

THE NEW YORK/NEW JERSEY HARBOR: A DREDGING CRISIS?

Christopher S. Van Houten, Ph.D.*

TABLE OF CONTENTS

| | |
|---|-----|
| I. INTRODUCTION | 219 |
| II. OVERVIEW | 222 |
| A. Importance of the Port of New York and New Jersey .. | 222 |
| B. Historical Use of the Mud Dump | 223 |
| C. State Action | 228 |
| III. PUBLIC AND PRIVATE INITIATIVES | 234 |
| A. New Jersey Legislative Initiatives | 234 |
| B. Federal Legislative Initiatives | 239 |
| C. Private Sector Initiatives | 241 |
| IV. IMPORTANCE TO THE SHIPPING INDUSTRY | 244 |
| V. ANALYSIS AND CONCLUSION | 245 |

I. Introduction

The Port of New York and New Jersey (Port), the third largest port in the country, is of great economic importance to the metropolitan region, as well as the entire East Coast.¹ Marine terminals in Brooklyn and Staten Island, passenger terminals in New York City, and container and liquid terminals in New Jersey all contribute to the economic vitality and growth of the region.² The need to dredge the nearly 430 miles of channels and berths in the New York/New Jersey Harbor

* B.A., Economics, Bucknell University, 1986; M.A., Political Science, Rutgers University, 1990; M.Phil., International Relations, University of Cambridge, 1992; Ph.D., International Relations, University of Cambridge, 1996; J.D., Seton Hall University School of Law, anticipated 2000.

¹ See THE DIRECTOR OF MARITIME RESOURCES, NEW JERSEY DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT, PORT DREDGING: THE PLAN FOR 1996 4 (Dec. 1995) [hereinafter N. J. DEP'T. OF COMMERCE AND ECON. DEV.].

² See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 4.

(Harbor) is among the most important issues that local, state, and federal policy makers must address in order to avoid losing nearly twenty billion dollars in economic activity and nearly 165,500 jobs.³ If the issue remains unsolved, the economic stability and growth of the metropolitan region will be severely impacted.⁴

The Harbor has a natural depth of approximately nineteen feet; therefore, channels must be dredged on a regular basis to a width and depth great enough to allow large ocean-going vessels to enter the Harbor to load and unload cargo.⁵ In the future, shipping channels will need to be dredged to depths of fifty feet as the next generation of "super cargo ships" are manufactured and put into service.⁶

This task is challenging for two reasons. First, the accumulation of sediment is a natural process which occurs when rivers flow into the Harbor and the accompanying silt is deposited at the bottom, gradually reducing the depth of the

³ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5.

⁴ See Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N. J.), Aug. 29, 1997, at 35.

⁵ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 9. Large cargo ships that are unable to enter the Harbor undergo "lightering," a process whereby a significant portion of the cargo is transferred to smaller, lighter ships. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). The ship can then navigate shallow shipping channels because of its decreased weight, resulting in less draft. See *id.* The lightering process, however, is time-consuming and expensive. See *id.* Rather than "lightering," many shipping companies are diverting their ships to either Halifax, Nova Scotia or Norfolk, Virginia. See *id.*

⁶ See David M. Levitt, *Big Ship, Deep Problem*, THE HOME NEWS AND TRIBUNE (East Brunswick, N.J.), July 23, 1998, at A-2. See also N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 8. It is estimated that by 1999, nearly one-quarter of operational steamships will have a draft greater than 40 feet. See *id.* There are currently over 52 steamships being manufactured in this larger class, which is referred to as the "Post-Panamax" class. See *id.* The size of these larger ships will limit their passage through the Panama Canal, thus giving rise to the term "Post-Panamax." See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998). The *Regina Maersk* is 1,043 feet long and was sent by Maersk Inc. to the New York/New Jersey Harbor to deliver the message that "the vessels that will ply the major global trade routes from now on are going to be very, very big, and that any port that wants to dominate maritime commerce in the 21st century has to be sure its channels are deep enough to accommodate them." Andrew C. Revkin, *Supership Carries A Big Message*, N.Y. TIMES, July 23, 1998, at B-1. See also David M. Levitt, *Big Ship, Deep Problem*, HOME NEWS TRIBUNE (East Brunswick, N.J.), July 23, 1998, at A-1.

shipping channels in the Harbor.⁷ Thus, maintenance dredging must be conducted on a regular basis to deepen the shipping channels. The second and more problematic issue is that much of the sediment flowing into the Harbor from upstream sources is contaminated with pollutants.⁸

While maintenance dredging is expensive and burdensome, the real problem is disposal.⁹ Until recently, this has not been a problem.¹⁰ However, dredging projects have slowed due to the environmental concerns of ocean dumping.¹¹ While dredging projects have slowed, the natural process of sediment accumulation has not, resulting in shipping channels in the Harbor that are becoming increasingly shallow.¹² It is estimated that approximately three million tons of contaminated, dredged sediment will need to be processed and treated on an annual basis.¹³

This note analyzes the extent to which there is a dredging crisis in the New York/New Jersey Harbor, and the steps being taken to find a solution. Part II provides a brief overview of the

⁷ See Andrew C. Revkin, *Harbor To Be Dredged, but Much Tainted Mud Lacks Home*, N.Y. TIMES, May 12, 1997, at B-1.

⁸ See Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N. J.), Aug. 29, 1997, at 36. This is due to the practice of locating industrial sites and sewage plants along major rivers in New Jersey, such as the Passaic, Hackensack and Hudson Rivers, and discharging waste directly into the river. See *id.* This waste, much of it chemical in nature and toxic, ends up in the river bed and is eventually transported to the Harbor. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). See also Andrew C. Revkin, *Harbor To Be Dredged, but Much Tainted Mud Lacks Home*, N.Y. TIMES, May 12, 1997, at B-1.

⁹ See Al Frank, *Dredging Program in Deep*, THE STAR-LEDGER (Newark, N. J.), Feb. 15, 1998, at B-3.

¹⁰ See *id.* All dredged sediment was deposited at a dump site several miles off the coast of Sandy Hook, New Jersey, commonly referred to as the "Mud Dump" site. See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 9.

¹¹ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 9. The Mud Dump was closed pursuant to the United States Environmental Protection Agency. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

¹² See Andrew C. Revkin, *Curbs on Silt Disposal Threaten Port of New York*, N.Y. TIMES, Mar. 18, 1996, at B-1.

¹³ See Andrew C. Revkin, *Harbor To Be Dredged, but Much Tainted Mud Lacks Home*, N.Y. TIMES, May 12, 1997, at B-1. See also Andrew C. Revkin, *Curbs On Silt Disposal Threaten Port Of New York*, N.Y. TIMES, Mar. 18, 1996, at B-1 (for a comprehensive and concise overview of the dredging issue).

importance of the dredging issue.¹⁴ Part III discusses public and private initiatives to meet the challenges of the dredging crisis.¹⁵ Part IV describes the importance of the New York/New Jersey Harbor to the shipping industry.¹⁶ Finally, the note concludes with some thoughts on the dredging crisis.¹⁷

II. Overview

A. Importance of the Port of New York and New Jersey

The history of The Port of New York and New Jersey dates back to 1666, when land "was purchased from the Hackensack Indians" to meet the growing import - export trade in New York City.¹⁸ By the 1800's, the economic activity at the Port represented approximately seventy percent of the nation's commerce.¹⁹ By the 1920's, the Port was the world's largest for ocean liners.²⁰

Today, the existence of the Port continues to be paramount to the region's economic well-being.²¹ Companies that move their products through the Port have a customer base of seventeen million consumers within the immediate

¹⁴ See *infra* Section II.

¹⁵ See *infra* Section III.

¹⁶ See *infra* Section IV.

¹⁷ See *infra* Section V.

¹⁸ N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 4.

¹⁹ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 4.

²⁰ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 4. Currently, the combined facilities at the Port include more than 2,200 acres of land, 38,000 linear feet of wharf, 23 container cranes, and easy access to a first-class intermodal transportation system. See *id.*

²¹ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5. As "many as 4,000 ships call in the Port" each year. *Id.* In 1994, the Port processed 1,219,139 containers, 409,400 automobiles, "461,354 passengers on 226 cruise ships," and 32,734,448 tons of bulk cargo. *Id.* The figure of 1,219,139 import and export containers is equivalent to 2,033,879 TEU's, which stands for "twenty foot equivalent units," the industry standard of measurement. See *id.* The shipping activity in the Port represents approximately 166,500 jobs in the region, nearly \$20 billion in annual sales, "\$6.2 billion in regional wages, \$.5 billion in regional income and sales taxes, and 2% of the gross regional product." *Id.* The Port is responsible for 1.3% of the region's total regional employment. See *id.*

surrounding region.²² The Port continues to be the country's leading importer of petroleum products.²³ In addition to Port operations, there are also more than ten private terminals operating in the region that significantly contribute to economic growth.²⁴ It is likely that the importance of the Port will continue well into the next century as the world economy becomes further integrated and increasingly interdependent.²⁵

Although estimates indicate that the Port will grow in the future, the increase is small when compared to the anticipated growth of the ports of Norfolk, Virginia; Philadelphia, Pennsylvania; and Charleston, South Carolina.²⁶ In order to compete, the Port must maintain itself as a world class facility. This will require the shipping channels within the Harbor to be dredged to maintain the proper depth and width.²⁷

B. *Historical Use of the Mud Dump*

The Mud Dump, one of 125 dumping grounds that has served the country's ports by accepting contaminated, dredged

²² See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5. There are twenty million consumers who "live within 250 miles of the Port." *Id.*

²³ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5.

²⁴ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5-6. It should be noted that the Port Authority of New York and New Jersey (Port Authority), a public entity, is responsible for managing the Port. See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998). See also Al Frank, *Blockaded By Mud, Cargo Terminal Struggles While Officials Debate Dredging Problems*, THE STAR-LEDGER (Newark, N.J.), Dec. 4, 1996, at 49.

²⁵ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 6. The Office of Maritime Resources, New Jersey Department of Commerce and Economic Development forecasts that: (1) world cargo trade "will reach \$8.5 trillion by the year 2000;" (2) that U. S. lines will handle an increase of more than three million "twenty foot equivalent units" (TEU's); (3) that the "global tanker fleet will increase from 700 million dead-weight tons to 770 million dead-weight tons;" and (4) that America's growth will increase "to approximately 120 million metric tons by the" end of the century. *Id.* The Office of Maritime Resources also estimates that the amount of general cargo imported into the Port has increased by .5%. See *id.* at 7.

²⁶ See N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 7. Anticipated growth figures for these ports are as follows: Norfolk (7.9%), Philadelphia (14.3%), and Charleston (31.5%). See *id.* These high growth figures are partly attributable to subsidization and investment by local and state governments and increasing competition among shippers. See *id.*

²⁷ See generally N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 7-8.

sediment, is located in the Atlantic Ocean six miles east of Sandy Hook, New Jersey.²⁸ It has been used for over a century as a repository for dredged sediment.²⁹

On April 9, 1990, the Port Authority of New York and New Jersey (Port Authority) applied to the United States Army Corps of Engineers (USACE) for a permit to perform maintenance dredging and to dispose of the material at the Mud Dump.³⁰ The USACE subsequently granted the permit.³¹ Clean Ocean Action, an environmental group, challenged the USACE's decision to issue the permit in federal court.³² Meanwhile, the Port Authority moved forward with the dredging project and dumped the dredged sediment at the Mud Dump site "in accordance with the permit."³³

On review, the district court granted the USACE high deference and allowed the permit to stand.³⁴ The district court found that the position of Clean Ocean Action was that no dioxin should be dumped in the ocean.³⁵ The court also ruled that Clean Ocean Action failed to establish that the USACE

²⁸ See Eileen Koutnik, *Ocean Dumping Comes to a Halt*, INDEPENDENT (Morganville, N.J.), Sept. 4, 1997, at 1.

²⁹ See *id.*

³⁰ See *Clean Ocean Action v. York*, 861 F.Supp. 1203, 1207 (D.N.J. 1994). The Port Authority applied for a permit to dredge and place the sediment at the Mud Dump under "§10 of the Rivers and Harbors Act of 1899; 33 U.S.C. §403, §404 of the Clean Water Act; 33 U.S.C. §1344, and §103 of MPRSA" (MPRSA stands for Marine Protection, Research, and Sanctuaries Act). *Id.*

³¹ See *id.* at 1208.

³² See *id.* at 1203. The permit allowed up to 500,000 cubic yards from the Port Elizabeth and Port Newark facility to be deposited at the Mud Dump site. See *id.* at 1206. Although the permit contained special conditions which were designed to mitigate "the adverse effects of the dioxin," Clean Ocean Action "alleged that the permit was impermissibly granted and sought its revocation." *Id.*

³³ *Id.* at 1208.

³⁴ See *id.* at 1219. The district court's review of this case was "governed by the standard set forth in the Administrative Procedure Act ("APA") under which the government's action is to be upheld unless it is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.'" *Id.* (quoting 5 U.S.C. § 706(2)(A)). In its decision, the court noted that this is a narrow and deferential standard under which agency actions are presumed valid and that deference is more appropriate when the agency is construing an administrative regulation than a statute. See *id.*

³⁵ See *Clean Ocean Action*, 861 F.Supp. 1219. In the court's words, Clean Ocean Action believed that there "can never be ocean dumping of any dredge material which contains a measurable amount of dioxin." *Id.*

issued the permit in an arbitrary or capricious manner.³⁶ The Court of Appeals for the Second Circuit ultimately affirmed the trial court's decision.³⁷

In July 1996, the Clinton Administration proposed a temporary solution to the dumping problem.³⁸ Vice President Al Gore stated that only lightly contaminated mud could be placed at the Mud Dump site for three months, June - September, 1996.³⁹ Negotiations between Congressman Frank

³⁶ See *id.* at 1220. The court noted that Congress delegated to the USEPA and the USACE:

[T]he ultimate responsibility for deciding if dredge material containing dioxin can be dumped in the ocean and, if so, under what circumstances. . . [N]either the plaintiffs nor the Court, however, can make the final decision nor challenge the agencies' decision if, as in the present case, it is within the statute and regulations and is supported by an adequate record.

Id. at 1219.

³⁷ See *Clean Ocean Action v. York*, 57 F.3d 328 (3d Cir. 1995). The court found that although the trial court "committed serious error" when it found that dioxin was a trace contaminant which was not subject to MPRSA (Marine Protection, Research and Sanctuaries Act) regulation, "both the balance of harms and the public interest support the denial of the preliminary injunction." *Id.* at 331.

³⁸ See *Saving New York Harbor*, N.Y. TIMES, Oct. 6, 1996, at A-24. See also Andrew C. Revkin, *Curbs On Silt Disposal Threaten Port of New York*, N. Y. TIMES, Mar. 18, 1996, at A-1.

³⁹ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). Many observers speculated that the White House was involving itself with the dredging issue only to undermine Governor Whitman's efforts and to preempt her from claiming herself as an environmentalist in a future national election (possibly 2000, when she may face Vice President Gore, himself an environmentalist, for the presidency). See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). Also, at this time, Governor Whitman was preparing for a gubernatorial re-election campaign. At a press conference on July 25, 1996, Governor Whitman stated that:

I am encouraged by the proposed involvement of the White House in addressing the issue of dredging in the New York-New Jersey port district. . . Up to this point, it has been New Jersey and New York which have taken the lead in this matter, designing a comprehensive \$130 million dredging program to be financed by the Port Authority of New York and New Jersey. . . It is inevitable that the belated arrival of the White House to this issue will raise allegations of election year politics. Indeed, the fact that neither Governor Pataki nor I was notified or consulted about the White House plans can only serve to heighten those suspicions. It is encouraging that the White House has recognized what we've known and acted upon for some time - namely, that continued ocean dumping is not in the best interest of our region. . . In point

Pallone, Jr. (D-NJ), the White House, and environmental, business and labor leaders led to a final agreement to close the site in July 1996.⁴⁰

Up to this point, the United States Army Core of Engineers and the United States Environmental Protection Agency (USEPA) were working on plans to expand the Mud Dump beyond its existing two square miles.⁴¹ However, New Jersey

of fact, there has been no activity at the mud dump because of actions taken by our state.

Governor Christine Todd Whitman, Press Conference Remarks (July 25, 1996) (transcript available in the Office of the Governor). See also John H. Cushman, Jr., *Plan Developed By White House To Clear Harbor In New York*, N.Y. TIMES, July 24, 1996, at B-1; Thomas J. Lueck, *Governors Complain as Gore Details New York Harbor Plan*, N.Y. TIMES, July 25, 1996, at B-1.

⁴⁰ See Eileen Koutnik, *Ocean Dumping Comes to a Halt*, INDEPENDENT (Morganville, N. J.), Sept. 4, 1997, at 1. Cindy Zipf, executive director of Clean Ocean Action, stated that the closure of the Mud Dump was "an extraordinary victory not only for our region, but for our nation." *Id.* However, not everyone was happy to see the Mud Dump closed. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). The New York Shipping Association, which represents marine terminal operators and shipping lines, called Vice President Al Gore's agreement to close the Mud Dump a "political deal that was apparently designed to appease the activist opponents of ocean dumping" and that the halt of ocean dumping would mean "the slow demise of what has been the nation's premier Atlantic Coast commercial port." Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N. J.), Aug. 29, 1998, at 36. The New York Shipping Association also noted that the Mud Dump "had ten times the capacity estimated by government and that no sound scientific reasons existed to preclude tainted mud from the site." *Id.* Maritime industry officials claim that such tight restrictions place their business activities in the Port at a competitive disadvantage. See *id.* Maritime officials are annoyed with the strict environmental standards of the Port and the fact that contaminated sediment dredged from the Ports of Seattle, San Francisco, and Boston can still be dumped at sea. See Andrew C. Revkin, *Harbor to Be Dredged, but Much Tainted Mud Lacks Home*, N.Y. TIMES, May 12, 1997, at B-1. New Jersey Democratic Congressman Robert Menendez criticized Governor Whitman, claiming that she was being unreasonable because she was imposing more stringent ocean dumping standards than those promulgated by the EPA. See Al Frank, *Whitman Assails Dredging Rules As Unfair To New Jersey*, THE STAR-LEDGER (Newark, N. J.), Mar. 8, 1996, at B-1. See also J. Scott Orr, *Compromise To Resume Harbor Dredging Hits A Late Snag*, THE STAR-LEDGER (Newark, N. J.), July 24, 1996, at 25. The deal announced by the White House was almost lost at the last hour. See John H. Cushman, Jr., *Plan Developed By White House To Clear Harbor In New York*, N.Y. TIMES, July 24, 1996, at B-1. Actually, business and labor leaders later opposed closure of the site, claiming that they did not agree to closure. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Sept. 14, 1998).

⁴¹ See Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N. J.), Aug. 29, 1997, at 35. See also GOVERNOR CHRISTINE

Governor Christine Todd Whitman issued an executive order directing the Dredged Materials Management Team and state agencies to find alternatives to non-ocean dumping of toxic sediment (effectively ending further dumping at the site).⁴² The aforementioned deal and the Governor's order forced the USACE and the USEPA to change their focus and instead concentrate on closing the Mud Dump and developing a plan to cap the site with clean dredged material.⁴³ The closure of the Mud Dump was a victory for environmental, business and labor leaders who had worked together for years to obtain this result.⁴⁴

At this time, the Mud Dump, which has been classified as a Historic Area Remediation Site (HARS), can only be used as a repository for dredged sediment meeting acceptable HARS disposal standards, which is determined on a case-by-case basis by the New Jersey Department of Environmental Protection (NJDEP).⁴⁵ Currently, clean dredged sediment is being

TODD WHITMAN AND GOVERNOR GEORGE E. PATAKI, JOINT DREDGING PLAN FOR THE PORT OF NEW YORK AND NEW JERSEY 2 (1996) [hereinafter WHITMAN AND PATAKI].

⁴² See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

⁴³ See Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N. J.), Aug. 29, 1997, at 35. The USACE is advocating a sediment containment island which would be created within a network of dikes at an approximate cost of \$1 billion. See Al Frank, *Corps' Answer To Port's Dredging Problem: A Whole Island of Tainted Mud*, THE STAR-LEDGER (Newark, N. J.), Sept. 26, 1996, at 27. In addition to the containment island, the USACE is also considering borrow pits off the coast of Staten Island. See Robin Eisner, *'Muck Island' Off Great Kills*, STATEN ISLAND ADVANCE, Jan. 27, 1998, at A-1. Apparently, a group of Staten Island environmentalists are "hoping to put the brakes on the Army Corps of Engineers plan to push through approval of the construction of a containment island and new borrow pits approximately two miles off the coast of Great Kills for contaminated New York Harbor dredged material." *Id.*

⁴⁴ See Eileen Koutnik, *Ocean Dumping Comes to a Halt*, INDEPENDENT (Morganville, N. J.), Sept. 4, 1997, at 1. Clean Ocean Action, a New Jersey based environmental coalition, began to campaign in the 1980's for the closure of all off-shore dump sites. See *id.* The executive director of Clean Ocean Action is Cindy Zipf. See *id.* In 1984, there were seven dump sites off the New Jersey coast with an eighth dump site planned. See *id.* The other sites included a cellar dirt dump site located off Sea Bright, New Jersey; a sewage sludge dump site located off Sandy Hook, New Jersey; an acid waste site situated approximately 15 miles off Long Branch, New Jersey; a wood burning area off the Manasquan Inlet; and sewage and industrial waste sites off Cape May, New Jersey. See *id.* at 15.

⁴⁵ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime

dumped at the site to cover the contaminated sediment in a process known as "capping."⁴⁶

While the closure of the Mud Dump has been a victory for environmental groups, there have been economic costs associated with the closure.⁴⁷ The cost of dredging has increased dramatically in the Port region because the Mud Dump can now only be used for untainted dredged sediment, which comprises approximately twenty-five percent of the estimated three to seven million cubic yards that must be removed annually on a maintenance basis.⁴⁸

C. State Action

New Jersey Governor Christine Todd Whitman and New York Governor George E. Pataki, in anticipation of the closure of the Mud Dump, released a report titled the "Joint Dredging Plan for the Port of New York and New Jersey" in October 1996.⁴⁹ The report called for the accomplishment of two major objectives: (1) to promote predictability in the dredged material management process, and (2) to develop sound management strategies for dredging and disposal.⁵⁰ New York and New Jersey also identified several fundamental principles

Resources (Feb. 3, 1998). See also Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N.J.), Aug. 29, 1997, at 35.

⁴⁶ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). "Capping" involves placing clean, dredged material over the contaminated sediment. See *id.*

⁴⁷ See *id.*

⁴⁸ See *id.* The price of dredging has increased from \$5 to an average of \$60 per cubic yard because most of the dredged sediment can no longer be dumped at sea and must be disposed of at upland sites. See *id.* at 36.

⁴⁹ See Andrew C. Revkin, *2 Governors Back \$130 Million Plan To Deepen Harbor*, N.Y. TIMES, May 3, 1996, at A-1. See also *New Jersey, New York To Dredge Port Silt*, THE TRENTON TIMES, Oct. 8, 1996, at A-7; *Saving New York Harbor*, N.Y. TIMES, Oct. 6, 1996, at A-24; Todd B. Yates, *Harbor-Dredge Plan Unveiled By Governors*, HOME NEWS AND TRIBUNE (East Brunswick, N.J.), Oct. 8, 1996, at B-8; Al Frank, *Governors Agree On PA Dredging Plan*, THE STAR LEDGER (Newark, N.J.), May 5, 1996, at 1.

⁵⁰ See WHITMAN AND PATAKI, *supra* note 41, at 1. Specifically, the two objectives delineated in the report are: (1) to "promote greater certainty and predictability in the dredging project review process and dredged material management" and (2) to "facilitate effective long-term environmentally sound management strategies for addressing dredging and disposal needs for the region." *Id.*

for the management of dredged sediment.⁵¹

The Joint Dredging Plan for the Port of New York and New Jersey noted that the USEPA and the USACE, in the New York District, established three categories of sediment suitable for ocean disposal.⁵² Category I sediment meets unrestricted dumping standards; Category II sediment is subject to ocean dumping restrictions; and Category III sediment poses a significant health risk and is also subject to ocean dumping restrictions.⁵³

Prior to 1992, approximately ninety-five percent of the sediment dredged from the Harbor was found to be acceptable for ocean disposal.⁵⁴ In 1992, however, the new and more rigorous testing standards described above were implemented.⁵⁵ With the new standards, approximately fourteen percent of the sediment in the Harbor was estimated to be in Category I, twenty percent in Category II, and sixty-six percent in Category

⁵¹ See WHITMAN AND PATAKI, *supra* note 41, at 1. The principles identified by New Jersey and New York include the following:

[U]tilize the most economically and ecologically efficient and effective management and disposal options; restore areas historically used for dredged material disposal; reduce volumetric requirements through efficient harbor planning and dredged material reduction techniques and technologies; decontaminate and remediate harbor sediments to the extent possible; improve sediment quality through the elimination/reduction of the contaminant sources; and develop beneficial reuses for dredged material wherever possible.

Id.

⁵² See WHITMAN AND PATAKI, *supra* note 41, at 2.

⁵³ See WHITMAN AND PATAKI, *supra* note 41, at 2. The specific characteristics of each category are as follows: a) Category I - sediment in this category meets "unrestricted" ocean dumping standards, has no "unacceptable toxicity or bio-accumulation," and "no special precautionary measures are required during ocean disposal;" b) Category II - these sediments do not exhibit toxicity, but there may be some bio-accumulation (sediments in this category are subject to some ocean dumping restrictions and require "capping or some other disposal management practice"); and c) Category III - sediment in this category does not meet the standards for ocean dumping, fails "acute toxicity testing" and poses "a threat of significant bio-accumulation that can not be addressed through available ocean disposal management practices." *Id.* See also NEW JERSEY MARITIME RESOURCES, THE BUSINESS OF DREDGING: A CONFERENCE SUMMARY AND DREDGED MATERIAL USERS GUIDE FOR THE BUSINESS COMMUNITY 3 (1996) [hereinafter THE BUSINESS OF DREDGING].

⁵⁴ See WHITMAN AND PATAKI, *supra* note 41, at 2.

⁵⁵ See WHITMAN AND PATAKI, *supra* note 41, at 2.

III.⁵⁶

The report also delineated the steps that New York and New Jersey intended to take in the short and long term to address the dredging crisis.⁵⁷ In the short-term, the states pledged their cooperation to dredge navigational channels, which have a high priority.⁵⁸ The states also agreed to comply with the following disposal options: (1) use the Mud Dump site for Category I material (which would be used for capping purposes); (2) use the Mud Dump site as a last resort for Category II material (with certain requirements);⁵⁹ and (3) place Category III material in upland disposal sites.⁶⁰

Although the report was prepared by New York, New Jersey, and the Port Authority, many of the steps to solve the

⁵⁶ See WHITMAN AND PATAKI, *supra* note 41, at 2. The report notes that these figures are estimates at best, and that it is likely that a higher amount of sediment from the Harbor will be found to belong in Category III. See also THE BUSINESS OF DREDGING, *supra* note 53, at 3. The Office of Maritime Resources has estimated that in the short term (1997-2000), a total of 25,816,400 cubic yards of Category I sediment needs to be dredged; 3,454,000 cubic yards of Category II; and 11,843,6000 cubic yards of Category III. See *id.*

⁵⁷ See WHITMAN AND PATAKI, *supra* note 41, at 3-4.

⁵⁸ See WHITMAN AND PATAKI, *supra* note 41, at 3.

⁵⁹ See WHITMAN AND PATAKI, *supra* note 41, at 3-4. According to the report, Category II material can be dumped at the Mud Dump only if no "reasonable alternative" is available and if the USEPA "determines that there is sufficient capacity." *Id.* A "reasonable alternative site" has been defined as a site which is available on a timely basis, with costs comparable to ocean disposal of Category II materials, as adjusted for cost escalation but not to exceed the current local upland disposal rates." *Id.* Other criteria are listed for disposal of Category II material at the Mud Dump. See *id.* Materials to be released at HARS must meet acceptable standards that the USEPA determines on a case-by-case basis. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

⁶⁰ See WHITMAN AND PATAKI, *supra* note 41, at 4. Category III material was to go to the Orion site, which is an "upland demonstration project for construction fill utilizing dredged materials." *Id.* A mall will ultimately be built on this site, which is located in Elizabeth, New Jersey. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). Further disposal options for Category III sediment include the Newark Bay Borrow Pits, in which Category III material would be placed and covered with clean fill. See WHITMAN AND PATAKI, *supra* note 41, at 4. Other disposal options mentioned in the report include the development of decontamination technologies, which would process the contaminated dredged sediment with an end product having a beneficial reuse, such as habitat creation, wetlands redevelopment, landfill closure, and "construction material and hazardous site remediation." *Id.* at 10.

crisis have been taken by New Jersey.⁶¹ The Office of Maritime Resources, in a report titled "Dredging: The New Jersey Commitment", estimates the economic effect of harbor commerce on New Jersey to be approximately twenty-nine billion dollars in local revenue effecting nearly 200,000 jobs.⁶² The Office of Maritime Resources also reported that New Jersey is committed to maintaining a viable port⁶³ and noted various types of dredging projects that need to be completed.⁶⁴

As early as June 1994, Governor Whitman created the Dredged Materials Management Team (Management Team), a task force responsible for identifying short term solutions for the disposal of contaminated, dredged material from the New Jersey side of the Port.⁶⁵ The Management Team, led by Assemblyman Steven Corodemus (R-Monmouth), reached a consensus that the most feasible non-ocean, short-term solution would be underwater borrow pits.⁶⁶ The Management Team

⁶¹ See DREDGING: THE NEW JERSEY COMMITMENT, OFFICE OF MARITIME RESOURCES 1 (1997) [hereinafter DREDGING: THE NEW JERSEY COMMITMENT] (this report highlights the importance of the Harbor to New Jersey). The Port Authority of New York and New Jersey, a bi-state agency, plays a central role in the dredging crisis. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

⁶² DREDGING: THE NEW JERSEY COMMITMENT, *supra* note 61, at 1. The Office of Maritime Resources estimates the impact on New Jersey as follows: (a) total economic activity, \$93 billion; (b) total local revenue, \$29 billion; (c) total jobs, 200,000; (d) New Jersey taxes, \$330 million; (e) New Jersey exports, \$13 billion; (f) New Jersey manufacturing jobs, 70,000; and (g) New Jersey manufacturing income, \$3 billion. See *id.*

⁶³ See DREDGING: THE NEW JERSEY COMMITMENT, *supra* note 61, at 9. The report also notes that New Jersey is committed to "maintaining a competitive cost for disposal" and ensuring beneficial reuse of river silt. *Id.*

⁶⁴ See DREDGING: THE NEW JERSEY COMMITMENT, *supra* note 61, at 6. Various types of dredging projects need attention, including federal navigation channels, state navigation channels, private berths, private access to channels, military facilities, and private marinas. See *id.* The Office of Maritime Resources has estimated that maintenance dredging of the above projects will be broken down as follows: (a) USACE, 8,859,000 cubic yards; (b) Department of the Navy, 4,650,000 cubic yards; (c) New York City, 2,403,000 cubic yards; (d) private, 2,169,000 cubic yards; (e) New Jersey, 1,130,000 cubic yards; (f) Port Authority of New York and New Jersey, 1,040,000 cubic yards; and (g) other, 107,000 cubic yards. See *id.* at 5.

⁶⁵ See DREDGED MATERIALS MANAGEMENT TEAM FINAL REPORT: DREDGING - WHAT IS THE BEST APPROACH FOR NEW JERSEY? 1 (1996) [hereinafter DREDGING - WHAT IS THE BEST APPROACH FOR NEW JERSEY?].

⁶⁶ See DREDGING - WHAT IS THE BEST APPROACH FOR NEW JERSEY?, *supra* note 65, at 2. Assemblyman Steven Corodemus is a Republican legislator from

also suggested that upland disposal sites and geo-textile bags could be used, as well as decontamination technologies for the long-term management of dredged sediment.⁶⁷ There is a wide range of processing and decontamination technologies. Basic processes include dewatering and stabilization/solidification, while vitrification, and acid and solvent extraction are examples of more advanced processes.⁶⁸ In addition, even more complex treatment processes for contaminated dredged sediment exist.⁶⁹

Monmouth County, New Jersey. "Short-term" is defined as zero to three years in this report. See *id.* at 1. The DMMT stated that underwater borrow pits were "the best non-ocean short term solution for the disposal of contaminated dredged material from the Port." *Id.* at 2. Underwater borrow pits are officially referred to as sub-aqueous confined disposal facilities. See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

⁶⁷ See DREDGING - WHAT IS THE BEST APPROACH FOR NEW JERSEY?, *supra* note 65, at 2. See also Al Frank, *Port Wraps Its Dredging Problem In Polyester*, THE STAR-LEDGER (Newark, N.J.), June 12, 1996, at 39-41 (for a discussion of the use of geo-textile bags as a method of disposal).

⁶⁸ See A FOCUSED FEASIBILITY STUDY FOR PROCESSING AND DECONTAMINATING DREDGED SEDIMENT FROM THE NEW YORK/NEW JERSEY HARBOR 20-28 (1996) [hereinafter A FOCUSED FEASIBILITY STUDY] (this is an unpublished report prepared by TetraTech for NUI Environmental Group on file with the author). Sediment de-watering is a basic form of treatment which provides dredged sediment with a moisture content low enough so that it can be used as "engineered fill, disposed of in a landfill or be available for other potential beneficial uses." *Id.* at 21. In this process, much of the water is removed. See *id.* Stabilization/solidification technology "involves application of binding agents to sediment contaminated with inorganic and several organic contaminants." *Id.* at 23. In solidification, a "binding agent is used to form a solid material that has improved material handling characteristics and reduced permeability," while stabilization involves the "addition of a binding agent to immobilize the contaminants." *Id.*

⁶⁹ See A FOCUSED FEASIBILITY STUDY, *supra* note 68, at A-1 to A-9. More advanced treatment technologies include: (a) bio-remediation, where micro-organisms are used to "degrade or transform organic contaminants to less toxic or nontoxic forms;" *Id.* at A-2; (b) de-chlorination, which removes "elemental chlorine from contaminants such as PCB's, dioxins and pentachlorophenol (PCP) through the addition of a de-chlorinating reagent under alkaline conditions and increased temperatures;" *Id.* at A-4; (c) chemical oxidation, a process which can "convert oxidizable hazardous contaminants to non-hazardous or less toxic compounds that are more stable, less mobile, or inert;" *Id.* at A-5; (d) soil washing, which uses a "water-based fluid as the solvent" to remove contaminants from sediment by "transferring the contaminants to a wash solution in either soluble or insoluble form;" *Id.* at A-6; (e) solvent and acid extraction, which "removes organic contaminants such as PCB's" and petroleum hydrocarbons from sediment;" *Id.* at A-7; (f) thermal desorption, which "separates the contaminants from the sediment by heating the sediment to temperatures ranging from 90° to 760°;" *Id.* at A-9; and (g) thermal destruction, in which "contaminated soil, sediment, or other wastes" are heated from "temperatures ranging from 800° to 1650° in order to destroy organic

Recently, the Management Team implemented several actions to address the dredging crisis.⁷⁰ In April 1997, Governor Whitman charged the Management Team with the task of reviewing the USACE's "Dredged Materials Management Plan" for the Port and making recommendations within six months.⁷¹ The DMMP outlined several possible solutions to the dredging crisis.⁷² The Management Team determined that, while the USACE presented many technically feasible disposal options in the DMMP, many were not viable due to public opposition.⁷³

compounds." *Id.* at A-12.

⁷⁰ See GOVERNOR WHITMAN'S DREDGED MATERIALS MANAGEMENT TEAM: REVIEW OF THE USACE DREDGED MATERIALS MANAGEMENT PLAN 1 (1996) [hereinafter REVIEW OF THE USACE DREDGED MATERIALS MANAGEMENT PLAN] (this is an unpublished document at the time of this writing and is on file with the author). Actions taken include: "the creation of a sub-aqueous confined disposal facility" in Newark Bay; the development of an upland containment site at a location referred to as "OENJ" in Elizabeth, NJ; expediting the permitting procedure by creating an in-house dredging task force at the NJDEP; and appointing a Director of Maritime Resources to act as the point for dredging throughout the state. *Id.*

⁷¹ See REVIEW OF THE USACE DREDGED MATERIALS MANAGEMENT PLAN, *supra* note 70, at 1. This report has a complete analysis of disposal options and the recommendations of the DMMT. See *id.* at 1-13. The U. S. Army Corps of Engineers document is titled DREDGED MATERIAL MANAGEMENT PLAN FOR THE PORT OF NEW YORK AND NEW JERSEY: PROGRESS REPORT (1997) [hereinafter PROGRESS REPORT].

⁷² See REVIEW OF THE USACE DREDGED MATERIALS MANAGEMENT PLAN, *supra* note 70, at 1-13. The options considered included ocean disposal, containment islands, containment areas, sub-aqueous pits, upland disposal, habitat creation/restoration, decontamination technologies, sediment reduction, ocean disposal with geo-bags, and pit disposal with geo-bags. See *id.* See also Al Frank, *Timing Looks Right For Harbor Dredge Pit*, THE STAR-LEDGER (Newark, N. J.), Jan. 1, 1996, at 31; Kirk Moore, *Lack Of Places To Put Mud Has Newark Bay In A Hole*, HOME NEWS & TRIBUNE (New Brunswick, N. J.), Feb. 12, 1997, at A-1; Al Frank, *Port Authority Gains Broad Approvals For Harbor Dredge 'Tombs'*, THE STAR-LEDGER (Newark, N. J.), Feb. 20, 1997, at 35.

⁷³ See REVIEW OF THE USACE DREDGED MATERIALS MANAGEMENT PLAN, *supra* note 70, at 9. The strength of public opposition toward disposal of the contaminated dredged sediment should not be underestimated. See Bridget Malone, *Contractor Challenges Sayreville Dredge Ban*, THE STAR-LEDGER (Newark, N. J.), Feb. 6, 1998, at B-1. A private company wanted to dispose of dredged material in Sayreville, New Jersey at a site in close proximity to townhouses and condominiums. See *id.* Ultimately, the company was denied a permit to dump by the NJDEP. See *id.* However, a vociferous group was formed in Sayreville to combat the dumping of dredged sediment in the town, and ultimately an ordinance banning dumping was adopted by the town. See *id.* The company, Disch Construction, has been battling the town of Sayreville for about two years and does not believe that the anti-dumping ordinance is valid. See *id.* The company's attorney stated that the ordinance is a

III. Public and Private Initiatives

A. New Jersey Legislative Initiatives

In an effort to prevent further substantial economic loss, New Jersey voters approved a bond issue to raise money for port dredging in November 1996.⁷⁴ The bond issue authorized New Jersey to borrow \$300 million to provide for economic development and to dredge ports and waterways crucial to New Jersey's shipping industry.⁷⁵

The initiative, which called for \$185 million to be used to help pay for dredging and related activities in the Port Authority's region, passed with sixty - eight percent of the vote.⁷⁶ An additional \$70 million was allocated for hazardous waste cleanup.⁷⁷ The money will also be used to obtain nearly \$1 billion in matching federal grants over the next five years.⁷⁸ In

"procedural irregularity" because "[w]e don't believe that the municipality has the authority or the power to enact an ordinance that deals with a matter that can be superseded by the DEP. They have to yield to state policies, which are uniform throughout the state." *Id.*

⁷⁴ See *Voters Approve Bond Act for Dredging Harbor*, N.Y. TIMES, Nov. 7, 1996, at B-13.

⁷⁵ See *id.* Senator Donald DiFrancesco (R-22) was the prime sponsor of the bond initiative. The prime sponsor in the Assembly was Republican Steven Corodemus (R-11). Co-sponsors included Senator Edward T. O'Connor (D-31) and Assemblyman Alex DeCroke (R-21). The official name of the bond act is the *Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Area Economic Development Bond Act of 1996*. Assembly Republican News, *Assembly Committee Releases Corodemus Bill To Provide For Dredging And Economic Development*, June 21, 1996, at 1.

⁷⁶ See *Voters Approve Bond Act for Dredging Harbor*, N.Y. TIMES, Nov. 7, 1996, at B-13. Approximately \$20 million from the bond issue will be used to dredge navigational channels in other parts of the state; \$20 million will be used to fund economic development projects in the Delaware River and Bay region; and at "least \$5 million for decontamination technologies." *Id.* See also OFFICE OF THE GOVERNOR, NEWS RELEASE: GOVERNOR WHITMAN SIGNS DREDGING BOND ACT TO KEEP NEW JERSEY WORKING, May 8, 1997 [hereinafter GOVERNOR WHITMAN SIGNS DREDGING BOND ACT].

⁷⁷ See Todd B. Bates, *Voters OK Dredging, Waste-Cleanup Public Questions*, HOME NEWS AND TRIBUNE (New Brunswick, N.J.), Nov. 6, 1996, at A-2.

⁷⁸ See *id.* Much was made of the matching federal grants, because this was seen by the public as a chance for New Jersey citizens to get something back from the federal government. See Ira Whitman, *Cast Your Vote For Jobs And A Clean*

addition to these funds, the Port Authority pledged to spend \$130 million on port dredging and sediment disposal.⁷⁹

New Jersey Senate President Donald DiFrancesco, Senator Edward T. O'Connor, and Assemblymen Steven Corodemus and Alex DeCroce also sponsored enabling legislation necessary to implement the provisions of The Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Area Economic Development Bond Act of 1996.⁸⁰ This legislation, signed into law by Governor Whitman on May 8, 1997, allocated of thirty-two million dollars for dredging projects at nine sites in the Harbor region.⁸¹ At the time she signed the bill, the Governor stated that the legislation was about providing jobs and protecting the environment.⁸²

The legislation also established a twelve-member Dredging

Environment, THE STAR-LEDGER (Newark, N. J.), Oct. 10, 1996, at 25. New Jersey "pays the highest percentage of taxes to the Federal Government and gets the least amount back on a per capita basis." *Id.* See also GOVERNOR WHITMAN SIGNS DREDGING BOND ACT, *supra* note 76, at 1-3.

⁷⁹ See GOVERNOR WHITMAN SIGNS DREDGING BOND ACT, *supra* note 76, at 1-3.

⁸⁰ See *Port Dredging Bill Clears Another Hurdle*, SENATE REPUBLICAN NEWS, Mar. 25, 1997, at 1.

⁸¹ See *id.* The \$32 million appropriation funded "dredging and dredged material disposal projects, including infrastructure investments, of nine sites in the New York and New Jersey Channels, upper New York Harbor, Port Newark/Elizabeth, Hudson River and adjacent channels, Raritan River and Newark Bay, Hackensack and Passaic Rivers." *Id.* See also GOVERNOR WHITMAN SIGNS DREDGING BOND ACT, *supra* note 76, at 3; and *Corodemus - DeCroce Bill To Appropriate \$32 Million for 1996 Dredging Bond Act Approved By Assembly*, ASSEMBLY REPUBLICAN NEWS, Mar. 25, 1997, at 1.

⁸² See GOVERNOR WHITMAN SIGNS DREDGING BOND ACT, *supra* note 76, at 1. Governor Whitman stated that: "This is about jobs. Dredging affects everyone, because the products that come through this port are found in homes throughout this state. With this act, we keep the ports open, the workers employed, and the goods moving - while at the same time, we protect the environment." *Id.* Senator DiFrancesco stated that the bill "takes the success of last year's ballot initiative to the implementation stage by recognizing the dredging crisis and addressing its most imminent problems." *Port Dredging Bill Clears Another Hurdle*, SENATE REPUBLICAN NEWS, Mar. 25, 1997, at 1. Assemblyman Corodemus noted earlier in the legislative process that "[t]his bond act addresses the interests of both the environmentalists and the shipping industry by providing for alternatives to ocean dumping." *Assembly Committee Releases Corodemus Bill to Provide For Dredging and Economic Development*, ASSEMBLY REPUBLICAN NEWS, June, 21, 1996. The act allows "the state to fund recommendations by the Governor's Dredged Material Management Team to store contaminated spoils in sub-aqueous borrow pits in Newark Bay." *Id.*

Project Facilitation Task Force (Task Force).⁸³ Three public members were appointed by the Governor, three by the Senate President, and three by the Assembly Speaker.⁸⁴ Under this legislation, the Department of Commerce and Economic Development would develop an application process and a project list.⁸⁵ The Task Force would then have the ability to modify the list, at which time the Task Force would make its suggestions to the Legislature.⁸⁶ Another key component of the legislation requires the Task Force to approve or disapprove a project priority list within sixty days of its receipt.⁸⁷ It also authorizes the Office of Maritime Resources to include in its budget at least five million dollars for the development of decontamination projects.⁸⁸

In a report prepared by the New Jersey Office of Maritime Resources, the mission of the Task Force was to assist state agencies and the Legislature to identify dredging priorities, and to make the most efficient use of the funds available to solve the crisis.⁸⁹ Thus far, the Task Force has funded several dredging

⁸³ See S. 34, 207th Leg., 2nd Sess. (N.J. 1997). The Task Force is composed of the Commissioners of Environmental Protection, Commerce and Economic Development, the State Treasurer, and nine public members. *Id.*

⁸⁴ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Sept. 14, 1998). The current members of the Dredging Project Facilitation Task Force include: Jeff Michaels, Chairman of the Task Force, lobbyist; James Capo, New York Shipping Association; Albert Cernadas, International Longshoreman's Association; John J. Angelone, International Longshoreman Union; Ella Fillippone, Passaic River Coalition; Joan Verplanck, New Jersey Chamber of Commerce; Brian Maher, Maher Terminals; Steven Carnahan, Cape May Seafood Association; and Charles Wowkanech, New Jersey AFL-CIO. *See id.*

⁸⁵ See S. 34, 207th Leg., 2nd Sess. (N.J. 1997). The Department of Commerce and Economic Development would establish and administer an application process and develop a project priority list for submission to the task force. *Id.*

⁸⁶ See *id.* The Dredging Project Facilitation Task Force would "approve, disapprove or approve with modifications the project list submitted by the department. . . The task force would then submit, upon its approval, a project priority list to the Legislature for legislative review and consideration." *Id.*

⁸⁷ See *id.*

⁸⁸ See *id.*

⁸⁹ See NEW JERSEY MARITIME RESOURCES: DREDGING PROJECT FACILITATION TASK FORCE 2 (Undated). Specifically, the mission of the Dredging Project Facilitation Task Force was identified as follows:

[T]o assist appropriate State Agencies and the Legislature in establishing priorities for Dredging Projects in accordance with their economic benefit to the State, and their relative potential to

projects in Southern New Jersey and will be reviewing additional projects in the region of the Harbor in the next several months.⁹⁰ It will then make its recommendations to the Legislature.⁹¹

Assemblyman Corodemus introduced another bill on November 6, 1997, which appropriated \$65.1 million for "decontamination, upland disposal, and beneficial reuse projects."⁹² This bill was held in the Assembly Environment Committee due to opposition from the Office of the Governor.⁹³ If ever released, the bill will then move to the Assembly Appropriations Committee for a hearing.⁹⁴

At this time, Assemblyman Corodemus' bill is not expected to move as a result of the work already completed by the Task Force. The Task Force will ultimately make funding

bring about economic growth through enhanced Maritime Commerce. The Task Force will review recommendations and proposals for funding the development and construction of disposal, treatment, or processing facilities for dredged material, decontamination and treatment of dredged material, dredging of navigation channels in the Port District and dredging of navigation channels statewide. The Task Force will review the purpose, impact, cost and construction schedules and shall conduct its activities in order to insure that projects proceed as expeditiously and efficiently as possible. The Task Force... will strive to insure that consensus is reached on the most effective use of the available funds to insure the continuing viability of the State's recreation and tourism industries.

Id.

⁹⁰ See A-3255, 207 Leg., 2nd Sess. (N.J. 1997). This legislation, sponsored by Assemblyman Corodemus, provided funding for the following dredging projects in South Jersey: St. George's Thoroughfare (\$350,000); Forked River (\$700,000); Will's Hole Thoroughfare (\$950,000); and Spicer's Creek (\$500,000). *See id.*

⁹¹ *See id.*

⁹² A-3155, 207th Leg., 2nd Sess. (N.J. 1997). Upland disposal refers to disposal of waste on land rather than in the ocean. *See* Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). Beneficial reuse refers to the use of the dredged sediment for road-fill and construction projects. *See id.*

⁹³ *See* Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). The \$65.1 million was appropriated from the 1996 Dredging and Containment Facility Fund established pursuant to Section 18 of the Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Area Economic Development Bond Act of 1996. *See id.* The Assembly Environment Committee is chaired by Assemblyman Corodemus. *See id.*

⁹⁴ *See id.*

recommendations to the Legislature, which will then draft enabling legislation.⁹⁵ The funds earmarked for appropriation in the forthcoming bill, the projects identified by the task Force, and the ensuing appropriations from the Legislature for these projects, will all ensure that the Whitman Administration meets its goal of keeping the Harbor operational.⁹⁶

New York, while active in the dredging crisis through its involvement with the Port Authority, has not given the dredging issue as much attention as New Jersey.⁹⁷ For example, the New York State Legislature passed the Clean Air Bond Act of 1996.⁹⁸ Although this legislation is designed to clean up waterways, it specifies that no monies are to go to navigational dredging projects.⁹⁹

One possible reason that New York is reluctant to become fully involved is that it does not believe that the Port Authority will be unbiased when planning future infrastructure improvements to handle the projected increase of traffic in the Harbor.¹⁰⁰ Due to this mistrust, the New York City Economic Development Corporation hired a consultant for a \$1.5 million fee to evaluate potential deep-water shipping terminals in Staten Island and Brooklyn.¹⁰¹ Officials at the Port Authority have downplayed any differences, although the agency has initiated its own \$1.2 million evaluation study.¹⁰²

⁹⁵ See Telephone Interview with Josie DiRienzo, Senate Majority Office (Feb. 16, 1998).

⁹⁶ See *id.*

⁹⁷ See Telephone Interview with Eric Stern, Contaminated Sediment Program Manager, U.S. Environmental Protection Agency, Region 2 (Feb. 10, 1998).

⁹⁸ See Memo from NUI Environmental Group to Jack Galloway, Consultant (July 30, 1996) (on file with the author).

⁹⁹ See *id.*

¹⁰⁰ See Al Frank, *Dredging Program In Deep*, THE STAR-LEDGER (Newark, N. J.), Feb. 15, 1998, at B-3.

¹⁰¹ See *id.* Charles Millard, President, New York City Economic Development Corp., stated that:

The city has always felt it has not gotten a fair shake in getting enough activity to its side of the harbor in the last 30 years. . . The coming market is going to be huge and there will be enough for New Jersey and New York, but we think the people who can best protect the interests of New York are the people in New York.

Id.

¹⁰² See *id.* Chris Ward, director of port planning for the Port Authority, stated that

B. Federal Legislative Initiatives

As mentioned earlier, the federal government agreed to prohibit all dumping of contaminated, dredged sediment at the Mud Dump, effective September 1, 1997.¹⁰³ The federal government, through the Water Resources Development Act of 1996 (WRDA), funds various water management and dredging projects.¹⁰⁴ On July 26, 1996, Congressman Shuster, Chairman of the Committee on Transportation and Infrastructure, submitted a report to Congress that authorized the Secretary of the Army to undertake projects to improve the waterways of the United States.¹⁰⁵

The Water Resources Development Act of 1996, a complex appropriations bill, authorizes billions of dollars to be spent on various water management projects.¹⁰⁶ The funds available through the WRDA 1996 are important to maintain the nation's waterways.¹⁰⁷ The management of these vital pathways is too costly and complex to be handled solely by the private

"we've reached consensus with the city that there is so much cargo to go around, all our maritime facilities will be needed and more. Getting the right type to the right facility is the critical component of these studies." *Id.* While most of the shipping takes place in New Jersey, a Port Authority study shows that approximately 86,000 of the 166,000 jobs created by the Port are in New York. *See id.* These jobs are in industries such as banking, government, insurance and freight forwarding. *See id.*

¹⁰³ *See Saving New York Harbor*, N.Y. TIMES, Oct. 6, 1996, at A-24. The "agreement announced by Vice President Gore allowed 4.8 million of the 6.8 million cubic yards dredged last year to go" to the Mud Dump, but the current deposit of sediment at the Mud Dump depends on "levels of chemical contamination found in the area of the particular project." Al Frank, *Dredging Program in Deep*, THE STAR-LEDGER (Newark, N. J.), Feb. 15, 1998, at B-3.

¹⁰⁴ *See* H.R. REP. NO. 104-695, at 1 (1996). Currently, Pennsylvania Congressman Bud Shuster (R-9) is chairman of the Committee on Transportation and Infrastructure, the committee that dealt with the initial WRDA authorization bill (H.R. 3592). *See id.*

¹⁰⁵ *See id.* This report makes amendments to WRDA 1996, which itself is an update of WRDA 1992. Specifically, the language states that the Secretary of the Army is authorized to "construct various projects for improvements to rivers and harbors of the United States. . . ." *Id.*

¹⁰⁶ *See id.* Various sections of the report are applicable to dredging and water management projects in the Harbor region, including Title II, § 201, § 205, § 207, and § 214. *See id.*

¹⁰⁷ *See* Telephone Interview with Eric Stern, Contaminated Sediment Program Manager, U.S. Environmental Protection Agency, Region 2 (Feb. 10, 1998).

sector.¹⁰⁸ More specific to the Harbor region, Title IV, Section 435 of WRDA 1996 calls for a study of navigational needs, including improvements necessary to meet the current and anticipated needs of the Port.¹⁰⁹ Matching funds available from the Federal Government are of primary interest to New Jersey.¹¹⁰ In general, approximately sixty-five percent of the costs of dredging shipping channels in the Harbor are paid by the USACE, while thirty-five percent are paid by the appropriate state.¹¹¹ In addition to the money from The Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Area Economic Development Bond Act of 1996, the Port Authority pledged to spend \$130 million on port dredging and sediment disposal.¹¹² In 1997, the Federal Government spent \$90 million to dredge approximately six million yards of sediment from shipping channels.¹¹³

The USACE must now decide how deep to dredge shipping channels in the Harbor in order to accommodate the next generation of large cargo ships.¹¹⁴ The deepening project is scheduled to begin in the Fall of 1998.¹¹⁵ It is expected that eight miles of shipping channels will be dredged to a depth of forty-five feet.¹¹⁶ The only obstacle to completion of the project

¹⁰⁸ See *id.*

¹⁰⁹ See H.R. REP. NO. 104-695, at § 435 (1996). WRDA 1996 provides for a comprehensive study of navigation needs at the Port of New York-New Jersey (including the South Brooklyn Marine and Red Hook Container Terminals, Staten Island, and adjacent areas) to address improvements, including deepening of existing channels to depths of 50 feet or greater, that are required to provide economically efficient and environmentally sound navigation to meet current and future requirements. *Id.*

¹¹⁰ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

¹¹¹ See Telephone Interview with Doug Tansey, Legislative Assistant, Office of Congressman Bob Franks (Feb. 4, 1998). The funds used by the USACE come from the Harbor Maintenance Trust Fund, which was established by the WRDA legislation. See *id.*

¹¹² See GOVERNOR WHITMAN SIGNS DREDGING BOND ACT, *supra* note 76, at 3.

¹¹³ See Al Frank, *Dredging Program in Deep*, THE STAR-LEDGER (Newark, N. J.), Feb. 15, 1998, at B-1.

¹¹⁴ See *id.* See also *supra* note 6.

¹¹⁵ See *id.*

¹¹⁶ See *id.* The work "is expected to take six years and cost" approximately \$850 million. *Id.* This project was approved in the early 1980's, but in an effort to save

is funding.¹¹⁷

While the federal government and New Jersey are actively involved in finding a solution to the dredging issue, both governments recognize that the private sector will also play a role in solving the dredging crisis, particularly in the Harbor region.¹¹⁸ The Office of Maritime Resources has issued a Request for Proposal (RFP) to vendors in the private sector for advanced sediment treatment technologies.¹¹⁹ It will also issue a RFP to establish a permanent sediment processing facility where advanced decontamination technology will be implemented.¹²⁰

C. Private Sector Initiatives

At this time, there are several private sector pilot projects that are utilizing dredged sediment.¹²¹ One project, located in Elizabeth, New Jersey, is referred to as the Orion site and involves using dredged material as landfill. The landfill site is planned to accommodate a parking lot for a nearby mall.¹²²

money the Port Authority decided to dredge only to a depth of 40 feet, necessitating a second dredge deepening project. *See id.* The initial project began in 1987 and was completed in 1995. *See id.* It cost \$256.7 million to complete. *See id.* Because the Port Authority initially delayed dredging to the deeper depths, the USACE had to determine that the benefits of dredging to 45 feet would still outweigh the cost. *See id.* A study completed in October 1997 indicated that the project was cost beneficial. *See id.* at 3-3.

¹¹⁷ *See id.* at B-3. Congressman Robert Menendez stated that a sales pitch would have to be made to the House Appropriations Committee, since the "Clinton administration's budget plan included only \$10 million of the \$32 million required." *Id.* Because the Mud Dump was closed to all sediment but Category One, the costs of disposal have dramatically increased. *See id.* In the past decade, costs to dispose sediment at the Mud Dump ranged from \$5 to \$7 per cubic yard. *See id.* Currently, the cost is between \$47 and \$52 per cubic yard. *See id.* As a result of this increase, the Port Authority's "annual operating and maintenance budget has tripled to \$96 million." *Id.*

¹¹⁸ *See* Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

¹¹⁹ *See id.*

¹²⁰ *See id.*

¹²¹ *See* Telephone Interview with Vahan Tanal, Vice President, Parsons Brinckerhoff (Jan. 12, 1998). *See also* Al Frank, *Jersey Finds A Place To Park Dredging Spoil*, THE STAR-LEDGER (Newark, N.J.), June 16, 1996, at 39.

¹²² *See* Telephone Interview with Vahan Tanal, Vice President, Parsons Brinckerhoff (Jan. 12, 1998). Concerning the project in Elizabeth, New Jersey,

Initially, there were problems moving the dredged material to the actual site, but at this time, the project is moving forward.¹²³

A second project involved shipping dredged material to Carbon County, Pennsylvania, where it was mixed with an additive and placed in mine shafts.¹²⁴ It is hoped that the dredged material will solidify and prevent water from passing through the shafts into the aquifer system in the surrounding area.¹²⁵ This project has been completed with the support of both the New Jersey and Pennsylvania Departments of Environmental Protection.¹²⁶ Private companies were involved at various stages of the project and proved to be more efficient than the public sector.¹²⁷ However, it remains to be seen whether the dredged material will solidify enough to prevent "leaching" in the future.¹²⁸

A third project is being implemented by NUI Environmental Group (NUIEG), a subsidiary of NUI

Governor Whitman announced "a state permit to allow chemically tainted mud to be used as fill for a shopping center parking lot." Al Frank, *Jersey Finds A Place To Park Dredging Spoil*, THE STAR-LEDGER (Newark, N. J.), June 16, 1996, at 39. The "permit could eventually allow as much as 150,000 cubic yards of mud. . .to support the parking lot of the 166 acre MetroMall under construction just south of the port complex in Elizabeth." *Id.* Carl Golden, Governor Whitman's spokesman at the time, stated that "[t]here is no question this is a major step forward in seeing to it that the viability of the whole port area is maintained." *Id.*

¹²³ See Telephone Interview with Vahan Tanal, Vice President, Parsons Brinckerhoff (Jan. 12, 1998). Part of the problem was that the sediment was becoming clogged in the pipes due to debris from the Harbor when it was transferred to the area where it was to undergo drying. See *id.*

¹²⁴ See Robert C. Shinn and Frank M. McDonough, *Many Ways Developed To Dispose Dredge Spoils*, THE ASBURY PARK PRESS, Oct. 24, 1997, at A-30.

¹²⁵ See Erin Dixon, *Landmark Project Under Way*, COURIER EXPRESS (Penfield, PA), May 25, 1997, at 1. See also Robert C. Shinn and Frank M. McDonough, *Many Ways Developed To Dispose Dredge Spoils*, THE ASBURY PARK PRESS, Oct. 24, 1997, at A-30.

¹²⁶ See Robert C. Shinn and Frank M. McDonough, *Many Ways Developed To Dispose Dredge Spoils*, THE ASBURY PARK PRESS, Oct. 24, 1997 at A-30. See also Susan Q. Stranahan, *River Silt May Go To Pa. Mines*, PHILADELPHIA INQUIRER, Mar. 4, 1997, at R-4.

¹²⁷ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998).

¹²⁸ See *id.* See also Erin Dixon, *Landmark Project Under Way*, COURIER EXPRESS (Penfield, PA), May 25, 1997, at 1. Leaching is the process of water seeping into the aquifer system. See Telephone Interview with Vahan Tanal, Vice President, Parsons Brinckerhoff (Jan. 12, 1998).

Corporation.¹²⁹ NUIEG is in the process of developing a permanent transfer, processing, and decontamination facility in Elizabeth, New Jersey.¹³⁰ It is envisioned that the majority of dredged material from the Harbor will move through this facility in order to prepare it for beneficial reuse.¹³¹ NUIEG anticipates competition from other companies who wish to develop a similar facility.¹³²

NUIEG is creating a partnership with local, county, and state governments, and the Port Authority in order to ensure that the facility will be created and utilized.¹³³ It signed a Memorandum of Understanding with Brookhaven National Laboratories to work together to identify viable decontamination technologies.¹³⁴ This year, the Conference Report on H.R. 2158, Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1998, appropriated three million dollars for the continuation of the dredge decontamination project in New York and New Jersey.¹³⁵ The conferees also directed the EPA Administrator to consider funding the NUIEG's proposal for a large-scale demonstration pilot project in conjunction with the decontamination technology research being done at Brookhaven National Laboratory.¹³⁶

NUIEG is the only private company mentioned in the report for purposes of appropriating funds in public/private

¹²⁹ See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998). NUI Corporation, a full services energy company, is based in Bedminster, N.J.

¹³⁰ See *id.*

¹³¹ See Interview with Daniel J. Edwards, Vice President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹³² See *id.*

¹³³ See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹³⁴ See Interview with Daniel J. Edwards, Vice President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998). Brookhaven National Laboratories is funded by WRDA 1996 through the United States Environmental Protection Agency (USEPA). See *id.*

¹³⁵ H.R. CONF. REP. NO. 105-297, at H8353 (1997).

¹³⁶ See *id.* Specifically, the conferees directed "the EPA Administrator to consider for funding the NUI proposal for a large-scale demonstration pilot project in correlation with the dredging contamination technology effort currently underway at Brookhaven National Laboratory." *Id.*

partnership arrangements.¹³⁷ The financial resources available to the State of New Jersey and WRDA 1996 from the federal government will help ensure that the project is completed.¹³⁸ When completed, it is expected that the NUIEG project will be the model of a successful public/private partnership in the decontamination of sediment.¹³⁹

IV. Importance to the Shipping Industry

Two of the largest shipping companies are considering leaving the Port.¹⁴⁰ Maersk Terminals is becoming increasingly frustrated with the delays affecting the dredging program.¹⁴¹ Contract re-negotiations between Maersk and the Port have just started, but it is reported that Maersk has grown impatient with the delays that have effected dredging projects in the Harbor region.¹⁴² Many of Maersk's ships need more than forty feet of depth for optimal loading; otherwise the ship must off-load part of its cargo at a competing port.¹⁴³

Although deepening of the Harbor is scheduled to begin in the autumn of 1998, it is estimated that it will take six years to complete.¹⁴⁴ The Office of Maritime Resources predicts that dredging the channels to depths of fifty feet will be well underway by the year 2001.¹⁴⁵ However, the USACE predicts an even longer construction period.¹⁴⁶ Maersk is reportedly

¹³⁷ See Interview with Daniel J. Edwards, Vice President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹³⁸ See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹³⁹ See *id.*

¹⁴⁰ See Memo from Roy Blanchard, Consultant, to Daniel J. Edwards, Vice President, NUI Environmental Group (Feb. 20, 1998) (This memo is on file with the author). The memo is based on an article by Peter Tirschwell in the JOURNAL OF COMMERCE, Feb. 17, 1998.

¹⁴¹ See *id.*

¹⁴² See *id.*

¹⁴³ See *id.*

¹⁴⁴ See *id.*

¹⁴⁵ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Sept. 14, 1998).

¹⁴⁶ See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

considering alternative arrangements as a result of these predictions.¹⁴⁷ Among the alternatives being considered include using the ports of Halifax, Nova Scotia; Norfolk, Virginia; and perhaps a port in Rhode Island.¹⁴⁸ Maersk brought a new 6,000 twenty-foot equivalent unit containership, one of the largest in the world, into New York and other East Coast ports in the summer of 1998. This was done to demonstrate that there was a new class of cargo ships that will need access to deep-water ports.¹⁴⁹

The second company, Sea-Land, is the Port's largest user.¹⁵⁰ It accounted for fifteen percent of the 1.7 million twenty foot equivalent units that moved through the Port last year.¹⁵¹ Sea-Land's lease expires in February 1999, and company officials have intimated that they may leave the Harbor and serve the region through rail connections, trucks, and smaller ships if steps are not taken to solve the dredging crisis.¹⁵²

If nothing is done, it is likely that the shipping companies will no longer use the Port.¹⁵³ The loss of Sea-Land and Maersk would be economically devastating to the region, as these companies were responsible for 24.5% of the Port's shipping activity in 1997.¹⁵⁴

V. Analysis and Conclusion

The need to dredge the nearly 430 miles of channels and berths in the New York/New Jersey Harbor is among the most important issues that local, state, and federal policy makers must address in order to avert a crisis. Substantial economic activity is at risk of being lost if a solution to the dredging and disposal of dredged sediment is not found.¹⁵⁵ As previously

¹⁴⁷ See Memo from Roy Blanchard, *supra* note 140.

¹⁴⁸ See Memo from Roy Blanchard, *supra* note 140.

¹⁴⁹ See Memo from Roy Blanchard, *supra* note 140. See also *supra* note 6.

¹⁵⁰ See Memo from Roy Blanchard, *supra* note 140.

¹⁵¹ See Memo from Roy Blanchard, *supra* note 140.

¹⁵² See Interview with Daniel J. Edwards, Vice President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹⁵³ See *id.*

¹⁵⁴ See Memo from Roy Blanchard, *supra* note 140.

¹⁵⁵ See generally N. J. DEP'T. OF COMMERCE AND ECON. DEV., *supra* note 1, at 5.

discussed, approximately twenty billion dollars in economic activity and nearly 165,500 jobs are at risk of being lost if a viable solution to the dredging issue is not found.¹⁵⁶

The public sector does not have the technological advantages available to the private sector.¹⁵⁷ At the same time, the private sector does not have the financial resources or incentive to invest several million dollars in a project that the public sector will not support.¹⁵⁸ Only through the development of public/private partnerships will a viable, cost-efficient solution for the treatment and disposal of contaminated dredged sediment be developed and implemented.¹⁵⁹

The need to dredge the shipping channels of the Harbor will always exist due to the natural process of sediment accumulation.¹⁶⁰ Policy makers must recognize this fact and commit financial resources to maintaining the shipping channels at the required depth by adopting a policy of maintenance dredging.¹⁶¹ However, maintenance dredging is not the true challenge. The disposal of contaminated, dredged material poses the most significant challenge to maintaining the economic vitality of the region.¹⁶²

Because there will always be a need to dredge the Harbor, policy makers must be careful not to focus solely on short-term solutions. An analogy may be illustrative at this point: why take out a home improvement loan and use the money to pay someone to cut your grass? The logical course of action would be to use the loan to create something that will add value to the home, such as a room addition. With regard to dredging, why

¹⁵⁶ See *id.*

¹⁵⁷ See Telephone Interview with Jennifer DiLorenzo, Office of Maritime Resources (Feb. 3, 1998). The Office of Maritime Resources has issued a RFP to vendors in the private sector for advanced sediment treatment technologies. See *id.*

¹⁵⁸ See Interview with Michael J. Behan, President, NUI Environmental Group, in Union, N.J. (Mar. 4, 1998).

¹⁵⁹ See *id.*

¹⁶⁰ See Andrew C. Revkin, *Harbor To Be Dredged, but Much Tainted Mud Lacks Home*, N.Y. TIMES, May 12, 1997, at B-1.

¹⁶¹ See Al Frank, *Burying the Mud Dump Doesn't Shroud Controversy*, THE STAR-LEDGER (Newark, N.J.), Aug. 29, 1998, at 35.

¹⁶² See Al Frank, *Dredging Program in Deep*, THE STAR-LEDGER (Newark, N.J.), Feb. 15, 1998, at section B-3.

spend all the money from the Port of New Jersey Revitalization, Dredging, Environmental Cleanup, Lake Restoration, and Delaware Bay Area Economic Development Bond Act of 1996 on short-term dredging projects, when the very same shipping channels will need to be dredged in the near future? It seems more logical to put some money toward creating a permanent infrastructure that will provide a return on the investment made by the citizens of New Jersey through their approval of the bond act.

The citizens of New Jersey would be better served if policy makers in the public and private sectors took a long-term approach toward finding a solution to the issue. While both an immediate and short-term approach is necessary, the development of a long-term strategy to address the future dredging needs of the Harbor cannot be overemphasized. It would be sound public policy to allocate some funds appropriated for dredging to create permanent treatment, processing, and decontamination facilities. Such a policy will ensure that future maintenance dredging, treatment, and disposal of the sediment will be done on a regular, cost-effective basis. By investing in a permanent solution, a message will be sent to the shipping companies that use the Port that it will continue to be a world class facility.

Finally, to permanently solve the dredging issue, an effort should be made to eliminate the contaminants at the source before they are dumped into rivers and waterways. Although the natural process of silt accumulation in the Harbor will still occur, the sediment will not be polluted. This would eliminate the need to find ways to process, treat, and dispose contaminated, dredged sediment. Realistically, however, it is unlikely that it will ever be possible to totally eliminate the discharge of contaminants into New Jersey's waterways. Even if it were possible, some rivers are so polluted that it will take years for the sediment in the river bed to wash into the Harbor, thereby necessitating the continuous need for the treatment and processing of contaminated, dredged sediment.