nourishment: A Guide for Local Government Officials – History and Evolution of Laws Relating to Beach Nourishment," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/law/history.htm</u> – accessed April 15, 2009

⁴³ NOAA, "Beach Nourishment: A Guide for Local Government Officials – History and Evolution of Laws Relating to Beach Nourishment," Undated, http://www.csc.noaa.gov/beachnourishment/html/human/law/history.htm – accessed April 15, 2009

⁴⁴ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, <u>http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml</u>

⁴⁵ Sonya Stevens, "Let's Talk...Beach Erosion!!," February 16, 2008, WWAY News Channel,

http://www.wwaytv3.com/blog/sonya stevens/lets talk beach erosion/17/6598

⁴⁶ Rachel Tompa, "Beaches steadily slipping into sea," Citing Professor Gary Griggs, Monterey County Herald, January 20, 2008

⁴⁷ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Historical Expenditures for Beach Nourishment Projects: Geographical Distribution of Projects and Sources of Funding, Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/geodist.htm</u> – accessed April 15, 2009

Corps Appropriations for Shore Protection ¹	
Fiscal Year	Total
1987	\$9,537,000
1988	\$11,037,000
1989	\$17,787,000
1990	\$34,434,000
1991	\$21,868,000
1992	\$22,377,379
1993	\$29,982,071
1994	\$57,234,752
1995	\$38,932,850
1996	\$50,939,095
1997	\$93,436,277
1998	\$100,923,617
1999	\$76,772,819
2000	\$63,099,647
2001	\$95,687,781
2002	\$92,943,990
2003	\$77,428,093
2004	\$86,160,540
2005	\$146,141,800
2006	\$87,504,466
2007	\$64,977,220
Total	\$1,363,981,977

However, Congress has continued to play a larger role in funding these projects, to the extent that now up to 65 percent of the total costs are borne by federal taxpayers throughout the 50-year time commitment of these nonsustainable projects.

According to NOAA, measured in 2002 U.S. dollars, federal beach nourishment spending has increased from less than \$40 million from 1950 to 1959, to \$835.6 million between 1990 and 1999 – an almost 21-fold increase. On average, Congress has spent more around \$100 million every year since 1997 for beach replenishment.⁴⁸ For the five years beginning with fiscal year 2001, the federal government, through several federal agencies, spent approximately \$600 million on these projects.⁴⁹ Combining NOAA and the Corps of Engineers' numbers together totals \$2.9 billion in federal funds spent on beach nourishment.⁵⁰

Twenty years ago, Congress appropriated less than \$20 million annually for these earmarked projects, yet over the past ten years, on average almost \$90 million has been appropriated annually (and more than \$1.3 billion over the last 20 years) through the Corps of Engineers.⁵¹

When one takes into account the cost for studies and non-Corps agency funding, yearly federal appropriations for beach nourishment equal over \$150 million and over \$2.9 billion total to date.⁵² The Congressional Budget Office has estimated that eliminating federal funding for these projects would reduce federal spending by \$431 million over the next five years.⁵³

NFIP Creates Greater Demand for Beach Nourishment Projects



⁴⁸ Marlowe & Company Government Affairs Consultants, "How Much Federal Money is Available, for Beach restoration?," February 5, 2008,

⁴⁹ Marlowe & Company Government Affairs Consultants, "Federal Assistance for Beach and Shoreline Restoration," Slide 2, 2005,

http://www.marloweco.com/files/Federal Assistance for Restoration REVISE.pdf

⁵⁰ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Historical Expenditures for Beach Nourishment Projects: Geographical Distribution of Projects and Sources of Funding, Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/geodist.htm</u> – accessed April 15, 2009

⁵¹ Correspondence to the office of Senator Coburn, Corps Office of Congressional Relations, April 11, 2008

⁵² NOAA, "Beach Nourishment: A Guide for Local Government Officials – History and Evolution of Laws Relating to Beach Nourishment," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/law/history.htm</u> – accessed April 15, 2009

⁵³ Congressional Budget Office, "Budget Options," February 2007, <u>http://www.cbo.gov/ftpdocs/78xx/doc7821/02-23-BudgetOptions.pdf</u>

areas at high risk to flooding and to minimize federal disaster assistance payments by providing owners of homes in flood-prone areas with "actuarially-sound" premium rates for flood insurance along with flood hazard identification and floodplain management (i.e., land-use controls and building codes).⁵⁴

NFIP instead has spurred increased coastal development and generated an increasingly large demand for

"Government-subsidized insurance, through the National Flood Insurance Program, was originally intended to reduce flood zone development and risk. It has instead encouraged risky development while providing a subsidy to coastal and floodplain developers, [high-risk] property owners, and the private insurance industry." ent and generated an increasingly large demand for beach nourishment projects:

"Government-subsidized insurance, through the National Flood Insurance Program, was originally intended to reduce flood zone development and risk. It has instead encouraged risky development while providing a subsidy to coastal and floodplain developers, [high-risk] property owners, and the private insurance industry." ⁵⁵

Today, more Americans than ever before live in flood-prone regions, which drives up individual risk

and increases the stress on the federal flood insurance program. In 2008, the Associated Press reported, "Some 153 million people live in coastal counties, an increase of 33 million since 1980. An additional 12 million are expected [by 2015]."⁵⁶

A 2007 Popular Mechanics article found that, "Despite forecasts of rising sea levels and stronger storms ... about 453,000 single-family homes and 303,000 multifamily units are built in coastal areas each year; along the East Coast, 654 people are packed into every square mile."⁵⁷

The NFIP has made it more attractive for more and more Americans to live in flood-prone areas along the coast. Taxpayers subsidize this program that encourages homes to be built and maintained on beaches by offering low insurance rates in areas private insurers previously avoided. This subsidization contributes to more beach erosion problems, which then, consequently, increase the demand for beach nourishment projects, which "act as subsidies by providing free storm protection for coastal property owners." ⁵⁸

http://www.popularmechanics.com/science/earth/4217981.html?page=2

⁵⁴ Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, <u>http://www.congress.gov/erp/rl/pdf/RL32972.pdf</u>

⁵⁵ Kenneth J. Bagstad, Kevin Stapleton, John R. D'Agostino, "Taxes, subsidies, and insurance as drivers of United States coastal development," December 2006, Ecological Economics

⁵⁶ Randolph E. Schmid, "Disaster Worries Grow as More Americans Live Near Coasts," Associated Press, March 1, 2005

⁵⁷ Chris Dixon, "Re-engineering America's Beaches, 1 Tax Dollar at a Time: Pumping sediment onto the nation's beaches is an expensive fix for the erosion caused by coastal development — and often a bad fix at that," July 2007, Popular Mechanics,

⁵⁸ Kenneth J. Bagstad, Kevin Stapleton, John R. D'Agostino, "Taxes, subsidies, and insurance as drivers of United States coastal development," December 2006, Ecological Economics

FINDINGS

Adding Sediment to Beaches Is a Costly, Temporary Fix

Beach nourishment is intended to address the problem of beach erosion. However, many experts concede that this process does not actually prevent erosion, but only provides a temporary solution to maintaining the width of a beach.

As previously noted, NOAA's Office of Ocean and Coastal Resource Management (OCRM) does not fund beach nourishment projects:

"OCRM's policy prohibiting the use of ... funds on beach nourishment is based on current scientific and public policy considerations. Sand placed on beaches often disappears rapidly because it does not prevent erosion and remains vulnerable to loss from [storm] events. As a result it usually involves a substantial long term investment rather than a one-time payment because of the need to continually renourish the beach.

"As a matter of policy, OCRM does not find it prudent to fund beach nourishment projects, given the limited amount of ... funds and the high cost of such projects including the anticipated maintenance costs."⁵⁹

A 2000 NOAA report, "State, Territory, and Commonwealth Beach Nourishment Programs," explains that, "Beach nourishment projects are very expensive due to the high cost of moving sand from a borrow site to the beach and the subsequent costs involved in maintaining the beach."⁶⁰

In fact, project sites must generally be maintained every three to seven years. The beach at Cape May, New Jersey, was renourished 10 times between 1962 and 1995, at a total cost of \$24.7 million. Another beach at Ocean City, New Jersey, was renourished 22 times between 1952 and 1995 at a total cost of more than \$83.1 million.⁶¹ "Beach nourishment projects are very expensive due to the high cost of moving sand from a borrow site to the beach and the subsequent costs involved in maintaining the beach."

Coastal geologists put the 10-year cost of maintaining nourished beaches along the developed shorelines of New Jersey, North Carolina, South Carolina, and Florida, using 1996 costs and average frequency of renourishment, at \$5.9 million per mile.⁶²

⁵⁹ Correspondence to the office of Senator Coburn, NOAA Office of Congressional Relations, March 17, 2008 ⁶⁰ Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA, <u>http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf</u>

⁶¹Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA, <u>http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf</u>

⁶² Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA, <u>http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf</u>



A USA Today report highlights the fact that beach nourishment does not solve or prevent beach erosion, but merely delays the inevitable:

"Coastal engineers say beaches ravaged by storms naturally reshape themselves to some extent within about six months. But to maintain them as wide, sandy spaces attractive to tourists, they need an infusion of sand every few years.

"Forever.

"Whether this cycle of replenishing sand is the best use of taxpayer money — and is good for the beaches — is a matter of ongoing debate between scientists and officials in beachfront towns" [emphasis added].⁶³

Additionally, the Corps of Engineers, which is responsible for overseeing beach nourishment projects, recently wrote that beach nourishment projects are "storm damage reduction projects" that "are formulated and justified to reduce property damage to existing communities and public infrastructure, and not to solve a problem of beach erosion, per se."⁶⁴

Criticism of beach nourishment is not a recent occurrence. A 1989 New York Times article noted that renourished coasts were already eroding and that previous beach control methods advocated by the Corps were considered by several scientists to be ineffective and even damaging in seeking to contain erosion. "Resorts are spending vast sums to pump new sand onto their beaches, only to see the sand disappear again within a few years." The "new" method of adding sediment to beaches was labeled by the newspaper 20

⁶³ Sue Lindsey, "Scientists, residents debate merits of sand replenishment," USA Today, May 14, 2005, <u>http://www.usatoday.com/news/nation/2005-05-14-va-beach-erosion_x.htm</u>

⁶⁴ Assistant Secretary of the Army John Paul Woodley, Jr., Letter to Senator Tom Coburn, Department of the Army, Civil Works, March 10, 2008

years ago as a "simple but expensive approach,"⁶⁵ and one that was already considered by many scientists to be ineffective, inappropriate, and wasteful.⁶⁶

Scientists have also noted that beach nourishment does not prevent beach erosion, but in fact may exacerbate it. In their analysis of the cost of beach nourishment projects, coastal experts and renourishment critics Orrin Pilkey and Andy Coburn⁶⁷ write, "Almost, without exception, nourished beaches disappear faster than natural beaches (2 to 12 times faster by our estimate) ... [and nourished] beaches recover poorly after storms compared to natural beaches...⁹⁶⁸

A beach nourishment project carried out in early 2007 for Long Beach Island in New Jersey was declared ineffective by the local mayor within a year. A considerable amount of added sediment washed away, leading the town's mayor to conclude about the coast line, "It's right back to where we started."⁶⁹

Proponents of federal beach nourishment tout that dozens of beaches have been successfully nourished. Yet, each of these beaches will continue to demand further nourishment and federal taxpayer dollars.

Beach Nourishment Prevents Permanent Solutions to Beach Erosion

Proponents claim beach nourishment is needed to protect communities and businesses from floods. In reality, the reverse may be true.

According to NOAA, beach nourishment may actually *increase* the potential damage toll of floods by encouraging further risky and costly coastal construction.⁷⁰

NOAA's opposition to using federal taxpayer funds is in fact tied to this dilemma:

"Beach nourishment also has the unintended effect of spurring new development as it tends to create the perception that an area is now safe for building, putting life and property at unnecessary risk."⁷¹

Coastal geologist Orrin Pilkey further emphasizes the point; "The density of development behind an artificially rebuilt beach often increases dramatically. High rises, hotels and condos replace beach cottages, leaving more buildings than ever dangerously positioned when the next big flood or storm comes."⁷²

NOAA further confirms this view and adds some context to explain the increasing popularity of beach nourishment:

"We have significantly modified the natural coastal shoreline by siting high density permanent residential, second home, resort, commercial and industrial development along it. In the past, settlers built small-scale expendable structures along shorelines, in part, out of respect for coastal storms and

⁶⁵ Cory Dean, "As Beach Erosion Accelerates, Remedies Are Costly and Few," August 1, 1989, New York Times,

⁶⁶ Dr. Stephen P. Leatherman, director of the Laboratory for Coastal Research at the University of Maryland at the time, suggested that public officials should let coastal towns "take their licks" if threatened by erosion. Beth Millemann, director of the Coastal Alliance at the time, described beach replenishment as "throwing dollar bills in the water." Dr. Orrin H. Pilkey Jr., a Duke University geologist at the time, studied 90 replenished beaches on the East Coast and found that north of Florida none of them lasted more than five years. On the Gulf of Mexico, only 10 percent last more than five years. ⁶⁷ No relation to Senator Tom Coburn

⁶⁸ Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Perspective," Undated, NOAA, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1a.htm</u> – accessed April 15, 2009

⁶⁹ Donna Weaver, "Surf City beach replenishment project appears to be a wipeout, locals say," Citing Mayor Leonard Connors, Press of Atlantic City, March 31, 2008, http://www.pressofatlanticcity.com/183/story/119809.html

⁷⁰ Correspondence to the office of Senator Coburn, NOAA Office of Congressional Relations, March 17, 2008

⁷¹ Correspondence to the office of Senator Coburn, NOAA Office of Congressional Relations, March 17, 2008

⁷² Orrin H. Pilkey, "Army Engineers Hit the Beaches," Washington Post, June 17, 2001

the natural movement of the shoreline... It is this intense development juxtaposed to the coast which creates the 'coastal erosion' problem.

"[B]each nourishment may provide an incentive to develop in coastal high hazard areas subject to hurricane and other types of coastal storm damage. Beach nourishment could induce development in high hazard areas by giving landowners and local officials a false sense of security and protection from storm waves and wind. Beach nourishment may also spur efforts to redevelop storm damaged or low density urban shorelines at higher densities. Such redevelopment may temporarily benefit the local landowners, businesses and governments, but it may also alter the ability of the public to access and use the beach. Taxpayers may also be exposed to greater liability in the form of disaster assistance when responding to storm damage" [emphasis added].⁷³

In 2004, the New York Times reported:

"[A]Ithough data on reconstruction after disasters is relatively slim, research suggests that people not only replace buildings destroyed in natural disasters, but they also tend to rebuild them bigger and better, said Dennis S. Mileti, former director of the Natural Hazards Center at the University of Colorado and author of the 1999 book 'Disasters by Design.'

"Unless there is total destruction, which there rarely is, buildings that are undamaged are an impetus to rebuild stuff that is already gone,' Dr. Mileti said. 'One of the biggest constraints to relocation after disasters is that not everything is damaged."⁷⁴

Projects such as the \$1.8 billion nourishment for 14.2 miles of shoreline in Dare County, North Carolina, illustrate this well. Even though buying out or relocating at-risk properties was estimated to cost much less (between \$300 and \$400 million), Congress – through an earmark authorization requested by the district's member of Congress – has placed the federal taxpayer on the hook for \$22.7 million annually over the next 50 years for this beach maintenance (a total of \$1.1 billion).⁷⁵

Recently, the North Carolina Coastal Resources Commission decided to relax previous oceanfront setbacks (prohibitions on residential construction within a certain distance from the shoreline) in Oak Island and allow construction close to the shore. The devastation Hurricane Floyd brought to Oak Island in 1999 required the construction line to be set back, but a number of beach nourishment projects encouraged the Commission to relax this decision and permit homeowners to rebuild or add to their beach front properties. The news report covering this development notes:

"The new line extension is scheduled to come into effect sometime in April. A month later, town officials hope to further extend the line of vegetation to encompass as many as four hundred homes if the town of Oak Island will continue an annual beach nourishment project."⁷⁶

The problem is not that beaches "need" new sand, but rather that coastal development is too close to the ocean and subject to the whims of Mother Nature. If left alone, the natural addition or subtraction of sand

http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf

⁷⁶ "Oak Island to restore vegetation line," WWAY News Channel 3 (Wilmington, NC), January 25, 2008,

http://www.wwaytv3.com/oak island to restore vegetation line/01/2008

⁷³ Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA,

⁷⁴ Cornelia Dean, "As Weather Shifts, Beaches May Pay a Heavy Price," September 14, 2004, New York Times

⁷⁵ Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf

will shift beaches further offshore or inland – a process that cannot be stopped in the long run by any beach project.⁷⁷

Unfortunately, while permanent solutions such as retreat and relocation of coastal development were once common responses to beach erosion, federal assistance programs, including beach nourishment, flood insurance, and FEMA post-disaster funding have instead incentivized risky coastal construction.

This trend in federal funding has led researchers to conclude, "over-reliance on federal assistance reduces the incentive for state and local governments to make strong commitments to disaster mitigation. This again encourages development of high-risk and environmentally sensitive areas."⁷⁸

Today more Americans than ever before live in flood-prone regions, which drives up individual risk and increases the stress on the flood insurance program. In 2008, the *Associated Press* reported, "Some 153 million people live in coastal counties, an increase of 33 million since 1980. An additional 12 million are expected [by 2015]."⁷⁹

Taxpayers are subsidizing coastal federal assistance programs that do not address the underlying beach erosion problem, but encourage continual requests for expenditures on stop-gap and, some would argue, wasteful "solutions."



Subsidies Lead to More, Not Less, Costs

⁷⁷ George R. Parsons and Michael Powell, "Measuring the Cost of Beach Retreat," 2001, Ocean & Coastal Management

⁷⁸ Kenneth J. Bagstad, Kevin Stapleton, John R. D'Agostino, "Taxes, subsidies, and insurance as drivers of United States coastal development," December 2006, *Ecological Economics*

⁷⁹ Randolph E. Schmid, "Disaster Worries Grow as More Americans Live Near Coasts," Associated Press, March 1, 2005,

http://www.livescience.com/environment/ap 050301 coastal pop.html

"Winning" Federal Funding for Beach Nourishment is a "Game"

Most communities that secure federal beach replenishment earmarks appear to do so primarily because of political connections in Washington, D.C.

The Heritage Foundation notes that one particular lobbyist and former Capitol Hill staffer, Howard Marlowe, who has been nicknamed the "Sand-A-Claus" for procuring beach nourishment projects for his clients, enjoys unusual access to the appropriations committee. According to the report, Marlowe was hired by the American Shore & Beach Preservation Association (ASBPA) for, "advocacy before the Office and Management and Budget 'to ensure that shore protection is not a low budget priority," arguing that, "Congress and the congressional committees responsible for water resources and the Army Corps of Engineers have effectively privatized some portion of the congressional budget process to the K Street lobbying firms and appear to have allowed them wide latitude in selecting what projects are included in the legislation."⁸⁰

Last year Marlow's firm, Marlowe and Company, earned \$1.8 million in lobbying fees from the 80% of their clients who sought projects in the 2009 Energy and Water appropriations bill and the Water Resources Development Act (WRDA), the two pieces of legislation that fund and authorize beach earmarks.⁸¹

Of the seven beach replenishment projects included in the 2007 WRDA bill, four were clients of this same lobbyist, according to a USA Today report. "Those projects [will] cost federal taxpayers \$192.7 million over 50 years."⁸²

This report notes, Marlowe "used [his] influence recently on a project in Solana Beach, California, after he learned that local Corps officials were leaning against a beach-nourishment project for that town because the dredging would threaten offshore reef habitats." The Corps "confirmed that Marlowe had his clients secure letters from Democratic California Sen. Dianne Feinstein to Corps officials urging that the project go forward."⁸³

The study continues to be "reworked" as of April 21, 2009, according to the Corps of Engineers.⁸⁴ USA Today wrote, "When the Corps study is released, Marlowe predicts, it will support the Solana Beach project. 'The study was flawed and needed to be reworked,' he said, 'and now it is being reworked.'"⁸⁵

It is also questionable whether or not Solana Beach should be eligible for limited federal infrastructure funds, since, according to CNNMoney.com, average home prices in Solana Beach in 2007 were just under \$1 million and the median family income was \$118,386.⁸⁶

In another article in the Capitol Hill newspaper, *The Hill*, Marlowe boasted of his lobbying firm, "We know beaches." *The Hill* reported:

⁸¹ Data compiled by OpenSecrets.org, <u>http://www.opensecrets.org/lobby/firmsum.php?lname=Marlowe+%26+Co&year=2009;</u> Clerk of the U.S. House of Representatives, <u>http://clerk.house.gov/</u> – accessed April 20, 2009

⁸⁰ Ronald Utt, "The Water Resources Development Act of 2007: A Pork Fest for Wealthy Beach-Front Property Owners," May 15, 2007, Heritage Foundation, http://www.heritage.org/Research/Budget/wm1458.cfm

⁸² Ken Dilanian, "He's the Sand-a Claus of Beaches," USA Today, August 29, 2007, <u>http://www.usatoday.com/news/washington/2007-08-29-sandman_N.htm</u>

⁸³ Ken Dilanian, "He's the Sand-a Claus of Beaches," USA Today, August 29, 2007, <u>http://www.usatoday.com/news/washington/2007-08-29-</u> sandman N.htm

⁸⁴ Correspondence to the office of Senator Coburn, Corps Office of Congressional Relations, April 11, 2008

⁸⁵ Ken Dilanian, "He's the Sand-a Claus of Beaches," USA Today, August 29, 2007, <u>http://www.usatoday.com/news/washington/2007-08-29-</u> sandman_N.htm

⁸⁶"Money Best Places to Live," 2007, CNNMoney.com, <u>http://money.cnn.com/magazines/moneymag/bplive/2007/snapshots/PL0672506.html</u> – accessed April 16, 2009

"Unlike the beaches themselves, the beach-renourishment business shows no sign of eroding — to the chagrin of spending-watchdog groups. The firm estimates that it has won more than \$100 million in federal money for beach projects so far. Spending millions on beaches destined to be washed away has struck both the Clinton and Bush administrations as not smart. But Congress keeps dumping millions on projects that the government could be paying for over the next 50 years."

Venice, Florida, City Manager George Hunt recounts how Marlowe was able to have funds appropriated for beach nourishment in 1994 deferred until 1996. "He went back to Congress and got them to defer part of the appropriation, but to keep it earmarked until we were ready for it. The money could have easily gone to another project somewhere else."⁸⁷

Hiring a K Street lobbyist also has enabled legislative changes that put the "recreation" benefits of beaches in a more favorable light, allowing more beaches to lobby for beach nourishment. In a 2000 congressional hearing on water infrastructure legislation, Marlowe argued Congress should, "require that projects whose primary benefit is recreational be accorded the same budgetary priority as those whose primary benefit is storm damage reduction or environmental restoration."⁸⁸ This would justify appropriating funds for purely "recreational" projects, even when storm damage mitigation projects are left unfunded. Similar-sounding language appeared in the report accompanying the legislation, "the Secretary shall develop and implement procedures to ensure that all of the benefits of a beach restoration project, including those benefits attributable to recreation, hurricane and storm damage reduction, and environmental protection and restoration, are displayed in reports for such projects."⁸⁹

The 2007 Water Resources Development Act made beach nourishment a national priority. The bill's conference report⁹⁰ stated:

"[I]t is the policy of the United States to promote beach nourishment for the purposes of flood damage reduction and hurricane and storm damage reduction and related research that encourage the protection, restoration, and enhancement of sandy beaches, including beach restoration and periodic beach renourishment for a period of 50 years, on a comprehensive and coordinated basis by the Federal Government, States, localities, and private enterprises."⁹¹

As a result of lobbying and parochialism by Congress, it is now the "policy" of the United States to "promote" beach nourishment. In contrast, the most recent two Administrations both opposed beach nourishment as a "United States policy" and actually pushed to have federal involvement in these projects reduced or eliminated.⁹²

⁸⁹ Public Law 106-541 (S. 2796), Water Resources Development Act of 2000, Conference Report, Section 220, Signed into law on December 11, 2000, http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=106_cong_reports&docid=f:hr1020.106.pdf,

⁹⁰ A conference report is the report that accompanies the reconciled legislation agreed to by both the House of Representatives and the Senate. This repot gives guidance to officials within the federal agencies impacted by this legislation on how it is to be implemented.

⁸⁷ Victor Tine, "A case study in beach replenishment," March 9, 2008, Daily News of Newburyport,

http://www.newburyportnews.com/punews/local_story_069222213.html

⁸⁸ Howard Marlowe, "Before the Subcommittee on Transportation and Infrastructure of the Senate Environment and Public Works Committee on the Subject of the Administration's WRDA 2000 Proposal," May 23, 2000, <u>http://epw.senate.gov/107th/mar_0523.htm</u>

⁹¹ Public Law 110-114, H.R. 1495, Water Resources Development Act of 2007, Conference Report, Section 2018, <u>http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_reports&docid=f:hr280.110.pdf</u>

⁹² Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999; Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml

Recent legislation sought to open up a FEMA grant program to support "structural flood projects," including beach nourishment. Currently this pre-disaster mitigation grant program can only fund non-structural flood projects such as buy-outs, land-and-use planning, and building codes.⁹³

Florida's St. Petersburg Times bluntly concludes:

"Congress picks the beaches based on politics and lobbying rather than environmental science... If you read the rules, you might think beaches are picked for federal sand based on a complicated formula about storm damage and flooding. But it's mostly politics, with a little science thrown in for good measure. [Harry] deButts, the head of public works for Avalon, [New Jersey,] calls it 'the game.' Although the Corps of Engineers analyzes each project, Congress decides which projects get built. What matters is raw political clout and whether a lawmaker has the chops to insert a local project in a bill. DeButts says there is a little science involved, but the real way to get money is to 'duke it out in D.C.'⁹⁴

"Congress picks the beaches based on politics and lobbying rather than environmental science... What matters is raw political clout and whether a lawmaker has the chops to insert a local project in a bill."

This finding is echoed by coastal experts Orrin Pilkey and Andy Coburn, who wrote, "As it stands now, beach nourishment is a highly political phenomenon, carried out on an ad-hoc or crisis basis. Communities with political clout ... bring home the bacon (federal funding for a beach nourishment project). Planning in any context other than political is totally absent."⁹⁵

In contrast, the Florida Department of Environmental Protection publishes a priority projects list and an alternate project list for the state. Items on the priority list are typically funded by the state government. Faced with a state budget crunch, Florida State Senator Don Gaetz predicted beach nourishment projects would receive less state funding: "In practical terms, [this] means many, many worthy projects will be reduced in scope or cut entirely ... there will be cuts... The arithmetic is incontestable... The checks won't cash because the revenues aren't there."⁹⁶

In 2008, New Jersey – the state that has received more federal beach nourishment funding than any other state over the last ten years⁹⁷ – elected to divert \$9 million of a \$25 million fund dedicated to shore protection projects, to pay for state park maintenance during its budget crunch.⁹⁸

Yet, many of the coastal communities within these states continue to request federal funds for beach nourishment, ignoring the \$10 trillion national debt and other pressing *national* priorities.

⁹⁵ Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Perspective," Undated, NOAA, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1a.htm</u> – accessed April 15, 2009

http://www.waltonsun.com/news/beach 883 article.html/restoration_year.html

98 State Senator Sean T. Kean, Assemblyman Dave Rible, and Assemblywoman Mary Pat Angelini Wall, "The fight to protect our coast and our economy," July

1, 2008, The Courier, <u>http://www.bayshorenews.com/publication/show/2264</u>

⁹³ S. 3175, The "Predisaster Hazard Mitigation Act of 2008," 110th Congress

⁹⁴ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml

⁹⁶ Fraser Sherman, "Destin beach nourishment funds slashed," The Walton Sun, February 27, 2008,

⁹⁷ According to a Power Point presentation produced by Marlowe & Company Government Affairs Consultants, New Jersey received \$285 million for beach dredgings between FY1995 and FY2005, \$50 million more than Florida and \$100 million more than New York.

While coastal communities, like the City of Imperial Beach in California, budget tens of thousands of dollars to hire Howard Marlowe,⁹⁹ they are trying to get the U.S. taxpayer to pay the price of building and maintaining their beaches. Corps priorities should be determined based upon the merits of projects, not on the political connections of Washington, D.C. lobbyists, or the whims of federal politicians.

This is especially unfair to other coastal communities that continue to recognize that beach nourishment projects are a regional, not a national, priority. For example, a South Carolina community in the Charleston area decided to tax themselves to help pay for beach nourishment. Each property owner will pay an extra \$1,500 for the local beach. Combining this tax with personal private contributions of \$800,000 from beach front owners and a nearby resort, local donations make up almost 60 percent of the \$9.9 million total cost. Nearby city councils have agreed to raise an additional \$3 million in local taxes, and the state is expected to contribute the remaining \$1 million.¹⁰⁰

There are many other examples of cities taking responsibility for these local projects:

- Michigan City, Indiana, collects a "boaters' fee" to pay for local dredging;¹⁰¹
- 1,400 homeowners in Riviera Beach, Maryland, pay additional property taxes called "erosion taxes" to "maintain" their shoreline;¹⁰²
- Dewey Beach, Delaware, residents pay a beach replenishment tax;¹⁰³
- Numerous other coastal communities are considering local bond measures¹⁰⁴ and tax increases¹⁰⁵ to finance their nourishment projects; and
- Ocean City recently signed an agreement with the New Jersey Department of Environmental Protection to fund a state and local \$6 million beach project even though it has accepted federal funds on numerous occasions because it did not want to wait on federal funds.¹⁰⁶

While these communities are seeking to renourish their beaches with local and state funds, another community in Massachusetts¹⁰⁷ raised funds to hire Howard Marlowe to lobby for millions of federal taxpayer dollars to improve its beaches. Despite the fact that a Corps feasibility study concluded that "engineering costs prohibit federal participation,"¹⁰⁸ and that many of the town's citizens do not want to hire this lobbyist, a group of beachfront owners led by the Chairman and CEO of Sarkady Consulting, a consulting firm to Fortune 500 corporations, ¹⁰⁹ hired Marlowe to use his D.C. connections to secure the funding for a beach earmark. The owners of the million-dollar beachfront properties sought initially to only donate \$4,000 of their own money

http://www.newsherald.com/news/panama 67522 article.html/city_beach.html

⁹⁹ According to Opensecrets.org, the City of Imperial Beach paid Howard Marlowe \$266,200 from 2002 and 2008,

http://www.opensecrets.org/lobby/clientsum.php?lname=City+of+Imperial+Beach%2C+CA&year=2008 – accessed April 23, 2009

¹⁰⁰ Jessica Johnson, "Wild Dunes Approves Renourishment Funding," Post and Courier, March 2, 2008,

http://www.charleston.net/news/2008/mar/02/wild_dunes_approves_renourishment_fundin32443/

 ¹⁰¹ Georgette Senter, "Sucking Muck Crux Of Yuck? Dredging project called necessary and safe, although some disgusted by the smell of 'beach replenishment," News-Dispatch, March 26, 2008, <u>http://thenewsdispatch.com/main.asp?SectionID=1&SubSectionID=1&ArticleID=11396&TM=46848.8</u>
¹⁰² Justin Fenton and Phillip McGowan, "Activism awakens in waterfront community: Arundel's Riviera Beach tax district leaders under fire," *Baltimore Sun*, March 25, 2008, <u>http://www.baltimoresun.com/news/local/annearundel/bal-md.ar.riviera25mar25,0,6716028.story</u>

¹⁰³ Georgia Leonhart, "Cost of parking to increase in the town of Dewey Beach," Cape Gazette, April 29, 2008,

http://www.capegazette.com/storiescurrent/200804/deweyparkinghike042508.html

¹⁰⁴ Carol Gorga Williams, "Long Branch's beach finally about to be replenished," November 18, 2008, Asbury Park Press, <u>http://www.app.com/article/20081118/NEWS01/811180355/1004/NEWS01</u>

¹⁰⁵ Pat Kelly, "Bed tax talk coming – TDC to consider higher rate after elections," August 17, 2008, News Herald,

¹⁰⁶ Veronica Dudo, "\$6M. Beach Replenishment Project for Ocean City," NBC 40 (Atlantic City, NJ), April 21, 2008, <u>http://www.nbc40.net/view_story.php?id=5323</u>

¹⁰⁷Plum Island, Massachusetts

¹⁰⁸ Gillian Swart, "Army Corps of Engineers: PI beach preservation too costly," February 07, 2008, Newburyport Current, <u>http://www.wickedlocal.com/newburyport/homepage/x249519171</u>

¹⁰⁹ "Leadership," Sarkady Consulting webpage, <u>http://www.sarkadyprocess.com/pages/leadershipmain.html</u> - accessed March 5, 2009

to this cause, requesting two local city councils cover the remaining \$36,000 in costs.¹¹⁰ This private group ended up raising the \$40,000 itself and has hired Marlowe to procure beach nourishment federal funding for it.¹¹¹

Another coastal community in Texas, having secured Marlowe's services and expecting a 50-year federal commitment for beach nourishment, has unexpectedly been stopped in its efforts by local voters, who rejected a \$9 million bond proposal to help pay for the non-federal share of these projects. Considering the city council only budgeted \$50,000 for beach projects, it is not difficult to see why local voters did not approve such a large increase in beach nourishment funds.¹¹² However, according to the *Galveston Daily News*, the town will continue to seek ways to raise the necessary funding because, "Once Galveston's beaches are accepted into the program, the federal government will provide whatever money is necessary to regularly replenish beaches for at least 50 years."¹¹³

Efforts to hire lobbyists are entirely political and parochial and prevent a more strategic and regional approach to addressing beach erosion problems that would better serve both taxpayers and coastal communities. The increasing number of coastal communities playing the Washington money game, has led city mangers like Tom Leath of Myrtle Beach, South Carolina, to conclude, "It's a shame you have to [hire a lobbyist], but you have to do that."¹¹⁴

A 2007 article by USA Today summarizes how scarce federal dollars are being allocated for regional and temporary projects such as beach nourishment when other national needs remain unmet:

"Among lawmakers, beaches are popular. Thus, the Corps may spend as much as \$80 million on 48 beach-nourishment projects [in 2008], according to Marlowe's tally of appropriations bills, even though many flood-protection projects, including the New Orleans levees, are not as strong as some experts think they should be."¹¹⁵

Because of the misprioritization of limited federal funds on projects that literally wash away, Americans may have suffered unnecessarily from the deterioration and collapse of critical federal infrastructure. Spending taxpayer dollars and setting federal priorities should not be a game played by lobbyists and politicians, but an open process based on merit.

Beach Nourishment Primarily Benefits the Local and Wealthy

It is clear that beach nourishment projects disproportionately benefit coastal home owners and coastal communities.

¹¹² "Beaches in need of money: Galveston considers new plan to raise funds for sand project," December 28, 2007, Associated Press, http://www.dallasnews.com/sharedcontent/dws/news/texassouthwest/stories/DN-beach_28tex.ART.State.Edition1.3697526.html

http://galvestondailynews.com/story.lasso?ewcd=eb5196d9e1e588df

¹¹⁰ Victor Tine, "Mayor wants more input before seeking lobbyist funds," January 31, 2008, *Daily News of Newburyport*, http://www.newburyportnews.com/punews/local_story_031230809.html

¹¹¹ Victor Tine, "Cash piles up: PI group raises \$35,000 in weeks," April 03, 2008,

Daily News of Newburyport, http://www.newburyportnews.com/punews/local story 094005441.html

¹¹³ Leigh Jones, "Island gets new chance to build beaches," Daily News, December 25, 2007,

¹¹⁴ Victor Tine, "'He was worth every penny' – 'Sand-a Claus' lobbyist earns praise from beach towns," March 09, 2008, Salem News, http://www.salemnews.com/punews/eaglelocalnews_story_069222147.html

¹¹⁵ Ken Dilanian, "He's the Sand-a Claus of Beaches," USA Today, August 29, 2007, <u>http://www.usatoday.com/news/washington/2007-08-29-sandman N.htm</u>

A New Jersey marina owner benefitting from a local beach nourishment project admitted to the Washington Post that, "The new sand made this a happier town, that's for sure... But the benefits haven't really extended to anyone outside town. You could say it's someone else's money well spent."¹¹⁶

A coastal lobbyist who is also a local real estate agent for the same New Jersey beach confessed to the Washington Post that:

"[H]e thinks the federal government shoulders far too

"You could say [federal beach nourishment funding] is someone else's money well spent."

much of the cost of nourishment projects... In a better world ... the state would pay more, and he has pushed for that. In a truly ideal world, he said with a joking whisper, some of the well-off, low-tax coastal towns he represents would pay their fair share as well. He has never even tried to push for that."¹¹⁷

These projects also increase the value of the average beach house. A study on South Carolina beaches by researchers at Francis Marion University found that when beaches increase in size from 70 to 100 feet, the value of the beach homes increase by \$34,000. A study by Taxpayers for Common Sense (TCS), who compared beach spending with a list of the richest places found "that 21 of the 74 coastal towns on the list had benefitted from beach restoration. The taxpayer group estimates that the towns will receive a federal subsidy of \$1.7-billion over the life of the projects."¹¹⁸

Others make the point that the benefits are not evenly distributed. According to NOAA, "The benefits of any given publicly funded beach nourishment project are not uniformly distributed across the population... [Benefits] such as storm damage reduction derived from beach nourishment, are limited geographically... These benefits accrue to the owners of beachfront property."¹¹⁹

The Heritage Foundation makes the point that beaches are basically trickle-up economy policy, designed to transfer the tax dollars of ordinary Americans to protect the vacation homes and seasonal businesses of the well-to-do.¹²⁰

Both NOAA and the Corps explain that in practice beach nourishment is geared toward a reduction of property damage, not to prevent beach erosion. NOAA further concludes that,

"Postwar development has increased the concentration of both people and structures along the coasts and at the same time our arrogance that proper engineering will protect us and our permanent structures. It is this intense development juxtaposed to the coast which creates the 'coastal erosion' problem."¹²¹

Coastal experts Orrin Pilkey and Andy Coburn agree with NOAA:

¹²¹Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA, <u>http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf</u>

¹¹⁶ Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999

¹¹⁷ Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999

¹¹⁸ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, http://www.sptimes.com/2002/05/12/Worldandnation/You bought-this_beach.shtml

¹¹⁹ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Distribution of Project Benefits by Income Level and by Beneficiary Group," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/bendist.htm</u> – accessed April 15, 2009

¹²⁰ Ronald Utt, "The Water Resources Development Act of 2007: A Pork Fest for Wealthy Beach-Front Property Owners," May 15, 2007, The Heritage Foundation, <u>http://www.heritage.org/Research/Budget/wm1458.cfm</u>

"When it comes to beach nourishment, the bottom line is money. Shorelines are only nourished to protect investment properties and the local tourist industry: the status quo. It is, therefore, disingenuous when nourishment proponents say they are concerned with a public interest and wish to improve the recreational value of our ocean beaches...¹²² If there were no buildings along the shoreline, we would not have an erosion problem."¹²³

A 2004 joint report by the National Wildlife Federation and Taxpayers for Common Sense illustrates this problem with a particularly egregious waste of taxpayer funds. As of 2004, "When it comes to beach nourishment, the bottom line is money. Shorelines are only nourished to protect investment properties and the local tourist industry: the status quo... If there were no buildings along the shoreline, we would not have an erosion problem."

beach nourishment along the coast of Long Beach, New York, had already cost federal taxpayers \$24 million in studies, and was projected to cost \$800 million in total. The project primarily benefited multi-million dollar properties located on the barrier island's primary dunes. Many of these homes had already been flooded or damaged repeatedly by storms, yet were always rebuilt, often tapping federally subsidized flood insurance. Each of these rebuilt Westhampton beachfront homes exceeded \$3 million in value. The Corps would have been committed to rebuilding the beaches continually over the 50-year authorization period to protect these homes from erosion – making the \$800 million a conservative estimate.¹²⁴ Remarkably, this project was terminated by the City Council of Long Beach unanimously in 2006.¹²⁵

Another example is an earmark for initial and periodic beach nourishment at Imperial Beach in San Diego, inserted into the 2007 Water Resources Development Act and lobbied for by Howard Marlowe. A letter from the executive director of WiLDCOAST, an Imperial Beach organization that seeks to protect and preserve coastal ecosystems and wildlife stated, "[WiLDCOAST has] been informed by City of Imperial Beach staff that federally funded beach sand projects are designed to 'enhance private property."¹²⁶

As previously noted, many publicly owned beaches already charge fees for beach access or local parking to ensure that those benefiting from the recreational improvements of beach nourishment pay their fair share while also requiring locals, who benefit the most from storm reduction and economic benefits, to pay for periodic beach nourishment.

In addition, the federal approach to protecting its own property has included "strategic retreat" or withdrawal from the shoreline – an approach not endorsed by private interests. According to NOAA, "The National Park Service has implemented a retreat policy for years for the barrier islands of the Cape Hatteras National Park. More recently, the Park Service has relocated the Cape Hatteras Lighthouse inland, rather

¹²² Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Perspective," Undated, NOAA, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1a.htm</u> – accessed April 15, 2009

¹²³ Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Response," Undated, NOAA, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1c.htm</u> – accessed April 15, 2009

¹²⁴ Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, <u>http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf</u>

¹²⁵ John Weber, "When the Surf's Up, and Gone," May 28, 2006, New York Times; Reasons for opposing the proposed Corps project included concern that swimming would be more dangerous, surfing the waves would be less appealing, the local fishing and marine habitat would be destroyed, and the aesthetic value of the beach would be diminished by coarse sand and high dunes.

¹²⁶ Serge Dedina, Correspondence to the office of Senator Coburn, May 14, 2007, WiLDCOAST

than armoring the beach in front of it."¹²⁷ While areas of high urban development make this alternative less attractive, many of the areas "nourished" are not high urban areas, but secluded beach communities.

New Jersey is seeking to "widen" all 127 miles of its coastline, despite cost estimates over the next 40 years totaling as much as \$9 billion.¹²⁸ Federal taxpayers in non-coastal states such as Oklahoma or Colorado have a right to question why they should pay for the state of New Jersey (with \$450 million in beach nourishment funding since 1985¹²⁹) to have its entire coast unsustainably "renourished."

Some proponents have argued that not providing federal subsidies for beach nourishment will cause "those middle- and lower-income Americans who make most of the two billion day trips to the beach each year" to "suffer."¹³⁰

This argument is highly questionable: If one eroding beach is not aesthetically pleasing, tourists can go to another, more attractive beach. Additionally, it is not a federal responsibility to ensure that all Americans have access to beaches. The federal government is not expected to purchase plane tickets so Americans living in middle America can visit the beach – neither should it be required to fund beach nourishment projects for this purpose. It is, after all, in the best interests of a community or a state seeking to attract tourists to use its own resources to draw visitors.

"According to the Corps of Engineers ... only ... about 20 percent of all [beach nourishment] projects ... address erosion caused at least 'partially' by federal navigation projects." Advocates for federal beach nourishment funding have also claimed that such assistance is justified because much of the erosion is or has been caused by federal navigation projects such as ports, jetties, and navigational channels. According to the Corps of Engineers, however, of the 106 beach projects listed in the inventory of projects having a beach "nourishment" component, only 22 – or about 20 percent of all projects – seek to address erosion caused at least "partially" by federal navigation projects.

Of the \$23 million in shoreline protection funding included in President Bush's FY09 budget, only \$4 million was for projects that mitigate "damaged induced by [federal] navigation projects."

The last two presidential administrations, representing both political parties, identified the current beachnourishment cost allocation as unfair to federal taxpayers and recommended Congress switch the cost-share allocation percentages to require that states and localities pay for 65 percent, instead of the current state and local cost-share of 35 percent. Unfortunately, Congress and Washington lobbyists have successfully prevented such a common-sense adjustment that would save taxpayers millions.

Beach Nourishment Has Negative Environmental Impact

The process of beach nourishment involves pumping sand onto beaches, where it is bulldozed.¹³¹ This is an unnatural process that disrupts local ecosystems both off- and onshore.

http://www.philly.com/inquirer/local/nj/20090412_Feds_may_give_up_on_beach_projects.html

¹²⁷ Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA, <u>http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf</u>

¹²⁸ Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, <u>http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf</u> ¹²⁹ Anthony R. Wood and Jacqueline L. Urgo, "Feds may give up on beach projects," April 12, 2009, *Philadelphia Inquirer*,

¹³⁰ Howard Marlowe, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: It's a Good Investment - Perspective," Undated, NOAA, http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series2a.htm – accessed April 15, 2009

While a recent beach replenishment project carried out by the Corps for Long Beach Island, New Jersey, resulted in more than 1,100 World War I-era military munitions being pumped onto the beach,¹³² in most instances the environmental impact of beach nourishment is less. It has become clear this process is harmful to much of the plant and sea life along the coast line.

NOAA states,

"Beach nourishment projects can have serious long and short-term environmental effects at: the beach where the nourishment takes place; the borrow site; and, nearby areas of the water column and the water bottom. Potential negative effects include: disturbance of species' feeding patterns; disturbance of species' nesting and breeding habitats; elevated turbidity levels [a key test in water quality measuring the cloudiness of fluid caused by individual particles that are generally invisible to the naked eye]; changes in near shore bathymetry [the measurement of ocean depth] and associated changes in wave action; burial of intertidal and bottom plants and animals and their habitats in the surf zone; and, increased sedimentation in areas seaward of the surf zone as the fill material redistributes to a more stable profile (National Research Council, 1995). Of particular concern are

the impacts to endangered species such as sea turtles and shorebirds which use the beach as nesting areas."¹³³

Popular Mechanics in 2007 reported:

"Dredge material can smother near-shore creatures such as sand fleas, damaging the food chain. It can also cause plumes of turbidity, or suspended sediment, that settle onto coral reefs, smothering them, too. In Palm Beach, Fla., in 2006, lifeguards closed the beaches because 11 miles of plumes made swimmers nearly invisible to schooling sharks."¹³⁴

Among the species that can be negatively affected are the loggerhead, leatherback,



THE GREEN SEA TURTLE (PHOTOGRAPH UNATTRIBUTED)

hawksbill, kemps ridley, spotted, blanding, and green sea turtles; nesting and foraging seabirds, including a variety of plovers, terns, darters, oystercatchers, and the green heron; and various mussels.

The Caribbean Conservation Corporation – a non-profit that seeks to ensure the survival of sea turtles within the wider Caribbean basin and Atlantic – finds, "Depending on sand sources, beach design parameters,

¹³² Donna Weaver, "Surf City beach replenishment project appears to be a wipeout, locals say," Press of Atlantic City, March 31, 2008, <u>http://www.pressofatlanticcity.com/183/story/119809.html</u>

http://coastalmanagement.noaa.gov/resources/docs/finalbeach.pdf

¹³⁴ Chris Dixon, "Re-engineering America's Beaches, 1 Tax Dollar at a Time: Pumping sediment onto the nation's beaches is an expensive fix for the erosion caused by coastal development — and often a bad fix at that," July 2007, Popular Mechanics, <u>http://www.popularmechanics.com/science/earth/4217981.html?page=2</u>

¹³¹ Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, <u>http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf</u>

¹³³ Casey Hedrick, "State, Territory, and Commonwealth Beach Nourishment Programs," March 2000, NOAA,

monitoring protocols, and surf conditions, nourishment projects can adversely impact sea turtles in many ways..."

"When the character, size, and shape of beaches are altered, these species find it difficult to recognize their own habitat. Without healthy and safe habitat, wildlife simply cannot survive," according to the National Wildlife Federation.¹³⁶

The National Wildlife Federation also notes, "Processes like beach nourishment gravely affect the sea turtle nesting site. Compact sands and steeper dunes are not conducive to nesting females, as it is more difficult to climb and break apart those sands to create safe nests for laying eggs. Construction that brings intense lights and noise also adversely affects hatchlings that are already vulnerable to predators and degraded environments."¹³⁷

Popular Mechanics details one 2004 nourishment project in Port St. Lucie, Florida, where low-quality sand concretized when it became dry, trapping turtle hatchlings beneath the surface. The sand was removed from the beach in 2006.¹³⁸

The Atlantic Coast piping plover is a tiny bird that nests and feeds along coastal beaches, primarily on the east coast and the shores of the Great Lakes. The piping plover is also listed as endangered,¹³⁹ and the construction associated with beach nourishment and coastal development continues to negatively affect the already struggling plover population, according to the National Wildlife Federation.

The National Wildlife Federation also notes, in order to maintain healthy populations, piping plovers require soft sands and sparse vegetation, along with natural cover from predators, for nesting sites.

The process of beach nourishment can alter the natural habitat and cycles on which the plover depends. Also,

dredging and filling can cause immediate harm and death to crustaceans and small fish which are vital to the plover as a food source.¹⁴⁰

According to scientists and environmental groups, coral reefs and the local ocean ecosystems they support can also be damaged by beach nourishment. Both dredging and filling have the ability to crush and kill coral reefs. Filling the beach also clouds the water and does not allow for sunlight to reach bottom dwellers. Introducing non-native sediments can also affect the toxicity and character of the water, further impacting the coral reef's native habitat. Impaired reefs degrade the habitat of numerous other species including tropical fish, groupers, snappers, sea turtles, crabs, and lobsters.¹⁴¹ Numerous studies continue to



BULLDOZING DREDGED MATERIAL (PHOTOGRAPH BY THE COURIER POST)

http://www.popularmechanics.com/science/earth/4217981.html?page=2

¹³⁵ Gary Appelson, "Beach Nourishment and Turtles - Can They Get Along?" Issue 2, 2004, Caribbean Conservation Corporation Newsletter, <u>http://www.cccturtle.org/velador.php?page=velart50</u>

¹³⁶ Karla Raettig, "Negative Impacts of Beach Nourishment on Endangered Species," National Wildlife Federation, August 2, 2008

¹³⁷ Karla Raettig, "Negative Impacts of Beach Nourishment on Endangered Species," National Wildlife Federation, August 2, 2008

¹³⁸ Chris Dixon, "Re-engineering America's Beaches, 1 Tax Dollar at a Time: Pumping sediment onto the nation's beaches is an expensive fix for the erosion caused by coastal development — and often a bad fix at that," July 2007, Popular Mechanics,

¹³⁹ U.S. Fish and Wildlife Services, "The Atlantic Coast Piping Clover," August 2007, <u>http://www.fws.gov/northeast/pipingplover/pdf/plover.pdf</u>

¹⁴⁰ Karla Raettig, "Negative Impacts of Beach Nourishment on Endangered Species," National Wildlife Federation, August 2, 2008

demonstrate that the beach beautification process may be harmful to the surrounding environment.

The National Wildlife Federation and Taxpayers for Common Sense found:

"[T]here is nothing nourishing about dredging machines mining sand offshore and blasting it on the beach through a pipe, and then smoothing the sand with bulldozers. This process can harm shallowwater reefs and habitat essential for fish and other species. In Florida, a handful of projects could bury more than 100 acres of near shore reefs used by more than 500 marine species. The process smothers crabs, mollusks, and shrimp, which are an essential source of food for birds and other marine species. It also buries fragile nesting habitats for sea turtles. Increasingly, these separately considered projects are pieced together to encompass entire coastlines."¹⁴²

Steve Blair of the Miami Dade County Department of Environmental Resource Management concluded, "Siltation and indirect burial from re-nourishment projects was largely to blame for the death of shallow coral reefs along Miami Beach."¹⁴³

A letter from 70 Ph.D. scientists to U.S. Army Corps of Engineers District Engineer Colonel Joe R. Miller five years earlier noted:

"These habitats are important recruitment and nursery areas for a diverse marine fauna and flora, that include rare taxa and important fishery species... At least 100 acres of nearshore reefs and 35 acres of seagrass beds [in Florida] have been directly buried since 1970."¹⁴⁴

While some agency-mandated "monitoring" of beach nourishment projects has failed to identify these problems, recent research has revealed federal studies overwhelmingly fail to meet basic scientific tests of rigor.

A 2005 article published in *Bioscience Magazine* analyzed 46 studies on the ecological impact of certain beach nourishment projects. Fifty-six percent of the studies reached conclusions that were not adequately supported by the data, and not one utilized anonymous scientific peer reviews, according to the article.¹⁴⁵ Researchers wrote:

"Our review demonstrates that much uncertainty surrounding biological impacts of beach nourishments can be attributed to the poor quality of monitoring studies. Because neither federal and state permitgranting agencies nor consulting companies ensure sufficient rigor in beach monitoring done as a permit condition, and because the agencies rarely require compensatory mitigation of even egregious injuries, the required monitoring now serves little public purpose.

"The absence of expert review and rereview in the approval process [for beach nourishment projects] to achieve acceptable designs is made more serious by the recognition that the monitoring is typically designed and conducted by private contractors, usually associated with the proponents of the nourishment project, rather than by independent research organizations. Anonymous peer review is needed for environmental impact statements (EISs), environmental assessments (EAs), monitoring

¹⁴¹ Karla Raettig, "Negative Impacts of Beach Nourishment on Endangered Species," National Wildlife Federation, August 2, 2008

¹⁴² Kate Costenbader, Steve Ellis, and David Conrad, "Crossroads: Congress, The Corps of Engineers and the Future of America's Water Resources," March 2004, National Wildlife Federation & Taxpayers for Common Sense, http://www.nationalwildlife.org/wildlife/pdfs/Crossroads.pdf

 ¹⁴³ Terry Gibson, "Excessive Dredging Threatens Florida Marine Life," April 2005, Florida Sportsman, <u>http://www.floridasportsman.com/confron/0504144/</u>
¹⁴⁴ Dr. Ken Lindeman, etc, "70 Ph.D. Scientists Urge Higher Environmental Standards in Beach Dredge and Fill Projects," June 27, 2000, Letter to Colonel Joe
R. Miller, Jacksonville District, Army Corps of Engineers

¹⁴⁵ Charles H. Peterson and Melanie J. Bishop, "Assessing the Environmental Impacts of Beach Nourishment," October 2005, BioScience Magazine

proposals, and final reports to induce consulting agencies to employ their expertise to elevate beach nourishment science to prevailing standards of scientific rigor."¹⁴⁶

The report also concluded that beach nourishment can bury shallow reefs and degrade other beach habitats, depressing nesting in sea turtles and reducing the densities of invertebrate prey for shorebirds, surf fishes, and crabs."147

The fact that many of those conducting these ecological impact studies are the very same people in favor of conducting beach replenishment projects may explain why this mandated monitoring often does not identify negative consequences of nourishment activities.

The possible damage to the fishing industry and wildlife tourism by beach nourishment should also be considered.

A Florida Fish and Wildlife Conservation Commission (FWC) study, "Economics of Fish and Wildlife Recreation," attributed more than \$5.2 billion of the annual gross state product and 51,500 jobs to saltwater fishing. The FWC estimate for dollars and jobs generated by boating are \$18.5 billion and 220,000,¹⁴⁸ respectively, and, according to the Florida Marine Industries Association, fishing accounts for more than half of the reason people give for boating.¹⁴⁹

Disrupting local marine ecosystems at any level negatively impacts all animals within the ecosystem and industries that depend on these animals. For example, according to an article in the Florida Sportsman, reefs

that supported recreational diving in Florida have been destroyed or obscured for long intervals by beach nourishment projects since the 1970s.¹⁵⁰

These observations support the basic assumption made by coastal researchers Pilkey and Coburn, "Does anybody truly believe that you can pump millions of cubic yards of sand on a beach, bulldoze it around and do it again every few years ... and not have a severe environmental impact?"¹⁵¹

Beach Nourishment Has Negative Health Impact

Spinal cord injuries may be linked to renourished beaches.

"Does anybody truly believe that you can pump millions of cubic yards of sand on a beach, bulldoze it around and do it again every few years ... and not have a severe environmental impact?"

The beaches at Cape May, New Jersey, have been replenished several times and are slated for another \$10 million beach replenishment. But over the past couple of years, local officials have seen a large increase in the number of serious injuries. In 2008, 22 spinal cord injuries were reported – twice as many as in 2007. Six cases required the patients to be airlifted to hospitals out of the area.¹⁵²

146 Charles H. Peterson and Melanie J. Bishop, "Assessing the Environmental Impacts of Beach Nourishment," October 2005, BioScience Magazine ¹⁴⁷ Charles H. Peterson and Melanie J. Bishop, "Assessing the Environmental Impacts of Beach Nourishment," October 2005, *BioScience Magazine* ¹⁴⁸ "Economics of Fish and Wildlife Recreation," Florida Fish and Wildlife Conservation Commission, 2007,

http://myfwc.com/About/Economic/EconomicsOfFishWildlifeRec2007.pdf

 ¹⁴⁹ Terry Gibson, "Addicted to Sand Pumping," May 2005, Florida Sportsman, <u>http://www.floridasportsman.com/confron/0505112/</u>
¹⁵⁰ Terry Gibson, "Addicted to Sand Pumping," May 2005, Florida Sportsman, <u>http://www.floridasportsman.com/confron/0505112/</u>

¹⁵¹ Orrin Pilkey and Andy Coburn, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: Is It Worth The Cost? – Response," NOAA, http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series1c.htm - accessed April 15, 2009

¹⁵² Jennifer Husko, "Call For Investigation Into Spinal Cord Injuries at Cape May Beaches," September 3, 2008, NBC40 (NJ), http://www.nbc40.net/view_story.php?id=6747

According to both Cape May City Mayor Edward Mahaney and local Fire Chief Jerry Inderwies, this increase is the result of recent beach replenishment projects that leave a steep drop off, instead of the previous gentle decline, when the dredged sand erodes.¹⁵³

U.S. Senator Frank Lautenberg asked for the Army Corps of Engineers to investigate this matter and find a solution that does not endanger the public.¹⁵⁴

According to the Press of Atlantic City:

"The city's beaches used to be known for their gentle slope, with waves breaking much farther out and rolling to shore ... the only [beach] not to get replenishment sand, is still like this.

"Most beaches now have a steeper dropoff, with waves breaking closer to shore. Sand that was pumped has eroded, creating a sharp break where waves break close to shore - dropping swimmers into shallow water or even sand."¹⁵⁵

Another health concern recently surfaced when a beach replenishment project carried out for Long Beach Island, New Jersey, by the Corps resulted in more than 1,100 World War I-era military munitions being pumped onto the beach.¹⁵⁶ Many of these munitions included unexploded gun powder.¹⁵⁷

In the San Diego, California area, concerns are being raised that a beach nourishment project will use sand from a site once home to a Navy gunnery.¹⁵⁸



U.S. MILITARY FUSES AND ADAPTORS FOUND ON LONG BEACH ISLAND, NEW JERSEY – SOME CONTAINING UNEXPLODED GUN POWDER (PHOTOGRAPHY BY U.S. ARMY CORPS OF ENGINEERS)

Munitions with unexploded powder still pose a risk to beach visitors and can maim or kill if detonated inadvertently.¹⁵⁹

Beach Nourishment Infringes on Property Rights

Beach nourishment activities have engendered the use of eminent domain for coastal cities to take beachfront private property without adequate consideration of private property rights.

¹⁶⁶ Donna Weaver, "Surf City beach replenishment project appears to be a wipeout, locals say," *Press of Atlantic City*, March 31, 2008, <u>http://www.pressofatlanticcity.com/183/story/119809.html</u>

¹⁵⁹ Jill Capuzzo, "Racing to Make Surf City Beach Safe by May 25, Opening Day," April 3, 2007, New York Times, <u>http://www.nytimes.com/2007/04/03/nyregion/03beach.html?fta=y</u>

¹⁵³ Jennifer Husko, "Call For Investigation Into Spinal Cord Injuries at Cape May Beaches," September 3, 2008, NBC40 (NJ), <u>http://www.nbc40.net/view_story.php?id=6747</u>

 ¹⁵⁴ Senator Frank Lautenberg (D-NJ), Letter to Lieutenant Colonel Tom Tickner of the Army Corps of Engineers, September 3, 2008
¹⁵⁵ Richard Degener, "In Cape May, more sand may mean more danger," August 22, 2008, Press of Atlantic City, <u>http://www.pressofatlanticcity.com/185/story/235585.html</u>

¹⁵⁷ Jill Capuzzo, "Racing to Make Surf City Beach Safe by May 25, Opening Day," April 3, 2007, New York Times, http://www.nytimes.com/2007/04/03/nyregion/03beach.html?fra=y

¹⁵⁸ Janine Zúñiga, "Army Corps finds munitions at park, keeps searching: Site once home to bombing range," May 6, 2008, San Diego Union-Tribune, http://www.signonsandiego.com/news/mexico/tijuana/20080506-9999-1m6border.html

Beach nourishment projects cannot take place in residential areas where areas of the affected beach are owned by individuals until all beach owners sign easements to their properties. Easements typically are agreements signed by property owners that allow for certain activities to take place on their privately owned land.

In some states, however, easement conditions are so restrictive that some property owners find it is not in their best interest to relinquish their rights to their own beach property. Those who do not agree to sign these easements are portrayed by the city as unreasonably jeopardizing the safety of houses on this beach by potentially holding up an upcoming beach nourishment project.¹⁶⁰

In Florida, easements require property owners to grant the state access to the property in question forever with no limitations to what can be done on that property. Owners may only hold property up to a determined "erosion line" with all other beach considered public. The Florida Department of Environmental Protections (DEP) has not been willing to negotiate modifications to these easement requirements.

In Destin, Florida, state officials have sought repeatedly to increase public access to beaches privately owned



SURF CITY BEACH, NEW JERSEY, NOURISHMENT (PHOTOGRAPH BY U.S. ARMY CORPS OF ENGINEERS)

and paid for by local homeowners. The Boston Globe found that the state was trying to encourage easements in Destin to increase public beach access.¹⁶¹ When the state attempted to convince local property owners to sign easements for a beach nourishment project that would make their beach public, they repeatedly reassured them that this project would not be carried out without the approval of most home owners.¹⁶² Despite public admissions that no more than 40 percent of owners signed the easements by the given deadline, the state went ahead with this project.¹⁶³ Some owners even offered to pay for their share of the beach nourishment in an attempt to keep their beach backyard private, but were told that the added beach would still be considered public land. While the First District Court of Appeals ruled in favor of the property owners, a recent Florida Supreme Court decision reversed this ruling, allowing DEP to continue the beach project.¹⁶⁴

Those beachfront property owners who do not want publicly funded beach nourishment, are being forced to give up their private property rights to accommodate an inflexible state entity with questionable motives. In this Destin, Florida case, in particular, local county officials had already unsuccessfully attempted to increase

¹⁶⁴ "A Big Win for Beach Sand Renourishment Supporters," September 29, 2008, Channel 7 – WJHG (FL),

http://www.wjhg.com/news/headlines/29916889.html

¹⁶⁰ "VB plans court action to protect beach," December 5, 2008, WAVY (VA),

http://www.wavy.com/dpp/news/local news/loca cityvb courtactionbeach 20081205

¹⁶¹ Ann M. Henson, "Florida Town at Center of Debate Over Public Access to Beaches," July 2, 2004, Boston Globe

¹⁶² Rick Hattersley, May 21, 2003, Destin Log (FL); and Liza Martin, "Nourishment Goes Forward, August 3, 2005, Destin Log

¹⁶³ Liza Martin, "Destin City, Walton Officials Making Plans for Beach Restoration," October 29, 2005, Destin Log

public beaches through an ordinance declaring any beach further than 25 feet from private properties to be public. If beach projects are really necessary for the protection of these homes, it is unclear why the owners were not permitted to pay for the projects on their own in order to retain their private beaches.

In New Jersey, easements now require property owners to grant the state access to the beachfront property forever, with no limitations as to what can be done by the state on that property. New Jersey State Senator John Adler recently agreed that there needed to be a "better balance between the public interest and private citizens' rights in beach-replenishment projects."¹⁶⁵

Part of a \$72 million beach replenishment project for Long Beach Island was held up in the city of Harvey Cedars, New Jersey, by 16 homeowners (out of a total of 82) who could not come to an agreement with the local government.¹⁶⁶ The city actually tried to force these homeowners to sign these easements by way of a preliminary injunction but a New Jersey appeals court ruled that the city would first have to exhaust all its options, including using eminent domain. The city of Harvey Cedars consequently passed an ordinance allowing the use of eminent domain in order to take away private beach property.¹⁶⁷

Once coastal property owners sign easements, their private beach in many cases no longer belongs to them. Without agreed-to restrictions within the easement contract, the government can essentially do what it wants on the acquired land.¹⁶⁸

Homeowners are holding out in Harvey Cedars because their concerns are not addressed specifically in the easement contracts. Even though they are supportive of the beach projects, the easements are worded in a manner that does not restrict the government to dune and beach enlargement. Beachfront owners are concerned about the government allowing new construction of condominiums or boardwalks and high dunes obstructing their valuable beach view – especially without reasonable compensation.¹⁶⁹ Harvey Cedars is still in the process of obtaining outstanding easements.¹⁷⁰

A similar situation is taking place in Strathmere, New Jersey, where the town is seeking to collect easements for another beach project. An ordinance to permit eminent domain has been approved to prompt resistant beachfront owners to sign their easements. The properties covered under the easements still have an assessed value used to calculate property taxes, but residents have accused the town of decreasing recent assessments of these properties in anticipation that the town will take them through eminent domain. Thus, homeowners charge, the town is artificially deflating the cost of future compensation to the current owners by saying their otherwise valuable land is not worth as much. Some of these owners are in favor of beach nourishment, but oppose granting the township so much discretion with their property.¹⁷¹ Several current landowners have held the beachfront property for which easements are being sought for more than 40 years. The city is offering some residents \$1, \$40, or \$80 for lots that currently cannot be developed. One resident points out, "The easement covers the entire lot in its entirety forever. You essentially sign away all your rights... If regulations

¹⁶⁷ Nicholas Huba, "Court: Property owners can say 'no," July 16, 2008, Asbury Park Press,

http://www.app.com/apps/pbcs.dll/article?AID=/20080716/NEWS02/807160388/1070 ¹⁶⁸ Wayne Parry, "Homeowners in wealthy Long Beach Island town fight beach replenishment," July 19, 2008, Associated Press,

http://www.mycentraljersey.com/apps/pbcs.dll/article?AID=/20080719/STATE/80719011/1001/rss ¹⁶⁹ Donna Weaver, "Some Harvey Cedars holdouts may be coming around," July 20, 2008, Press of Atlantic City,

http://www.pressofatlanticcity.com/183/story/209798.html

- ¹⁷⁰ Nicholas Huba, "Long Beach delays hearing on easements," April 7, 2009, Asbury Park Press (NJ),
- http://www.app.com/article/20090407/NEWS02/904070337/1070/NEWS02

¹⁷¹ Michael Miller, "Easements may not come easily for Strathmere beach-fill project," July 29, 2008, Press of Atlantic City, <u>http://www.pressofatlanticcity.com/181/story/216921.html</u>

 ¹⁶⁵ "Adler's beach bill / Wrong direction," June 2, 2008, Press of Atlantic City, <u>http://www.pressofatlanticcity.com/146/story/172521.html</u>
¹⁶⁶ Jessica Infante and Nicholas Huba, "Saved by the sand: Thousands of yards of sand brought in to shore up beaches," July 3, 2008, Asbury Park Press, http://www.app.com/apps/pbcs.dll/article?AID=/20080703/NEWS02/807030530/1070

should change or if the configuration of Strathmere should change (through natural or man-made circumstances) your hands will be tied."¹⁷²

Similar concerns exist in Ship Bottom, New Jersey, where one property owner referring to the lack of restrictive language in the easement agreement asked, "Why can't [the New Jersey Department of Environmental Protection] put [the specifics] in writing and say that there will never be a boardwalk? I've been asking that all along."¹⁷³

The Virginia Beach, Virginia, City Council also recently passed an ordinance allowing for eminent domain to be used to force all Cape Henry beach owners to sign easements for beach nourishment projects that declare the beach as public.¹⁷⁴

While the motives of some objecting to these easements may seem questionable, the lack of flexibility granted by these easements to many beachfront property owners is concerning. The additional possibility that states and localities may be using beach nourishment as a tool to increase government control and access to beaches is even more troubling.

¹⁷² Michael Miller, "Easements for beach fill project in Strathmere prove tough sell," November 27, 2008, Press of Atlantic City, http://www.prospectationity.com/186/ctopy/228870.html

http://www.pressofatlanticcity.com/186/story/328870.html

¹⁷³ Donna Weaver, "Unlike Long Beach Island, four Delaware towns had little problem with easements," August 12, 2008, Press of Atlantic City, http://www.pressofatlanticcity.com/183/story/227135.html

¹⁷⁴ Deirdre Fernandes, "Virginia Beach OKs use of eminent domain on Cape Henry," December 10, 2008, The Virginian-Pilot,

http://hamptonroads.com/2008/12/virginia-beach-oks-use-eminent-domain-cape-henry

RECOMMENDATIONS

Prioritize Fixing Aging Levees Rather Than Nourishing Beaches

Instead of allowing lobbyists and powerful members of Congress to divert Corps funds for select beach nourishment projects, Congress should prioritize funding for critical infrastructure needs, including levees managed and overseen by the Corps that have a flood rating level of less than 100 year and are rated as "unacceptable."

There are 985 levees within the Corps of Engineer's Levee Safety Program that have a flood level rating of less than 100 years.¹⁷⁵ Even a 100-year flood level rating is not considered sufficient for critical infrastructure whose failure would be catastrophic.

Of these 985 levees, 550 have less than a 25-year flood level. Considering that the overall list of levees "only represents a small percentage of levees which may exist nationwide,"¹⁷⁶ it is likely that there are many other levees in unacceptable condition.

A recent USA Today story also found there are 177 levees nationwide with "'unacceptable' maintenance ratings in corps inspections, meaning that it can be 'reasonably foreseen' that they will not perform properly in a major flood."¹⁷⁷ In fact, these levees are so poorly maintained that they do not qualify for federal rehabilitation.¹⁷⁸

The average age of levees within the federal levee safety programs is approximately 50 years, and the age of many non-federal levees can be much older – even more than 100 years. The costs to maintain and update these levees is enormous.¹⁷⁹

The head of the Corps' Levee Safety Program recently stated that people who rely on the levees should "be aware that there is reason for concern," as the neglected levees include the Arcade Creek levee in Sacramento and others that protect urban-residential areas.¹⁸⁰

The Sacramento levee system has the worst flood protection level of any major city – between an 85- and 100-year rating.¹⁸¹ In comparison, New Orleans and Omaha have a 250-year level of flood protection and other major cities at risk for catastrophic flooding like Tacoma, St. Louis, Dallas and Kansas City enjoy at least a 500-year flood protection.¹⁸²

According to the Sacramento Business Journal, the Sacramento Area Flood Control Agency estimates that \$2.7 billion is needed for Sacramento to attain a 200-year flood protection level – still a lower level than in New Orleans.¹⁸³

¹⁷⁵ Correspondence to the office of Senator Coburn, Corps of Engineers Office of Congressional Relations, March 17, 2009

¹⁷⁶ Correspondence to the office of Senator Coburn, Corps of Engineers Office of Congressional Relations, March 17, 2009

¹⁷⁷ Peter Eisler, "Army Corps cracks down on flunking levees," February 23, 2009, USA Today, <u>http://www.usatoday.com/news/nation/2009-02-23-levees_N.htm</u>

¹⁷⁸ Peter Eisler, "Army Corps cracks down on flunking levees," February 23, 2009, USA Today, <u>http://www.usatoday.com/news/nation/2009-02-23-levees</u>. N.htm

¹⁷⁹ National Committee on Levee Safety, "Recommendations for a National Levee Safety Program," January 15, 2009,

http://www.iwr.usace.army.mil/ncls/docs/NCLS-Recommendation-Report_012009_DRAFT.pdf

¹⁸⁰ Peter Eisler, "Army Corps cracks down on flunking levees," February 23, 2009, USA Today, <u>http://www.usatoday.com/news/nation/2009-02-23-levees_N.htm</u>

¹⁸¹ Correspondence to the office of Senator Coburn, Corps of Engineers Office of Congressional Relations, May 10, 2007; City of Sacramento Department of Utilities, http://www.cityofsacramento.org/utilities/flood-ready/ – accessed, March 4, 2009

¹⁸² Senator Diane Feinstein (D-CA), Floor Speech, May 2, 2006, <u>http://www.c-spanarchives.org/congress/?q=node/77531&id=7445895</u>

¹⁸³ "Leveraging Levees," Sacramento Business Journal, February 19, 2007.

Yet Congress voted against an amendment to prioritize funds for improving these levees over a beach nourishment project in California.¹⁸⁴

Because of this inability of Congress to prioritize, complete, and maintain infrastructure projects that are true national needs, the Corps has been plagued with a massive construction backlog for more than two decades.¹⁸⁵ Current construction backlog estimates range from \$61 billion¹⁸⁶ to more than \$80 billion since passage of the Water Resource Development Act of 2007.¹⁸⁷ The Corps' maintenance backlog has also grown to more than \$1 billion and is increasing by more than \$100 million every year.¹⁸⁸

In fact, the culture of earmarking funds for parochial projects has led the National Academy of Public Administration to conclude:

"Annual appropriations for specific, individual projects, or project segments, are not conducive to efficient and effective completion of major infrastructure systems; they often do not adequately support system-wide performance improvements... The present project-by-project approach, with lagging project completions, on-again-off-again construction schedules, and disappointed cost-share sponsors that do not know what they can count on, is not the best path to continued national prosperity."¹⁸⁹

According the Office of Management and Budget (OMB), the construction backlog has had a negative impact on water infrastructure projects, our national economy, and the environment:

"The Corp's enormous backlog of ongoing civil works construction represents a significant source of unrealized economic and environmental benefits. The size of the backlog and the amount of funding necessary to complete it have grown in recent years, largely because of the continued addition of new projects to the Corps workload each year... This growth trend in the construction backlog unfairly penalizes both taxpayers and project sponsors."¹⁹⁰

OMB in the past has recommended at least directing most construction funds to ongoing projects nearing completion or others offering the highest economic or environmental returns.¹⁹¹

Congress should require federal funds be prioritized in conjunction with the Corps and OMB first and foremost for critical levee maintenance and repairs and allow local communities and state governments to fund beach nourishment projects with their own funds.

Eliminate Federal Involvement in Beach Nourishment Projects

Currently, the federal share of beach nourishment projects is 65 percent for initial nourishment and 50 percent for subsequent renourishments over a period of 50 years. States and localities determine how to split the remaining costs.

¹⁹⁰ "The Budget for Fiscal Year 2005: Corps of Engineers-Civil Works," Office of Management and Budget

¹⁸⁴ Senate Amendment 1090 to H.R. 1495 (The Water Resources Development Act of 2007), May 15, 2007,

http://senate.gov/legislative/LIS/roll call lists/roll call vote cfm.cfm?congress=110&session=1&vote=00163

¹⁸⁵ Government Accountability Office, "Water Project Construction Backlog – A Serious Problem With No Easy Solution," January 26, 1983, http://archive.gao.gov/f0302/120642.pdf

 ¹⁸⁶ "The American Recovery and Reinvestment Act of 2009 (P.L. 111-5, known as the "stimulus" bill)," House of Representatives Report, Page 26
¹⁸⁷ This number is a combination of the backlog number issued by the National Academy of Public Administration in February 2007 (\$60 billion) and the additional projects authorized in the Water Resources Development Act of 2007 (\$23 billion according to the Congressional Budget Office).
¹⁸⁸ S. Rept. 110-127 for S. 1751, The Energy and Water Development Appropriations Act, 2008, Page 9

¹⁸⁹ National Academy of Public Administration, "Prioritizing America's Water Resources Investments: Budget Reform for Civil Works Construction Projects at the U.S. Army Corps of Engineers," February 2007, <u>http://www.napawash.org/pc_management_studies/Corps_Summary_Report_03-02-07.pdf</u>

According to the NOAA, much of the alleged national economic development derived from these projects is nothing more than a transfer of spending from one geographic area to another (national vs. regional economic development).¹⁹²

While beach nourishment proponents claim that *recreational* benefits derived from beach replenishment are spread out over a greater geographic area,¹⁹³ these benefits are more regional than national. Two studies cited by NOAA demonstrate two beaches in Florida were frequented by state and local residents 76.5 and 56.82 percent of the time, respectively. The percentages for just local visitors (excluding other state visitors) for these beaches were 59.6 and 48.2 percent. While this difference is significant, at least half of all recreational benefits are concentrated locally.¹⁹⁴

Beach nourishment lobbyists claim this practice should be prioritized because it is a "good investment" and that for each federal dollar spent on such projects, the U.S. Treasury receives \$593 in tax revenue as a result of tourism.¹⁹⁵

This argument is overly simplistic. Transportation and water infrastructure improvements, local attractions, environmental amenities and other factors would seem to play a greater role in promoting economic development and tourism than beach nourishment projects.

A Heinz Center report finds that there are about 40 federal programs, including programs not specific to coastal areas, which invest "in beachfront development."¹⁹⁶

Advocates for federal beach nourishment funding have also claimed that such assistance is justified because much of the erosion is or has been caused by federal navigation projects such as ports, jetties, and navigational channels. According to the Corps of Engineers, however, of the 106 beach projects listed in the inventory of projects having a beach "nourishment" component, only 22 – or about 20 percent of all projects – seek to address erosion caused at least "partially" by federal navigation projects.¹⁹⁷

Of the \$23 million in shoreline protection funding included in President Bush's FY09 budget, only \$4 million was for projects that mitigate "damaged induced by [federal] navigation projects."¹⁹⁸

The previous two Administrations have advocated decreasing or eliminating federal government involvement in beach nourishment projects. In fact, President Clinton suggested eliminating all new beach nourishment projects.¹⁹⁹

Eliminating the federal cost-share of these projects will encourage coastal communities and the states to which they belong, to pursue more long-term and sustainable solutions to beach erosion. It will also free the Corps of Engineers to more fully address critical national infrastructure maintenance needs. Currently, federal beach nourishment projects authorize periodic renourishment every three to five years for 50 years.

¹⁹⁵ Howard Marlowe, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: It's a Good Investment - Conclusion," NOAA, Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series2d.htm</u> – accessed April 15, 2009

¹⁹⁶ H. John Heinz III Center for Science, Economics and the Environment, "Human Links to Coastal Disasters," 2002,

http://www.heinzctr.org/publications/PDF/Full report human links.pdf

¹⁹² NOAA, "Beach Nourishment: A Guide for Local Government Officials – Distribution of Project Benefits by Income Level and by Beneficiary Group," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/bendist.htm</u> – accessed April 15, 2009

¹⁹³ Howard Marlowe, "Beach Nourishment: A Guide for Local Government Officials – Beach Nourishment: It's a Good Investment - Perspective," NOAA, Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/dialog/series2a.htm</u> – accessed April 15, 2009

¹⁹⁴ NOAA, "Beach Nourishment: A Guide for Local Government Officials – Distribution of Project Benefits by Income Level and by Beneficiary Group," Undated, <u>http://www.csc.noaa.gov/beachnourishment/html/human/socio/bendist.htm</u> – accessed April 15, 2009

¹⁹⁷ Assistant Secretary of the Army John Paul Woodley, Jr., Letter to Senator Tom Coburn, Department of the Army, Civil Works, May 1, 2008, Enclosure 2 ¹⁹⁸ Correspondence to the office of Senator Coburn, Corps of Engineers Office of Congressional Relations, April 11, 2008

¹⁹⁹ Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999

Congress may prefer to phase out these projects by returning the federal cost share to 33 percent initially, followed by a complete elimination of any federal cost-share requirement for beach nourishment projects.

Both President George W. Bush²⁰⁰ and President Clinton²⁰¹ suggested making the federal cost-share 35 percent.²⁰²

Reform the National Flood Insurance Program to be Actuarially Sound

According to its mission statement, the National Flood Insurance Program (NFIP) was created to: "(1) reduce suffering and economic losses due to floods through the purchase of flood insurance; (2) promote state and local land-use controls to guide development away from flood-prone areas; and (3) reduce federal expenditures for disaster assistance and flood control."²⁰³

Today, however, more Americans than ever live in flood prone regions – driving up individual risk and stress on the flood insurance program. "Some 153 million people live in coastal counties, an increase of 33 million since 1980. An additional 12 million are expected to live in coastal counties [by 2015]."²⁰⁴ Risk exposure, just for NFIP properties, now exceeds \$1 trillion.²⁰⁵

Unfortunately, Congress has compromised the effectiveness of NFIP. While federal law requires mortgage holders for properties in flood-prone areas to purchase flood insurance, many break this law because they continue to be eligible for disaster assistance. In 2005, according to the Congressional Research Service, 61,000 (or 55 percent) properties most at risk for flooding (called "repetitive loss properties") remained uninsured.²⁰⁶ Attempts by Congress to address this problem have not been successful.²⁰⁷

Compounding this problem, the program provides generous subsidies to expensive coastal properties that prevent the entire program from being actuarially sound. Rather than reducing risks, the program has encouraged riskier homeowner behavior and greater financial exposure for taxpayers.

In the event that premium and investment income are inadequate in a given year, the NFIP can exercise its statutory authority to borrow up to \$20 billion from the U.S. Treasury to cover losses (an attempt to forgive the current debt of almost \$20 billion failed in 2008, but future efforts will likely prove successful).²⁰⁸

²⁰³ Rawle O. King, "Side-by-Side Comparison of Flood Insurance

http://www.livescience.com/environment/ap_050301_coastal_pop.html

²⁰⁰ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, <u>http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml</u>

²⁰¹ Assistant Secretary of the Army (Civil Works) Joseph Westphal, Statement on WRDA 1998, June 23, 1998, Senate Committee on the Environment and Public Works, http://epw.senate.gov/105th/dod_6-23.htm

²⁰² Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, http://www.sptimes.com/2002/05/12/Worldandnation/You bought-this_beach.shtml

Reform Legislation in the 110th Congress," June 24, 2008, Congressional Research Services, <u>http://www.congress.gov/erp/rl/pdf/RL34367.pdf</u> ²⁰⁴ Randolph E. Schmid, "Disaster Worries Grow as More Americans Live Near Coasts," March 1, 2005, Associated Press,

²⁰⁵ Flood Insurance Reform and Modernization Act of 2007 (S. 2284), Senate Report 110-214, <u>http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_reports&docid=f:sr214.110.pdf</u>

²⁰⁶ Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, http://www.congress.gov/erp/rl/pdf/RL32972.pdf

²⁰⁷ Senator Coburn withdrew an amendment to the Flood Insurance Reform and Modernization Act of 2007 (Senate Amendment 4716 to S. 2284) to require persons located in flood prone areas to hold flood insurance as a condition for receiving federal flood disaster assistance on May 8, 2008.

http://www.govtrack.us/congress/record.xpd?id=110-s20080508-15#sMonofilemx003Ammx002Fmmx002Fmmx002Fmhomemx002Fmgovtrackmx002Fmdatamx002Fmusmx002Fm110mx002Fmcrmx002Fms20080508-

^{15.}xmlElementm30m0m0m

²⁰⁸ While the Flood Insurance Reform and Modernization Act of 2007 (S. 2284) was passed by the Senate, the House of Representatives did not approve the Senate version. Different versions of H.R. 3121 (also called the Flood Insurance Reform and Modernization Act of 2007) were approved by both the House and the Senate but could not be reconciled in conference and failed as well.

According to the Senate Banking Committee, "The NFIP has grown significantly over its history from 1 million policyholders and \$50 billion of risk exposure to over 5.4 million policyholders with in excess of \$1 trillion of risk exposure." Yet, it only brings in an estimated \$2.6 billion in premiums each year.²⁰⁹

Despite earlier claims of program soundness, the program has routinely operated in the red. According to the Congressional Research Service, "operating losses occurred annually between 1972 and 1980 and in the years 1983, 1984, 1989, 1990, 1992, 1993, 1995, 1996, 2004, and 2005.²¹⁰

Furthermore, since 1981, the program has been forced to borrow from the U.S. Treasury (i.e. U.S. taxpayers) on at least 15 separate occasions.²¹¹ In effect, taxpayers are the reinsurer for NFIP.

While Congress attempted to pass a reauthorization of NFIP that contained some improvements, even these efforts failed to address the critical deficiency with this program. Following several years of large losses, taxpayers again will likely be left to cover the deficit incurred by these non-actuarial premiums and bailed out homeowners in flood-prone areas for up to \$30 billion (including future interest payments).

As the former General Counsel of FEMA wrote:

"The challenge is that more and more development is taking place in flood prone and hurricane prone areas. People like to live near the seashore. But unless the actual cost of living by the water is reflected in the cost of ownership — including the cost of building property to resist wind damage, elevating out of floodplains, and insuring at actuarial rates for the cost of rebuilding after inevitable floods and hurricanes — the result will only be more development in more risk prone areas..."²¹²

Congress should require these homeowners pay actuarially sound, non-subsidized premiums thus taking taxpayers off the hook for large future losses and requiring a much greater financial commitment from the homeowners in flood-prone areas. This cost will also discourage risky construction and thereby eliminate the demand for many beach nourishment projects.

Until Congress can prove that the federal flood insurance program is sound and effective in discouraging risky coastal development, it should also oppose any efforts to expand NFIP or create other similar federal insurance programs.

Reform FEMA flood disaster assistance eligibility and uses

The Robert T. Stafford Disaster Relief and Emergency Assistance Act authorizes FEMA to provide eligible disaster victims and state and local governments in designated natural disaster areas with federal disaster relief funding following a Presidential declaration.²¹³ Awarded assistance may be used to rebuild damaged infrastructure and for beach renourishment efforts (if the beach in question has been "routinely maintained

²⁰⁹ Flood Insurance Reform and Modernization Act of 2007 (S. 2284), Senate Report 110-214, <u>http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_reports&docid=f:sr214.110.pdf</u>

²¹⁰ Rawle O. King, "National Flood Insurance Program: Treasury Borrowing in the Aftermath of Hurricane Katrina," September 19, 2008, Congressional Research Service, <u>http://www.congress.gov/erp/rs/pdf/RS22394.pdf</u>

²¹¹ Rawle O. King, "National Flood Insurance Program: Treasury Borrowing in the Aftermath of Hurricane Katrina," September 19, 2008, Congressional Research Service, http://www.congress.gov/erp/rs/pdf/RS22394.pdf

²¹² Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

²¹³ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, March 27, 2009

prior to the disaster" with non-federal funds), among other things.²¹⁴ From 2004 to 2008 FEMA spent \$35 million to restore these beaches.²¹⁵

Though local and state entities are legally required to pay for 25 percent of disaster relief costs, in practice states often are successful in lowering this percentage to between zero and ten percent.²¹⁶ Individual assistance is capped at \$25,000 in federal aid and does not require a personal or state cost share for housing assistance.²¹⁷

Congressional appropriations for disaster assistance, however, have increased while the rate of compliance with the mandatory purchase requirement remains low.

A February 2009 Congressional Research Service report found, "Total disaster assistance for emergency flood response operations, and subsequent long-term recovery efforts, increased from an average of \$444 million [per year] during the 1980s to \$3.75 billion [per year] from 1995 to 2004...²¹⁸ Another Congressional Research Service report detailed how uninsured losses from Hurricanes Katrina, Rita, Wilma and Dennis caused an unprecedented \$130 billion in federal outlays for emergency disaster relief.²¹⁹

In fact, according to the Congressional Research Service in 2005, 61,000 (or 55 percent) properties most at risk for flooding (called "repetitive loss properties"²²⁰) remained uninsured.²²¹ These properties represent a little over one percent of total flood insurance policies, yet account for 30 percent of total claims on average and are more likely to be uninsured than insured.²²²

Congress has unsuccessfully attempted to address the compliance issue. Congress passed the Flood Disaster Protection Act of 1973,²²³ which required property owners in flood-prone areas with housing loans from federally regulated lending institutions to purchase flood insurance. When this change failed, Congress passed the National Flood Insurance Reform Act of 1994.²²⁴ This law required lenders to purchase flood insurance on behalf of property owners who did not on their own (and then bill the property owner), and made lenders subject to civil monetary penalties if they did not enforce the mandatory purchase requirement.²²⁵ This reform, however, also was inadequately enforced.²²⁶

While the Government Accountability Office (GAO) recently found that compliance rose after Hurricane Katrina in 2005 to between 75 and 80 percent, GAO also found that market penetration was only one

²¹⁴ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, April 16, 2008

²¹⁵ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, April 17, 2008

²¹⁶ Correspondence to the office of Senator Coburn, FEMA Office of Congressional Relations, March 27, 2009

²¹⁷ "Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities," June 2007, FEMA, http://www.fema.gov/pdf/about/stafford_act.pdf

²¹⁸ Nicole T. Carter, "Federal Flood Policy Challenges: Lessons from the 2008 Midwest Flood," February 5, 2009, Congressional Research Service, http://apps.crs.gov/products/r/pdf/R40201.pdf

²¹⁹ Rawle O. King, "Financing Recovery From Large-Scale Natural Disasters," February 9, 2009, Congressional Research Service,

http://apps.crs.gov/products/rl/pdf/RL34749.pdf

²²⁰ The repetitive loss properties (RLPs) are insurable buildings for which two or more claims of more than \$1,000 were paid by NFIP within any rolling tenyear period, since 1978.

²²¹ Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, http://www.congress.gov/erp/rl/pdf/RL32972.pdf

²²² Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, http://www.congress.gov/erp/rl/pdf/RL32972.pdf

²²³ P.L. 93-234; 87 Stat. 975

²²⁴ P.L. 103-325; 108 Stat. 2255

²²⁵ Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, <u>http://www.congress.gov/erp/rl/pdf/RL32972.pdf</u>

²²⁶ Rawle O. King, "Federal Flood Insurance: The Repetitive Loss Problem," Congressional Research Service, June 30, 2005, http://www.congress.gov/erp/rl/pdf/RL32972.pdf

percent in some markets and questioned whether or not policy holders will remain in the program in the future.²²⁷

The Congressional Research Service concludes that, "When the government assists homeowners, renters, and businesses to cover uninsured losses, the incentive to purchase insurance and to mitigate losses in future disasters is lessened."²²⁸

Congress must prohibit flood disaster assistance for individuals who do not purchase flood insurance in a flood-prone area – ending the recent government practice of granting assistance after a disaster to both insured and uninsured homeowners." Enacting this reform will help curb federal flood disaster assistance payments outside of NFIP and force homeowners to bear at least some of the cost for living in a flood-prone area instead of pushing this cost onto their fellow taxpayers.

Additionally, Congress should prohibit the use of federal funds for beach nourishment and instead use these funds for other activities that will not incentivize future flood damages and federal disaster assistance.²²⁹

²²⁷ Orice Williams, "Federal Emergency Management Agency: Ongoing Challenges Facing the National Flood Insurance Program," October 2007, GAO, http://www.gao.gov/new.items/d08118t.pdf

²²⁸ N. Eric Weiss, "Rebuilding Housing After Hurricane Katrina: Lessons Learned and Unresolved Issues," Congressional Research Service, December 19, 2006, http://apps.crs.gov/products/rl/pdf/RL33761.pdf

²²⁹ The approach to protecting and managing federal coastal property has also included withdrawal or "strategic retreat." According to NOAA and the Congressional Research Services a few successful retreat projects include the Cape Hatteras Lighthouse in North Carolina and the FEMA's relocation of more than 300 homes and demolition of nearly 12,000 following the Midwest Flood of 1993 which cost over \$150 million. FEMA's Flood Mitigation Assistance program (FMA) also buys, relocates, or demolishes damaged or at-risk properties and helps pay for measures that reduce or eliminate the long-term risk of flood damage of structures insurable under the National Flood Insurance Program (including the elevation or flood-proofing of structures and the construction of minor flood reduction projects).

CONCLUSION

It is clear beach projects should not be subsidized with federal taxpayer dollars and prioritized over other, more critical water infrastructure needs.

These projects are costly, temporary, require perpetual upkeep and are designed to fail.

They have the effect of encouraging further risky coastal construction and future federal assistance, instead of protecting both homeowners and taxpayers from flood-based risk.

The process for determining which beach projects merit funding is broken, with decisions dictated by lobbyists and members of Congress representing certain coastal communities.

Local coastal property owners and businesses almost exclusively benefit from these projects.

Some studies show these projects negatively impact the environment.

Recent beach nourishment projects have prompted human health and eminent domain concerns.

Congress' inability to effectively prioritize and appropriate scarce federal dollars played a role in allowing critical infrastructure needs, such as those in New Orleans and Minnesota²³⁰ to remain unaddressed for too long. Unless Congress learns how to prioritize more effectively, similar catastrophes may occur in areas such as Sacramento – the city most at risk for massive and catastrophic flooding.²³¹ Hurricane Katrina caused an estimated 1,836 deaths, more than \$200 billion in property damages, and cost almost \$60 billion in federal relief in Louisiana alone.²³² According to the Department of Homeland Security (DHS), the federal government has provided more than \$127 billion in resources to the entire Gulf region for both Hurricanes Katrina and Rita.²³³

Additionally, in 2006, New Orleans attracted only 3.7 million tourists – down significantly from the 8.5-9 million visitors in the previous years. This decline represents a loss of more than \$3.5 billion in 2006 alone.²³⁴ Compared to the \$9.9 billion spent on tourism from out of state visitors in 2004, the actual decline in private expenditures is a more than \$7 billion decrease and also represents hundreds of millions in lost state and federal tax revenues.²³⁵

Because billions of federal dollars were invested in the New Orleans levee system after Hurricane Katrina, DHS recently concluded that:

"If another Katrina were to hit tomorrow along the same track, the Corps does not expect New Orleans would have the same catastrophic flooding that occurred during Katrina."²³⁶

²³¹ Eric Bailey, "Sacramento officials prepare for the worst -- massive flooding: State and federal agencies race to complete work designed to prevent the \$25-billion disaster that could result if the rivers surrounding the capital city overflow or breach aging levees," Los Angeles Times, May 11, 2008, http://www.latimes.com/news/printedition/california/la-rivercity-dave11-2008may11,0,6189258,full.story

Progress Report, August 2007, Louisiana Recovery Authority http://lra.louisiana.gov/assets/twoyear/LRAAugust2007ProgressReport.pdf
"Continuing Progress: A 2-Year Update on Hurricane Recovery and Rebuilding," Department of Homeland Security,

http://www.dhs.gov/xprepresp/programs/gc 1188338502848.shtm - accessed March 25, 2009

²³⁵ "Louisiana Rebirth – Restoring the Soul of America," <u>http://www.crt.state.la.us/LouisianaRebirth/plan/TOURISMActionPlanAmendment2.pdf</u>
²³⁶ DHS, "Continuing Progress: A 2-Year Update on Hurricane Recovery and Rebuilding," August 28, 2007

²³⁰ The Interstate 35 West (I-35W) bridge over the Mississippi River in Minneapolis, Minnesota, was in deficient condition when it collapsed on August 1, 2007, during rush hour, killing 13 people and injuring another 123.

²³⁴ Jaquetta White, "No. of visitors to N.O. climbed last year, study shows," *The Times-Picayune*, April 14, 2008, <u>http://blog.nola.com/tpmoney/2008/04/no_of_visitors_to_no_climbed_l.html</u>

Parochial federal projects siphon away important taxpayer dollars appropriated to address national infrastructure. With advice from California's Orange County Coastal Coalition like, "Don't give up because you don't have the money. Find someone else's money," it is not difficult to see how that "someone else" can be New Orleans or Sacramento citizens.

Congress must require states to shoulder the financial burden for these parochial projects, FEMA to demand more stringent land-use controls, construction setbacks, and relocation of properties in flood-prone areas, and significant reform of NFIP to make sure taxpayers aren't subsidizing beachfront property values and encouraging risky coastal construction.

President George W. Bush²³⁷ and President Bill Clinton²³⁸ proposed to reduce the federal roll for beach nourishment projects.²⁴⁰

Congress should ensure the scarce federal funds are prioritized for projects that are national – not parochial – priorities.

²³⁷ Bill Adair and Amy Wimmer, "You bought this beach: Some of America's richest towns need sand - and you're paying," St. Petersburg Times, May 12, 2002, <u>http://www.sptimes.com/2002/05/12/Worldandnation/You bought this beach.shtml</u>

²³⁸ Assistant Secretary of the Army (Civil Works) Joseph Westphal, Statement on WRDA 1998, June 23, 1998, Senate Committee on the Environment and Public Works, http://epw.senate.gov/105th/dod_6-23.htm

²³⁹ Assistant Secretary of the Army (Civil Works) Joseph Westphal, Statement on WRDA 1998, June 23, 1998, Senate Committee on the Environment and Public Works, http://epw.senate.gov/105th/dod_6-23.htm

²⁴⁰ Michael Grunwald, "Whose Beaches, Whose Burdens? At \$60 Million a Mile, Rebuilding New Jersey's Shore Stirs Debate on Access, Effectiveness," Washington Post, April 20, 1999; Terry Kivlan, "White House Wants Projects Removed From WRDA Bill," CongressDailyPM, May 11, 2007, <u>http://www.nationaljournal.com/congressdaily/dj_20070511_6.php?related=true&story1=null&story2=null&story3=null</u>