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THE DREDGING CRISIS IN NEW YORK HARBOR: PRESENT AND FUTURE PROBLEMS, PRESENT AND FUTURE SOLUTIONS

*Gerard C. Keegan, Jr.**

INTRODUCTION

It is a beautiful day in Bay Ridge, Brooklyn. The earth, awake from its long winter's nap, yields forth its green, fresh, growing scent unique to spring. The brilliant sun reflects the bright reds and yellows of kites flying high on the warm breeze. Below, the people laugh and chase kites, or simply lie in the sun. The nearby Belt Parkway, with its steady stream of cars heading eastward, seems a distant memory. People come to this small strip of grass, not even a park, to gaze at the water, or even to awe at the sheer size of the Verrazano Narrows Bridge, looming headily above them. But if they wait, they will be rewarded with an ordinary, and yet somehow still spectacular sight - a supertanker headed up the Verrazano Narrows.

What most people do not realize is the danger waiting just under the bridge for these huge ships. This danger is a result of the difficulties New York and New Jersey encounter dredging the waterways leading to their common port in Elizabeth, New Jersey. This port is accessible under the Verrazano Bridge and through the winding, often treacherous passage known as the Kill Van Kull. The port is naturally only 18 feet deep.[1] However, modern tankers require roughly 50-foot depths to safely navigate a port.

As a consequence, many carriers have stopped sending their ships to New York. For the second year in a row, New York's share of the North Atlantic cargo market dropped, from 36.2% in 1994 to 35.5% in 1995, with total products, including those shipped in bulk, declining 3.5% to 44.9 million tons.[2]

To attract and keep modern tanker business, the Elizabeth

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1. *See* Faye Brookman, *New York Remains Port of Crawl Despite Moves to Boost Cargo*, CRAINS N.Y. BUS., June 3, 1996, at 20.

2. *See id.*

port needs to be dredged every 2-3 years.[3] This dredging process has stalled recently because the dredged spoils are toxic, and controversy surrounds their disposal. As politicians and government agencies shuffle their feet, the New York area suffers, losing business daily to deeper ports such as Norfolk, Baltimore and Halifax.[4]

The dredging crisis in New York Harbor has attracted both local and national attention of late. President Clinton convened the Interagency Working Group on the Dredging Process in 1993,[5] and proposed his own solution to the dredging problem in late 1996.[6] In addition, local politicians, such as New York Governor George A. Pataki, New Jersey Governor Christine Todd Whitman[7] and New York Congressman Jerrold Nadler[8] have all proposed their own solutions to the dredging problem in New York Harbor.

Part I of this Note will examine the environmental issues related to dredging in New York Harbor. Part II will explore the regulatory and political framework surrounding harbor dredging. Part III will examine and evaluate the three federal and state plans that purport to solve the New York Harbor's dredging problem in light of the Interagency Working Group's recommendations. This Note concludes that a renovation of the now dormant Brooklyn Harbor would best address and solve the environmental and economic aspects of the dredging problem in New York Harbor.

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3. *See* Tirza S. Wahrman, *To Dredge or Not to Dredge: Navigating the Shoals of Single-Medium Analysis in the Disposal of Contaminated Sediment*, 28 URB. LAW. 173, 181 (1996).

4. *See* Brookman, *supra* note 1, at 28.

5. *See Report to the Secretary of Transportation by the Interagency Working Group on the Dredging Process, The Dredging Process in the United States: An Action Plan for Improvement* i (Dec. 1994) [hereinafter *Dredging Process Action Plan*].

6. *See infra* part III.A; *see also* Katherine H. Stimmel, *Water Pollution: Region II announces Start of Formal Effort for Closing Mud Dump Site Off New York*, DAILY ENV'T REP. (BNA) (Sept. 12, 1996).

7. *See infra* part III.B. (discussing the Governors' joint plan for the harbor).

8. *See infra* Part III.C. (discussing Congressman Nadler's Plan for the harbor).

I. THE ENVIRONMENTAL ISSUES CURRENTLY AT PLAY IN NEW YORK HARBOR

New York Harbor's declining share of the cargo market is primarily attributable to dredging problems. Dredging is the process whereby sediment is removed from the floor of waterways.[9] This creates a deeper waterway, allowing larger ships that require deeper "drafts" or depths to safely navigate the river or harbor. Many ports rely on dredging to maintain their commercial viability to larger tanker and cargo ships.[10] For the Port of New York, dredging and ocean disposal of dredged spoils have been characterized as "crucial to operational survival."[11] This section will first explore the toxic content of these dredged spoils and the environmental impact of their ocean disposal. Additionally, it will outline the environmental costs of not dredging, and will examine the possibility of environmentally satisfying solutions.

A. *The Toxicity of New York Harbor's Dredged Materials*

Spoils from harbor and river dredging are most frequently disposed of in the ocean.[12] The volume of dredged material that is dumped in any year depends upon a variety of factors. During years of high storm activity when harbor and channel sediments increase, larger volumes of material are ocean-dumped than in drier years.[13] Nevertheless, dredged spoils are the wastes most frequently dumped in the oceans off the coast of the United States,

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9. *See generally*, Robert L. O'Halloran, *Comment, Ocean Dumping: Progress Toward a Rational Policy of Dredged Waste Disposal*, 12 ENVTL. L. 745, 752 (1982).

10. *See id.*

11. *Id.* (citing *Reauthorization of the Marine Protection, Research, and Sanctuaries Act: Hearings Before the Subcomm. On Oceanography and the Subcomm. On Fisheries and Wildlife Conservation and the Environment of the House Comm. On Merchant Marine and Fisheries*, 97th Cong. 388 (1982) (statement of Col. Herbert Haar)).

12. *See* Allan Bakalian, *Regulation and Control of United States Ocean Dumping: A Decade of Progress, an Appraisal for the Future*, 8 HARV. ENVTL. L. REV. 193, 204 (1984).

13. *See id.* (noting that 98.7 million cubic yards of dredged materials were ocean dumped in 1974, corresponding with unusual storm activity in the Mississippi River drainage area in 1973).

accounting for nearly 80% (by weight) of all materials dumped in the oceans.[14] These dredged spoils contain alluvial sand, silt, clay, and municipal or industrial waste sludge.[15]

Much of these dredged materials are harvested from river and harbor areas contaminated with a variety of toxic chemicals. In 1968, the Army Corps of Engineers estimated that 34% (13 million tons) of dredged material was "polluted."[16] These contaminants typically include heavy metals, synthetic organics ("PCB"), pesticides, nutrients and pathogens, and oil and grease.[17] Many of these contaminants have as their origin chemicals and other toxic substances from upriver sources that become concentrated in the bottom sediments.[18] This is especially true in the New York Harbor region. Recent analysis of dredged samples at four locations detected fifteen different polynuclear aromatic hydrogen compounds, significant amounts of PCBs and several types of chlorinated hydrocarbon pesticides.[19]

These and other bioaccumulating[20] pollutants have been linked with cancerous diseases in fish and shellfish, as well as with large-scale die-offs of dolphins and seals.[21] Additionally, they have been linked with cancer and other diseases in humans.[22] For example, at least 1,655 individuals in Japan became ill with Yusho Disease caused by eating rice oil contaminated by PCBs. Symptoms of the disease included, among others, severe

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14. *See* O'Halloran, *supra* note 9 at 753 (citing *U.S. Council on Environmental Quality, Ocean Dumping: A National Policy*, 12-18, 3 (1970)).

15. *See id.* at 752 (citing *Hearings on S. 1067 Before the Subcomm. on Oceans and Atmosphere of the Comm. on Commerce*, 93d Cong. 36-37, 349 (1973)).

16. *See* Bakalian, *supra* note 12, at 205 (citing *U.S. Council on Environmental Quality, Ocean Dumping: A National Policy*, at 12-18, 3 (1970)).

17. *See id.*

18. *See id.* at 206.

19. *See id.*

20. *See infra* notes 33-36 and accompanying text (defining bioaccumulation).

21. *See* Richard L. Williamson, *Gathering Danger: The Urgent Need to Regulate Toxic Substances That Can Bioaccumulate*, 20 ECOLOGY L.Q., 605, 616 (1993).

22. *See id.* at 622-23.

chloracne and liver disease.[23]

Unlike other sources of pollution, the environmental effects from the dumping of dredged materials may not produce visible effects such as oil slicks or floating debris.[24] Yet the impact is as serious. Even non-toxic dredged spoils can degrade the environment. The disposed material buries marine organisms, increases levels of suspended sediments, and causes the accretion of disposed materials.[25] Non-toxic organic sediments may also seriously deplete the level of oxygen available for the decomposition of organic wastes in a given area of water.[26] This accretion of waste loads means that much less oxygen is available for marine organisms.[27] This may cause the death of these organisms, altering the diversity of marine life.[28] If the accretion of organic materials is significant enough, the lack of oxygen in an area may persist long after dumping has stopped.[29] Organic wastes are also dangerous as they may contain human pathogens such as hepatitis and polio virus.[30] Such pathogens may be concentrated in marine organisms and passed to humans through the consumption of shellfish[31] or through swimming in an affected body of water.[32]

Toxic dredged spoils have an even greater impact on the environment when disposed at sea. Toxic substances can concentrate in phytoplankton, which ingest contaminated nutrients, and in

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23. *See id.* at 624.

24. *See* O'Halloran, *supra* note 9, at 750.

25. *See* Bakalian, *supra* note 12, at 205 (citing *National Oceanic & Atmospheric Admin., National Marine Pollution Program Plan 1981-1985*, at 21).

26. *See id.* (citing *National Oceanic & Atmospheric Admin., National Marine Pollution Program Plan 1981-1985*, at 21).

27. *See* John A. Guarascio, *The Regulation of Ocean Dumping After* City of New York v. Environmental Protection Agency, 12 B.C. ENVTL. AFF. L. REV. 701, 705 (1985) (citing *Council on Environmental Quality, Report to the President, Ocean Dumping: A National Policy*, at 14 (1970)).

28. *See id.*

29. *See id.*

30. *See id.*

31. *See id.* (citing *National Advisory Comm. on Oceans and Atmosphere, the Role of the Ocean in a Waste Management Strategy*, at 56 (1981)).

32. *See id.*

higher marine organisms, which pass contaminated water through their gills.[33] Predators that feed on these organisms cause bioaccumulation, the increasing magnification of tissue toxin concentrations in organisms at successive levels of the food chain.[34] Accumulation of toxins in fish tissue can lead to reduced fish populations in areas contiguous to dump sites and threaten the health of humans who eat contaminated fish.[35] This became particularly apparent in the New York/New Jersey coastal area when numerous beach closings and dolphin deaths sparked controversy in 1987.[36]

Toxic dredged spoils may also cause biostimulation and acute pH imbalances.[37] Biostimulation is the accelerated growth of algae and associated plant life.[38] This occurs when the disposed materials are rich in nutrients such as nitrates and phosphates.[39] Accelerated growth may disrupt bottom-dwelling organisms by depleting oxygen in the surrounding waters.[40] Some species of plankton that grow well in the presence of excess nutrients are toxic to both marine and human populations.[41] Acute acid-base (pH) imbalances produced in the water by dumping highly acidic or alkaline materials can also lead to increased mortality of marine organisms.[42]

Often, physical changes stem from the immediate impact of the dumped mass upon the sea.[43] These changes may cause the

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33. *See* Steven J. Moore, *Troubles in the High Seas: A New Era in the Regulation of U.S. Ocean Dumping*, 22 ENVTL. L. 913, 921 (1992) (citing *National Advisory Comm. on Oceans and Atmosphere, The Role of the Ocean in a Waste Management Strategy*, at 67 (1981)).

34. *See* O'Halloran, *supra* note 9, at 750 n.31.

35. *See* John W. Kindt, *Solid Wastes and Marine Pollution*, 34 CATH. U. L. REV. 37, 42-43 (1984).

36. *See* Moore, *supra* note 33, at 913.

37. *See id.* at 921.

38. *See* O'Halloran, *supra* note 9, at 751 n.40.

39. *See* Moore, *supra* note 33, at 922.

40. *See* O'Halloran, *supra* note 9, at 751 n.40.

41. *See* Kindt, *supra* note 35, at 46 (stating that when toxic plankton bioaccumulate in shellfish, they pose a health risk to humans who consume the shellfish).

42. *See* Moore, *supra* note 33, at 922.

43. *See id.* at 923.

obliteration of certain life forms, or ecological imbalance by increasing the vitality of otherwise "minor" life forms.[44] Although most fish leave the area, and the impact is usually restricted to the dumpsite itself,[45] large-scale dumping may so alter the habitat that fisheries and coral reef ecosystems are lost.[46] Suspended solids in the water column cause death in marine organisms through direct ingestion, gill clogging, or through reduced light penetration which inhibits photosynthesis - thereby reducing available food.[47]

Even sublethal levels of dredged wastes can cause real damage to the marine ecosystem. Marine life exposed to pesticides and heavy metal contaminants can experience sensory impairment and reduction in reproductive capacity.[48] Toxic and irritant substances can hamper chemo-receptor mechanisms, reduce resistance to infection and stress, and interfere with respiratory and filtering organs.[49]

B. *The Environmental Costs of Not Dredging*

Of all the environmentally problematic aspects of dredging, perhaps the most frustrating is that land-based sites around urban areas for disposal of dredged material are either scarce or not available.[50] So why not stop dredging and phase out the New York Port completely? In short, an undredged or non-viable port in the New York area would have as serious an impact on the environment as that of the ocean disposal of dredged material.

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44. *See id.* (referring to organisms such as bacteria).

45. *See id.* (citing *Office of Technology Assessment, U.S. Congress, Wastes in the Marine Environment* 73, 245 (1987)).

46. *See id.* (citing the dumping near Naraganset Bay in 1969 and 1970 as destroying a fishery and a similar dumpsite off the coast of southern Florida that suffocated, killing a coral reef).

47. *See* O'Halloran, *supra* note 9, at 751 n.37.

48. *See* William L. Lahey, *Ocean Dumping of Sewage Sludge: The Tide Turns from Protection to Management*, 6 HARV. ENVTL. L. REV. 395, 399 (1982).

49. *See* O'Halloran, *supra* note 9, at 751 n.37.

50. *See* Wahrman, *supra* note 3, at 176 (citing *U.S. Army Corps of Engineers, Managing Dredged Material*, 21 (1989)).

The most readily apparent aspect of this impact would be increased road traffic. Roughly 75% of goods that arrive by ship remain in the New York/New Jersey area.[51] Unusable ports then, would have an impact on roads, traffic conditions, and air quality. Delays in dredging can substantially increase the volume of heavy- duty trucks on urban highways carrying goods from distant ports.[52] This increased truck volume would have a serious impact on regional air quality.

The Clean Air Act[53]("CAA") is the federal legislation which requires EPA to identify toxic pollutants which "may reasonably be anticipated to endanger public health and welfare" and to issue appropriate standards for specific source emissions and general air quality criteria.[54] The Current National Ambient Air Quality Standards ("NAAQS") for ozone promulgated under CAA specify that the maximum hourly average ozone concentration should not exceed .12 parts per million (ppm) more than once a year.[55]

This standard is regularly exceeded in the New York/New Jersey metropolitan area.[56] The 1990 amendments to CAA characterized the New York/New Jersey metropolitan area as being a "high severe zone" for ozone.[57] It found that the baseline "ozone

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51. *See id.* at 177 (citing *Technical Memorandum, Regional Consumer Prices and the Port of New York and New Jersey, Port Authority of New York and New Jersey, Office of Economic & Policy Analysis, Economic Impacts Division*, at 3 (Apr. 24, 1995)).

52. *See* Wahrman, *supra* note 3, at 177.

53. 42 U.S.C. §§ 7401-7671 (1994).

54. National Ambient Air Quality Standards for Ozone; Proposed Decision, 57 Fed. Reg. 35, 542 (1992)(codified at 40 C.F.R. § 50.9 (1995)); *see also* Wahrman, *supra* note 3, at 191.

55. National Ambient Air Quality Standards for Ozone; Proposed Decision, 57 Fed. Reg. 35, 542 (1992)(codified at 40 C.F.R. § 50.9 (1995)).

56. *See* Final Rule on Ozone Transport Commission; Low Emission Vehicle Program for the Northeast Ozone Transport Region, 60 Fed. Reg. 4712 (1995) (codified at 40 C.F.R. pts. 51, 52, & 85); *see also* Wahrman, *supra* note 3, at 191.

57. The official categorization of the New York/New Jersey high severe zone ozone levels is "Severe II." 42 U.S.C. § 7511(a)(1) (1994)(categorizing the various levels of nonattainment according to the guidelines promulgated under the statute. Above the baseline, regions may be classified as marginal areas, moderate areas, serious areas,

design volume" for the region was .201 ppm, almost 100% above the NAAQS standards.[58]

New York's dredging problems may result in a greater decline in the region's air quality. The Port Authority, considering parameters of 30-foot undredged harbor depths and 1994 diverted container volumes, estimates that returning redirected imports to the local region and back-hauled exports would result in an additional 55.4 million truck miles within New Jersey and the locally-served regions of the metropolitan area.[59] The volume of traffic attributed to diverted cargo would account for the equivalent of 1.23% of New Jersey's total truck miles on interstate highways, freeways and expressways for 1993.[60] This may seem like a minimal impact, however CAA has mandated that portions of states in severe non-attainment for ground-level ozone, like the New York/New Jersey area, must reduce their emissions by 3% per year.[61] Thus, if New York gradually phased out the port, or even continued to delay dredging, CAA would be violated.

Finally, the National Environmental Policy Act of 1969[62] ("NEPA"), to which EPA and the Army Corps is subject,[63] requires all federal agencies to prepare a detailed environmental impact statement ("EIS") when undertaking actions and pro-

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severe areas or extreme areas); *see also* Wahrman, *supra* note 3, at 191.

58. *See* 2 U.S.C. § 7511(a)(1) (1994)(promulgating National Ambient Air Quality Standards for Ozone); *see also* Wahrman, *supra* note 3, at 191.

59. *See* Wahrman, *supra* note 3, at 194.

60. *See id.* (citing Louis Berger & Associates, New York-New Jersey Harbor Dredging Scenario Study, Draft Report, Nov. 1995)).

61. *See id.*

62. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4361 (1994); *see also* Wahrman, *supra* note 3, at 195 (describing NEPA as designed to make federal agencies aware of the negative impact of their decisions on the environment).

63. *See* O'Halloran, *supra* note 9 at 769 n.135 (citing the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4361 (1994) and explaining that while the EPA has immunity from the NEPA in all but voluntary compliance under 33 U.S.C. § 1371 (1994), the Corps has been recognized as having no such immunity).

grams that effect "the quality of the human environment."[64] Ceasing dredging operations in the New York Harbor would necessitate the preparation of an EIS by EPA and the Army Corps. Considering the impact that the lack of a useable port would have on air quality and the marine environment, it is unlikely that the EIS could justify such action. Simply put, no port is no solution to New York's dredging problem.

C. *Environmentally Satisfying Solutions*

The New York Harbor region is in the "severe non-attainment" zone for ozone,[65] and also has toxic sediment concentration levels that place it in the top 20 of 175 coastal and estuary sites for heavy metals, pesticides and PCBs.[66] Thus, just as closing the harbor cannot be a solution, continuing to dump dredged spoils in the ocean is similarly untenable.[67]

In recognition of this quandary, EPA recently created the Office of Multi-Media Enforcement.[68] The multi-media method of waste management is premised on the idea that once waste is produced, it must be disposed of through one of three media: air, water, or land.[69] The theory maintains that disposal will necessarily impose a risk or cost to society, regardless of which method of disposal is chosen.[70] The total cost and the total risk to society should be minimized by selecting the best medium or

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64. 42 U.S.C. § 4332(2)(c) (1994); *see also* O'Halloran, *supra* note 9, at 768.

65. Final Rule on Ozone Transport Commission; Low Emission Vehicle Program for the Northeast Ozone Transport Region, 60 Fed. Reg. 4712 (1995) (codified at 40 C.F.R. pts. 51, 52, & 85); *see also* Wahrman, *supra* note 3, at 178.

66. *See* Wahrman, *supra* note 3, at 178 (citing *New York-New Jersey Harbor Estuary Program, Toxics Characterization Report*, (1991)).

67. *See supra* notes 24-42 and accompanying text (discussing effect of dumping toxic spoils).

68. *See generally* Peter J. Fontaine, *EPA's Multimedia Enforcement Strategy: The Struggle to Close the Environmental Compliance Circle*, 18 COLUM. J. ENVTL. L. 31, 33-34 (1993); *see also* Wahrman, *supra* note 3, at 174.

69. *See* Guarascio, *supra* note 27, at 709 (citing *National Advisory Comm. on Oceans and Atmosphere, the Role of the Ocean in a Waste Management Strategy*, at 7-9 (1981)).

70. *See id.*

combination of media in which to dispose of a given waste.[71] For example, even though some environmental damage is incurred, the ocean may be the best disposal medium for extremely acidic wastes because of its disbursive currents and tendency to act as a natural buffer.[72] On the other hand, land burial may be the more appropriate medium for radioactive wastes as it is considered safer to contain rather than disperse such material.[73] Through an informed choice of alternatives, the multi-medium approach envisions the management of wastes rather than simple disposal.[74]

In terms of the New York Harbor region's dredging problem, the multi-media approach would first weigh human health risks associated with poor air quality stemming from increased traffic and a non-viable port.[75] The approach would then consider the human health risks associated with the presence of contaminants in coastal waters associated with a dredged viable port.[76] The approach would then choose the lesser of the two evils — in this case continuing to dredge — and dump spoils in the ocean.[77] The rationale is that mitigation measures to isolate dredged material at ocean dump sites, such as sand capping, are more feasible than those to reduce ozone increased emissions from motor vehicle traffic[78] associated with a non-viable, undredged port.[79]

Multi-media waste management seems to work well as a broad policy choice, but for day-to-day individual projects, it smacks of sacrifice. The multi-media approach assumes that in certain situations, like the Port of New York's, solutions innocuous to the en-

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71. *See id.* (citing *National Advisory Comm. on Oceans and Atmosphere, the Role of the Ocean in a Waste Management Strategy*, at 97 (1981)).

72. *See id.* (citing *National Advisory Comm. on Oceans and Atmosphere, the Role of the Ocean in a Waste Management Strategy*, at 100 (1981)),

73. *See id.* (citing H.R. REP. No. 562, 97th Cong. 2 (1982)).

74. *See id.* (citing *National Advisory Comm. on Oceans and Atmosphere, the Role of the Ocean in a Waste Management Strategy*, at 10 (1981)).

75. *See* Wahrman, *supra* note 3, at 180 (citing the EPA, *The Report of the Human Health Subcommittee, Reducing Risk*, App. C, at 21 (1990)).

76. *See id.*

77. *See id.*

78. *See supra* notes 51-61 and accompanying text (examining effect of increased motor vehicle emissions).

79. *See* Wahrman, *supra* note 3, at 181.

vironment are impossible. Typically, the policy maker, in this theory, must choose the lesser of two evils. However, for the problem at hand, this may not be true. In fact, one recent government group that studied dredging problems like New York's refutes the type of pessimism assumed by the multi-media method, asserting that environmentally satisfying solutions are feasible.[80]

On August 13, 1993, President Clinton admitted that the dredging process for U.S. ports was in crisis, and instructed Secretary of Transportation Frederic Pena to convene the Interagency Working Group on the Dredging Process[81] ("Group"). The Group made numerous recommendations for the improvement of the dredging process in U.S. ports.[82] In its report, the Group criticized the permit and rule-making process of EPA and the Army Corps.[83] The Group cited a lack of a unified dredging policy or vision for the future of dredging as one of the reasons for the present state of ports such as Elizabeth.[84] Another problem pointed out by the Group was unresolved interagency conflicts.[85] The Group observed that federal and state regulatory agencies often do not adequately coordinate with one another or communicate their concerns about dredging projects early enough in the dredging process.[86] The Group indicated this may be the cause of delays in the decision-making process for the approvals required by federal and state law.[87]

Considering dredging reform, the Group recommended interagency cooperation among all stakeholders in the area of the port in question. This reform included a long-term planning process tailored to reflect the unique mix of environmental, political, and economic circumstances in the region.[88]

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80. *See generally Dredging Process Action Plan, supra* note 5.
81. *See id.* at i.
82. *See id.*
83. *See id.* at 2-3.
84. *See id.* at 4.
85. *See id.* at 6.
86. *See id.*
87. *See id.*
88. *See id.* at 8.

In terms of individual projects, the Group implicitly rejected the sacrifices inherent in the multi-media method of waste management.[89] The Group placed a premium on long-term planning projects to ensure the continued vitality of U.S. ports.[90] The Group cited inconsistent funding policies, in terms of uses for dredged material, as a source of major problems for U.S. dredging.[91] Unlike the multi-media approach, the Group viewed dredged material as a resource to be used in environmentally beneficial development projects.[92] The Group also pointed out that these beneficial projects have not been realistically incorporated into past dredging plans.[93]

While the multi-media method of waste management may suffice as a broad policy choice and a compromise to the reality of many environmental problems, its breadth may limit new, relatively small project choices. As the Group suggests, other options may exist and should be explored before conceding that every solution to the dredging problem would necessarily harm the environment. New York Harbor's dredging problem may be amenable to such an ideal solution. Logic dictates that every effort to support a plan that would make the port "environmentally safe and economically competitive"[94] must be made before yielding to the multi-media approach.

II. THE REGULATORY AND POLITICAL FRAMEWORK OF THE HARBOR

Any proposed solution to New York's dredging problem must be examined first and foremost for its environmental and economic benefits cast in terms of the Group's guidelines. An impractical or logistically impossible plan is worthless, no matter how idyllic it seems on paper. For this reason, any proposed solution to the

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89. *See id.* at i (viewing dredged material as not necessarily detrimental to the environment, but as a possible resource for development projects).

90. *See id.* at 1-2.

91. *See id.* at 3.

92. *See id.* at 5 (for example, Los Angeles recently used concrete coated dredged materials to extend the harbor by 265 acres).

93. *See id.* at 6.

94. *Water Pollution: Gore Offers Plan to Clear Up Contamination in New York Harbor,* DAILY ENV'T REP.(BNA) (July 25, 1996).

dredging problem must take account of, and be compatible with, the statutory framework that surrounds New York Harbor. Therefore, it is relevant to explore the federal and state statutes that have a bearing on the harbor as well as how the courts have interpreted and applied them.

A. *Federal and State Statutes Pertaining to the Harbor*

Federal regulation of ocean-dumped spoils in New York Harbor and the United States dates back to 1886.[95] It was then that the 49th Congress, concerned with ocean disposal of waste in New York Harbor, attached a provision to a river and harbor appropriations bill forbidding vessels from "cast[ing], throw[ing], empty[ing], or unload[ing] . . . ballast, stone, slate, gravel, earth, slack, rubbish, wreck, filth, slabs, edgings, sawdust, slag, or cinders, or other refuse or mill waste of any kind into New York Harbor."[96] The Act provided an exception for dumping approved by the "U.S. officer,"[97] or in other words, the harbor official.[98] However, despite this provision, the federal government exercised little control over ocean dumping.[99]

Various federal statutes granted the Army Corps of Engineers regulatory authority within the 3 mile territorial sea of the United States, but these were ineffective in controlling marine degradation.[100] Section 13 of the Rivers and Harbors Act of 1899 took to task the dumping of waste into navigable waters.[101] However, the Army Corps interpreted the Act as being only applica-

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95. *See* Moore, *supra* note 33, at 925.

96. Act of August 5, 1886, ch. 929, 24 Stat. 310 § 3,329; *see also* Moore, *supra* note 33, at 925.

97. Act of August 5, 1886, ch. 929, 24 Stat. 310, § 3,329-30.

98. *See* Moore, *supra* note 33, at 925.

99. *See* O'Halloran, *supra* note 9, at 754-55 (noting that although many government agencies such as the Army Corps of Engineers, the Atomic Energy Commission and the Coast Guard, had some measure of regulatory authority over ocean dumping, no agency attempted to regulate ocean dumping until the enactment of Marine Protection, Research, and Sanctuaries Act of 1973).

100. *See id.* at 754.

101. *See* Navigation and Navigable Waters, Chapter 9 Protection of Navigable Waters and of Harbor and River Improvements, 33 U.S.C. § 407 (1994).

ble to deposits of material that impeded navigation.[102]

The 1970 Council on Environmental Quality evaluated the state of ocean dumping and concluded that a massive increase in the growing volume of ocean-dumped waste would result absent comprehensive regulation of ocean dumping and a clear national regulatory policy.[103] The Council recommended EPA as the agency most appropriate to handle the task.[104]

Congress, heavily influenced[105] by the 1970 Council on Environmental Quality Report, passed the Marine Protection, Research, and Sanctuaries Act[106] ("MPRSA"), which became effective on April 23, 1973. The MPRSA prohibits, absent issuance of a permit, the transport of waste materials from the United States for the purpose of dumping, and the dumping of waste materials, into the contiguous zone[107] and the territorial seas of the United States.[108]

The MPRSA sets up a bifurcated system[109] wherein EPA is empowered to issue dumping permits for non-dredged materials, and the Army Corps of Engineers has the authority to issue permits for the dumping of dredged materials.[110] Specifically, Title I of MPRSA empowers EPA and the Army Corps to issue five classes of dumping permits based upon the types and amounts of waste to be disposed.[111] These classes include general permits, special permits, interim permits, emergency permits, and re-

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102. *See* O'Halloran, *supra* note 9, at 754 (citing Lumsdaine, *Ocean Dumping Regulations: An Overview*, 5 ECOLOGY L.Q. 753, 758-59 (1976)).

103. *See id.* (citing *U.S. Council on Environmental Quality, Ocean Dumping: A National Policy* at 33 (1970)).

104. *See id.* at 755.

105. *See id.*

106. 33 U.S.C. § 1401-1444 (1994).

107. *Id.* The contiguous zone is a 12 nautical mile strip off the coast marking the breadth of the territorial sea. 33 U.S.C. § 1411 (1994); *see also* O'Halloran, *supra* note 9, at 755.

108. 33 U.S.C. § 1411 (1994); *see also* O'Halloran, *supra* note 9, at 755.

109. *See* O'Halloran, *supra* note 9, at 755.

110. *See id.*

111. 40 C.F.R. § 220.3 (1982); *see also* Guarascio, *supra* note 27, at 717.

search permits.[112] General permits are issued for the disposal of non-toxic materials in small quantities for specific classes of materials that must be disposed of in emergency situations.[113] Special permits are issued for the dumping of all materials that are not covered by a general permit and would not unreasonably degrade the environment in the form in which they are dumped.[114] The highest levels of toxic or otherwise harmful substances allowed under a special permit are determined by laboratory testing.[115] Materials not qualifying for a general or special permit may qualify for an interim permit.[116] To qualify for an interim permit, an applicant must agree to either phase-out their dumping or to bring it within limits set by the general or special permits within a specified time period.[117] These interim permits expire within one year from the date of issuance.[118] If the applicant has shown progress and has completed phases of the plan, a new interim permit may be obtained.[119]

Emergency and research permits are only issued in specific circumstances.[120] An emergency permit is only allowed where there is an unacceptable risk to human health and no feasible alternative to ocean dumping exists.[121] Research permits are granted if the potential benefit of the scientific research outweighs the potential impact the dumped hazardous materials would have on the environment.[122]

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112. *See* 33 U.S.C. § 1413 (1994); *see also* Guarascio, *supra* note 27, at 717.

113. 40 C.F.R. § 220.3(a)(1995); *see also* Guarascio, *supra* note 27, at 717. The MPRSA contemplates emergencies requiring the dumping of wastes which pose an unacceptable risk to human health where there are no other solutions. *See* 33 U.S.C. § 1412(a) (1994).

114. *See* 40 C.F.R. § 220.3(b) (1995). For a general discussion of the permit process, see Guarascio, *supra* note 27, at 717-19.

115. *See* 40 C.F.R. § 227.27 (1995).

116. *See id.* § 220.3(d).

117. *See id.*

118. *See id.*

119. *See id.*

120. *See* Guarascio, *supra* note 27, at 718.

121. *See* 40 C.F.R. § 220.3(c) (1996); *see also* Guarascio, *supra* note 27, at 718.

122. *See* 40 C.F.R. § 220.3(e) (1996); *see also* Guarascio, *supra* note

The Administrator of EPA is required by MPRSA section 102 to issue permits for ocean dumping of non-dredged materials after a determination that such dumping will not "unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities."[123] The EPA Administrator is also required to establish guidelines for reviewing and evaluating permit applications[124] for dredged and non-dredged materials.[125]

Similarly, the Secretary of the Army Corps of Engineers is required, independently, to issue permits for ocean disposal of dredged material after determining that the proposed dumping will not "unreasonably degrade" the marine environment[126] based upon criteria established by EPA.[127] For federal projects, the Army Corps issues regulations according to EPA-established criteria required for private permit applicants instead of the regular permit procedure.[128]

Title II of MPRSA authorizes the Secretary of Commerce, working with the Coast Guard and EPA, to create a continuing program for monitoring and researching the environmental effects of ocean dumping activities.[129] The Coast Guard maintains surveillance of ocean dumping.[130] EPA and the National Oceanic and Atmospheric Administration ("NOAA") are directed to research and study alternative disposal methods.[131]

27, at 718.

123. 33 U.S.C. § 1412(a) (1994); *see also* O'Halloran, *supra* note 9, at 755-56.

124. *See* 33 U.S.C. § 1412(a) (1994).

125. *See* 33 U.S.C. § 1412(c) (1994); *see also* O'Halloran, *supra* note 9, at 756.

126. 33 U.S.C. § 1413(a) (1994); *see also* O'Halloran, *supra* note 9, at 756.

127. 33 U.S.C. § 1413(b) (1994); *see also* O'Halloran, *supra* note 9, at 756.

128. *See* 33 U.S.C. § 1413(e) (1994); *see also* O'Halloran, *supra* note 9, at 756-57.

129. *See* 33 U.S.C. § 1441 (1994); *see also* Moore, *supra* note 33, at 932.

130. *See* 33 U.S.C. § 1441 (1994).

131. *See* 33 U.S.C. § 1443 (1994); *see also* Moore, *supra* note 33, at 932 (citing OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, WASTES

Title III of the MPRSA authorizes the Secretary of Commerce, working in conjunction with the President, representatives of the affected states, Congress, and the public to designate coastal waters, waters of the Great Lakes, or "submerged lands over which the United States exercises jurisdiction . . . consistent with international law" as national marine sanctuaries.[132] Any activity in an area designated a sanctuary may continue only in accord with the regulations the Secretary promulgates or with the Secretary's permission.[133]

The MPRSA includes both civil and criminal penalties for violating its tenets.[134] A violator of the Act, the Act's regulations, or a permit issued under the Act, can receive criminal and civil fines of up to $50,000 for each violation and imprisonment up to five years.[135] Medical waste dumpers can receive fines up to $250,000 and up to five years imprisonment.[136] Dumping from several vessels constitutes different offenses for each vessel.[137] Similarly, each day of continuing violation constitutes a separate offense.[138]

The Attorney General may seek an injunction to stop dumping in violation of MPRSA.[139] The U.S. District Courts have jurisdiction over violators in equity.[140] Additionally, private persons can commence a civil suit to enjoin a person, state, municipality, or the United States Government from dumping in violation of the

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IN THE MARINE ENVIRONMENT, 73 at 148 (1987)).

132. 16 U.S.C. § 1432(3) (1994); *see also* Moore, *supra* note 33, at 932-33.

133. *See* 16 U.S.C. § 1434(a)(4) (1994); *see also* Moore, *supra* note 33, at 932-33.

134. *See* 33 U.S.C. §§ 1415(a) (civil penalties); 1415(b) (criminal penalties) (1994); *see also* Moore, *supra* note 33, at 933.

135. *See* 33 U.S.C. § 1415(a),(b) (1994). For a general discussion of MPRSA enforcement see Moore, *supra* note 33, at 933-34.

136. *See* 33 U.S.C. § 1415(b) (1994).

137. *See* 33 U.S.C. § 1415(c) (1994).

138. *See* 33 U.S.C § 1415(c) (1994); *see* Moore, *supra* note 33, at 933 (citing *Norwegian Company Accused of Ocean Dumping in U.S.*, REUTER LIBR. REP., Oct. 19, 1988).

139. *See* 33 U.S.C. § 1415(d) (1994).

140. *See id.*

MPRSA.[141] However, an action by a private person is restricted in the sense that it may not be commenced

> (A) prior to sixty days after notice of the violation has been given to the Administrator or to the Secretary, and to any alleged violator of the prohibition, limitation, criterion or permit; or
> (B) if the Attorney General has commenced and is diligently prosecuting a civil action in a court of the United States to require compliance with the prohibition, limitation, criterion or permit; or
> (C) if the Administrator has commenced action to impose a penalty pursuant to subsection (a) of this section, of if the Administrator, or the Secretary, has initiated permit revocation or suspension proceedings under subsection (f) of this section; or
> (D) if the United States has commenced and is diligently prosecuting a criminal action in a court of the United States or a State to redress a violation of this subchapter.[142]

Thus, in terms of state regulation, the MPRSA appears to dominate the dredging process. In fact, when first enacted, the MPRSA indicated that states could not exercise any power over ocean dumping.[143]

The Port Authority of New York and New Jersey deals most closely with the Port of New York and port-related issues such as dredging. The Port Authority, "was created as [an] autonomous, multipurpose, public authority, fashioned apart from mode of ordinary government, and while it is a body corporate and politic and perhaps, in some respects has standing analogous to that of [a] municipal corporation, it derives its power and authority to act solely from statute."[144] This unique agency is charged with

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141. *See* 33 U.S.C. § 1415(g) (1994).

142. *Id.*

143. Based on the 1992 amendments to the MPRSA, this is no longer true. States are no longer precluded from enacting their own dredging requirements, subject to certain restrictions set out in 33 U.S.C. § 1416(d) (1994). However, the MPRSA still appears to dominate dredging in the New York Harbor.

144. N.J. Stat. Ann. § 1-33, (West 1997) Title 32. Interstate and Port Authorities and Commissions, Subtitle 1. The Port Authority of New York and New Jersey (formerly the Port of New York Authority), Chapter 1. Compact of April 30, 1921, with Supplementary and Amendatory Laws, Article 2 . Comprehensive Plan for the Development of the Port of New York (citing Port of New York Authority v. Public Service

the day-to-day operation of the Port of New York. However, in terms of dredging, the Port Authority seems to defer to the federal government. The Port Authority

> shall request the Congress of the United States to make such appropriations for deepening and widening channels and to make such grants of power as will enable the said plan to be effectuated. [The Port Authority] shall have power to apply to all federal agencies, including the interstate commerce commission, the war department, and the United States shipping board, for suitable assistance in carrying out said plan.[145]

The statutes that give the Port Authority its power thus seem to defer to the federal government and the MPRSA for the purposes of dredging regulation. Thus, any plan for dredging in New York Harbor should be aware of, and be tailored to, the specific requirements of the MPRSA, and through the MPRSA, the Army Corps and EPA.

B. *Judicial Interpretation of the MPRSA*

In tailoring a plan for dredging New York Harbor, a simple reading of the MPRSA will not suffice. The MPRSA must be read in the context of its judicial interpretation. Specifically, the MPRSA directed EPA and the Army Corps to create their own guidelines for dredging. The manner in which these agencies have interpreted these guidelines has been subject to judicial scrutiny.[146]

Although EPA and Army Corps are permitted to create their own guidelines,[147] neither the courts, nor the public through the courts, have allowed them to interpret and apply these criteria without challenge. Some have suggested that this lack of public confidence springs from the inherent conflict of interest of the Army Corps when it comes to dredging.[148] While the Army Corps is responsible for issuing permits for and policing the dumping of dredged spoils, it is itself responsible for nearly 90% of mate-

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Electric and Gas Co., 76 N.J. Super. 359, 184 A.2d 659 (L. 1962), *cert. granted*, 39 N.J. 468, 189 A.2d 55, *rev'd on other grounds* 41 N.J. 90, 195 A.2d 1).

145. N.Y. UNCONSOL. LAW § 6549 (McKinney 1979).

146. *See supra* part II.A.

147. *See* 33 U.S.C. § 1412(a) (1994).

148. *See* Moore, *supra* note 33, at 937-38.

rial dumped at sea.[149] Whatever the source, any plan for dredging must take account not only of the MPRSA as a statute, but must also navigate through the litigious atmosphere surrounding the application of the statute's mandates to dredging and dredged waste disposal.

In *National Wildlife Federation v. Benn*,[150] plaintiffs sought to ensure the Army Corps' compliance with EPA criteria and to require an Environmental Impact Statement[151] ("EIS") for the effects of ocean dumping of dredged spoils in the New York area.[152] The National Wildlife Federation and the Environmental Defense Fund challenged the Army Corps procedures in dumping dredged spoils in the New York Bight area.[153] "[P]laintiffs claimed that the Army Corps failed to comply with statutory and regulatory requirements in conducting federal programs and licensing private projects involving ocean disposal of dredged spoils."[154]

After the government was granted summary judgement on two claims, the only issue that remained was whether the Army Corps, which is subject to NEPA,[155] was compelled to prepare a comprehensive (programmatic) EIS on dredged spoil dumping in the area.[156] The plaintiffs argued that the Army Corps was acting in violation of NEPA by "treating ocean dumping projects in isolation and not preparing" an EIS for the Mud Dump in the New York Bight.[157] The court held that Army Corps was responsible for, and was required to conduct a programmatic EIS on, the

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149. 33 U.S.C. § 1412(d) (1994); *see also* Moore, *supra* note 33, at 937-38.

150. 491 F. Supp. 1234 (S.D.N.Y. 1980).

151. *See supra* notes 62-64 and accompanying text (defining EIS).

152. *See* 491 F. Supp. at 1236.

153. *See id.* The New York Bight is an ocean dumping site located off the coast of New York and New Jersey. *See* O'Halloran, *supra* note 9, at 767.

154. *Id.*

155. *See id.* at 769 and n.135 (citing the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-70 (1994) and noting that while the EPA has immunity from the NEPA in all but voluntary compliance under 33 U.S.C. § 1371 (1994), the Corps has no such immunity).

156. *See id.* at 768.

157. 491 F. Supp. at 1249.

Mud Dump Site.[158]

In addition to requiring the Army Corps to adhere more closely to federal guidelines, *Benn* is important for another reason. The court found the parties had standing to sue even though their claim did not challenge a specific permit or project. The court found it enough that the suit "attacked a clear and consistent pattern of conduct constituting agency action."[159] Plaintiffs, after *Benn,* will not need to utilize resources by separately litigating individual permit actions project-by-project.[160] As a result, this ruling opened the door to additional suits directly challenging the EPA and the Army Corps' interpretation of their own dredging permit criteria.

In *City of New York v. EPA,*[161] the City of New York challenged EPA's decision to deny the City a continuance of its interim sludge dumping permit.[162] EPA's position was that the 1977 Amendment to the MPRSA absolutely prohibited the dumping of harmful sludge after December 31, 1981.[163] At that time, the City of New York depended on transporting a barge of 260 tons of sewage sludge daily to the dump site of the New York Bight.[164] The City, not surprisingly, maintained that the MPRSA required EPA to take a wider view, to take into account available alternatives in considering an ocean dumping application.[165] The City further argued that EPA's interpretation of the 1977 Amendment had to be erroneous, especially considering the consequences and costs of short-term land disposal compared to ocean disposal.[166]

In granting a motion of summary judgement for the City, the U.S. District Court for the Southern District of New York held that MPRSA section 1412(a) required EPA to apply a balancing

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158. *See id.* at 1252.

159. *Id.*

160. *See* O'Halloran, *supra* note 9, at 768.

161. 543 F. Supp. 1084 (S.D.N.Y. 1981).

162. *See id.* at 1086. For a general discussion of the case see Moore, *supra* note 33 at 941-42.

163. *See* 543 F. Supp. at 1086.

164. *See id* at 1085-86.

165. *See id.* at 1086.

166. *See id.*

test.[167] The court held that if, in applying the nine criteria contained in section 1412(a), EPA determined that the ocean dumping caused unreasonable degradation of the environment,[168] then the denial of the interim permit was within EPA's power. However, the court found that, in actuality, EPA had acted unreasonably by creating a "conclusive presumption" that the failure of sewage sludge to meet environmental impact criteria automatically caused unacceptable degradation of the environment.[169] The court interpreted Congressional intent to require EPA to weigh all factors listed in the MPRSA, including environmental and economic costs of alternative methods of disposal, in deciding whether or not a permit would "unreasonably degrade" the environment.[170] The court completely rejected EPA's interpretation of the Amendment as calling for an absolute end to all ocean dumping of sewage sludge.[171]

In *Clean Ocean Action v. York*,[172] an environmental group brought an action against EPA and the Army Corps for declaratory and injunctive relief to stop ocean dumping of materials dredged from the Port of New York.[173] The challenge surrounded a dredging permit, issued May 26, 1993, that allowed the Port Authority to dredge 500,000 cubic yards of dioxin contaminated spoils from the Newark/Port Elizabeth facility and to dispose of the materials at the Mud Dump site six miles off the New Jersey shore at the New York Bight.[174]

The court, in entertaining the challenge, reviewed EPA's permit criteria embodied in 40 C.F.R. § 227. The court interpreted EPA's regulations to mean that the dumping of materials containing dioxin was prohibited unless the dioxin is present only as a trace contaminant.[175] Dioxin, the court read, can only qualify as a trace contaminant when it would not cause significant unde-

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167. *See id.* at 1089.
168. *See id.*
169. *See id.* at 1100-03.
170. *See id.* at 1092.
171. *See id.*
172. 57 F.3d 328 (3d Cir. 1995).
173. *See id.* at 330.
174. *See id.*
175. *See id.* at 332.

sirable effects, including bioaccumulation in marine organisms.[176] Further, the court found that the determination whether or not dioxin would cause significant undesirable effects was to be made by conducting specified tests, including bioassays in specified types of marine organisms.[177] It was undisputed that no bioassays were conducted on the suspended particulate phase.[178]

The court held that EPA, in choosing not to conduct the suspended particulate phase of the bioassay, was misapplying its own regulations.[179] The court found that EPA's reservation of discretion in determining how to conduct tests could not be read as a reservation of discretion regarding whether or not to conduct an aspect of the test, "required by the unequivocal language of its regulations."[180] The court stated that it generally deferred to an agency's interpretation of its regulations unless that interpretation was plainly at odds with those regulations.[181] While the court did require EPA to more strictly apply the letter of its regulations, it did not grant the plaintiffs their injunction based on the fact that the plaintiffs failed to show "irreparable injury" to the environment as balanced against the economic injury that the lower court found would accrue in an unusable port.[182] Thus, while Clean Ocean Action did not get its injunction, it did force EPA and the Army Corps to interpret their ocean dumping criteria more strictly.

Any plan that proposes to solve a not yet existing problem involves an element of clairvoyance - of looking into the future and predicting how similar or dissimilar the existing situation will be-and then tailoring the plan to meet that situation. For any proposed solution to New York Harbor's dredging problem, that planning is made easier in the sense that the only statutory framework a plan really needs to account for is the MPRSA. However, as we have seen, this is a deceptive oversimplification.

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176. *See id.* (citing 40 C.F.R. § 227.6(b)).
177. *See id.* (citing 40 C.F.R. § 227.6(c)).
178. *See id.*
179. *See id.*
180. *See id.*
181. *See id.*
182. *See id.*

In terms of the MPRSA, a plan needs to take account of the EPA-promulgated and Army Corps implemented standards for permits, of the different types of permits available for various dredged wastes, and of the penalties involved for violating these standards.[183] A plan must also account for possible court ordered delays in ocean dumping from a suit brought by either the government or a private citizen.[184]

Further confusing the seemingly straight-forward MPRSA is that these facial statutory statements resist prediction. As the variance in the outcomes of these cases have shown, the very way that EPA and the Army Corps interpret their own criteria may be second-guessed by the court, making reliance on those stated criteria a fool's errand. Perhaps the EPA's revision[185] of its own decision-making criteria in reaction to *Clean Ocean Action v. York*[186] will help make the criteria more reliable. However, with the door to litigation opened by the *Benn* court[187] and considering the Army Corps' still unresolved inherent conflict of interest[188] for dredged spoil dumping, litigation surrounding the Army Corps' and EPA's interpretation of their own dumping criteria does not seem likely to go away any time soon.

III. THE PROPOSED SOLUTIONS AND HOW THEY ADDRESS THE ISSUES

New York's dredging problem needs a solution. As we have seen, an active approach to the problem is required. Ideally, a plan for the port would address both the economic and environmental aspects of the problem. Economically, an ideal plan would keep the port accessible to large ships now and in the future, thereby keeping local consumer costs low, maintaining existing jobs, providing future port and port related employment,

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183. *See supra* notes 109-28 and accompanying text (discussing permit system).

184. *See supra* notes 139-44 and accompanying text.

185. *See* Proposed Rules, Environmental Protection Agency, 61 Fed. Reg. 7765 (1996) (to be codified at 40 C.F.R. pts 220, 227).

186. 57 F.3d 328 (3d Cir. 1995).

187. *See supra* notes 150-60 and accompanying text.

188. *See supra* notes 148-49 and accompanying text.

and securing the port's status as the east coast hub.[189] On the environmental side, an ideal plan would solve the immediate dredging problem and make way for less and safer dredging in the future. Akin to the suggestions of the Interagency Working Group,[190] this ideal plan rejects the environmental sacrifice of the multi-media approach to dredged waste management.[191] This idyllic plan would also realize and provide for the unpredictability surrounding the mandates of the MPRSA caused by legal challenges to the EPA's and the Army Corps' interpretation of that statute. However, before any sacrifice, environmental or economic, is made, we must first strive to find a plan that sacrifices neither.

This section will explore three plans that each portend to provide these answers. The Clinton-Gore plan, the Pataki-Whitman plan, and the Nadler-McHugh plan will all be judged against the environmental and economic ideal akin to the suggestions of the Group.

A. *The Clinton-Gore Plan*

The Clinton-Gore plan for the Port of New York focuses on closing the Mud Dump site off the Jersey shore by September 1, 1997.[192] This site is the primary dumping ground for the toxic spoils dredged regularly to maintain the Elizabeth port's accessibility to larger cargo ships. Vice President Gore perceives this plan as an effort to make the port environmentally safe and economically competitive.[193]

While closing the dumping site would make the port more environmentally safe by reducing the level of potentially toxic spoils in the water, the positive economic impact of the plan remains questionable. The port requires regular dredging, and these spoils need to be put somewhere.

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189. *See infra* note 247 and accompanying text.

190. *See generally* DREDGING PROCESS ACTION PLAN, *supra* note 5.

191. *See supra* notes 68-74 and accompanying text.

192. *See* Stimmell, *supra* note 6.

193. *See Water Pollution: Gore Offers Plan to Clear Up Contamination in New York Harbor*, DAILY ENV'T REP. (BNA) (July 25, 1996).

In the New York District, the EPA and the Army Corps of Engineers have established three broad categories of dredged material based upon their suitability for ocean disposal. Category I sediments are those that meet "unrestricted" ocean dumping criteria and whose test results do not indicate an unacceptable level of toxicity or bioaccumulation.[194] As toxic materials are either not present or present in only trace amounts, no special precautionary measures are required for their disposal.[195] Category II sediments are those which demonstrate no toxicity, but where there is potential for bioaccumulation.[196] Restricted ocean disposal, capping,[197] or some other disposal management practice is required for these sediments.[198] Category III sediments are those that do not meet ocean dumping criteria. These sediments fail acute toxicity testing or pose a threat of significant bioaccumulation that cannot be addressed through ocean disposal management practices.[199]

In terms of "unacceptable" levels of toxicity, EPA has specified that certain contaminants are prohibited in other than trace amounts. These include organohalogen compounds, mercury and mercury compounds, cadmium and cadmium compounds, oil of any kind and form (including, but not limited to, petroleum, oil sludge, oil refuse, crude oil, fuel oil, heavy diesel oil, lubricating oils, and hydraulic fluids), and known carcinogens, mutagens, or tratogens, or those suspected to be such.[200]

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194. *See* OFFICES OF GOVERNORS WHITMAN AND PATAKI, JOINT DREDGING PLAN FOR THE PORT OF NEW YORK AND NEW JERSEY 2 [hereinafter *Joint Dredging Plan*].

195. *See id.*

196. *See id.*; *see also supra* notes 33-36 and accompanying text (defining bioaccumulation).

197. "Capping" is the disposal management practice whereby uncontaminated material, such as sand, is dumped on top of dumped contaminated material in order to reduce the exposure of the contaminated material to the open ocean and to prevent marine organisms from burrowing into the contaminated material.

198. *See* JOINT DREDGING PLAN, *supra* note 194, at 2.

199. *See id.*

200. *See* 40 C.F.R. § 227.6 (1995). Mercury and its compounds are considered to be in trace amounts when they are present in any solid phase of a material in concentrations less than 0.75 mg/kg, or less

Before the dump site's closure in 1997, the Clinton-Gore plan only allows for interim dumping of Category II spoils, not the more contaminated Category III spoils which make up 55-70% of the Harbor sediments.[201] The plan does not propose new locations for disposal after 1997, nor does it provide funds to build disposal facilities,[202] thereby leaving local governments to foot the bill. The plan is expensive. James T.B. Tripp, general counsel for the Environmental Defense Fund, estimates that such a plan would cost $125 million for decontamination technology and $250-275 million for containment facilities to compensate for the loss of the Mud Dump site.[203] Although Mary Mears the of EPA claims that the plan will not change things significantly,[204] as far back as 1993, Lillian Liburdi of the New York/New Jersey Port Authority claimed that there were no options besides disposal at the Mud Dump site.[205] Logically, the Mud Dump site's closure will make operating and dredging the port more expensive.

This plan is further hindered by the fact that it necessarily relies upon the MPRSA and the Army Corps promulgated criteria for dumping dredged spoils. As previously discussed, this may not be a sound planning choice. The Army Corps criteria for

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than 50% greater than the average total mercury content of natural sediments of similar lithologic characteristics as those at the disposal site. Cadmium and its components are considered to be in trace amounts when they are present in any solid phase of a material in concentrations less than 0.6 kg/mg, or less than 50% greater than the average total cadmium content of natural sediments of similar lithologic characteristics as those at the disposal site. Organohalogen compounds are considered to be in trace amounts when the total concentration of organohalogen constituents in the waste as transported for dumping is less than a concentration of such constituents known to be toxic to marine organisms. Existing oils are considered to be in trace amounts when those amounts do not produce a visible surface sheen in an undisturbed water sample when added at a ratio of one part waste material to 100 parts water. *Id.*

201. *See White House Dredges Up a Plan*, ENGINEERING NEWS RECORD, Aug. 5, 1996, *available in* 1996 WL 5978840.

202. *See id.*

203. *See id.*

204. *See* Stimmel, *supra* note 6.

205. *See House Members, Environmentalists Blast Approval of Ocean Dumping Permit*, DAILY ENV'T REP. (BNA) (Mar. 31, 1993).

granting dumping permits has been consistently second-guessed by the courts.[206] Given the possibility of private suits, and the open door to litigation provided by the *Benn* court,[207] the possibility of injunction and expensive delays is a very real and unpredictable possibility. Relying on these nebulous criteria is a serious flaw in the Clinton-Gore plan.

Commenting on both the Clinton-Gore plan and the mounting dredging problem, Representative Robert Franks stated, "[t]he dredging crisis must be resolved, not with quick fixes and smoke and mirrors as the Clinton administration proposes, but with a comprehensive plan on how to dispose of the dredged material once the ocean facility is closed."[208] As toxic silt builds yearly, and delays in dredging cause more and more ships to slip away to Halifax and Norfolk, the port clearly merits a pro-active solution to the dredging problem.

B. *The Pataki-Whitman Plan*

The governors of New York and New Jersey jointly proposed a plan for the dredging problem in late 1996 ("Joint Plan").[209] The plan recognizes the port as vital to the economies of both New York and New Jersey and acknowledges the need for a clean and safe harbor environment.[210] This recognition of the dual, environmental/economic aspect of the dredging problem is something to which the Clinton plan gives little more than lip service. However, while the Pataki-Whitman plan is superior in terms of its recognition of the problem, the plan has flaws in both its implementation and its level of generality.

The plan first outlines non-specific, policy based guidelines for dredging. Suggestions such as, "utilize the most economically and ecologically efficient and effective management disposal op-

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206. *See supra* II.B.

207. *See supra* notes 150-60 and accompanying text.

208. J. Scott Orr, *Dredging May Resume in a Month Under Salvaged Harbor Plan Environmental Groups Drop their Objection*, STAR-LEDGER (Newark, NJ), July 25, 1996 *available in* 1996 WL 7953542.

209. *See generally* JOINT DREDGING PLAN, *supra* note 194. *See also* Al Frank, *Whitman Accord Allows Deepening of Port Channels*, STAR-LEDGER (Newark, NJ), Oct. 6, 1996 *available in* 1996 WL 11881161.

210. *See* JOINT DREDGING PLAN, *supra* note 194, at 1.

tions,"[211] "decontaminate and remediate harbor sediments to the extent possible,"[212] and "develop beneficial uses for dredged material wherever possible"[213] are sound policy goals, but they are so general that they provide little help for the present dredging problem. However, as general policy statements, these proposals are not immediately fatal to the Joint Plan.

The "Long Term" section of the plan is a list of generalized policy statements and suggestions of potential dredging projects. The plan "commits" to the "development of heretofore undisclosed decontamination technology,"[214] to the design and construction of "nearshore and upland construction projects,"[215] to "beneficial use projects,"[216] to "processing facilities,"[217] and to the "evaluation and promotion of technologies."[218] The plan offers little detail beyond these bare statements. Although these statements are flawed in their generality, they offer potential promise if one or more of them are invested in and developed further. However, the plan offers several solutions that are fatally flawed even at this basic level.

The plan suggests a continued investment in the use of geotextile bags[219] for spoil disposal even after a second $1 million experiment with the bags failed as recently as July 19, 1996.[220] The plan also endorses continued ocean disposal of contami-

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211. *Id.*

212. *Id.* The plan calls this and associated suggestions "fundamental principles for dredged materials management." *Id.*

213. *Id.*

214. *Id.* at 5.

215. *Id.* Such new technology would be designed to handle an additional 1,000,000 cubic yards of dredged material per annum. *See Id.*

216. *Id.* at 6.

217. *Id.*

218. *Id.*

219. Geotextile bags are huge polyester bags filled with contaminated sediment and sewn shut in an effort to prevent the contaminated material from leaking into the sea when the bags are dumped, thus providing an ostensibly safe method of contaminated sediment sea dumping. The results of this method, however, have not been promising. *See* Al Frank, *Mud Bags Fail to Pass Dredge Test*, STAR LEDGER (Newark, NJ), July 19, 1996 *available in* 1996 WL 7950204.

220. *See id.*

nated sediment which, as we have seen, is not a solution but a sacrifice of the environment.[221] Finally, the plan bases its long term, hub port projections (as far as 2025) on a 50' Harbor Deepening Study when large ocean carriers such as Maersk and APL are already developing ships that draw 55 feet and carry 8,000 containers.[222] As New York could never expect to be a hub port without drawing these ships, the projections of the plan are unrealistic.

Some of the long term projects however, show hope and a more realistic grasp of the problem than the Clinton plan.[223] The Joint Plan endorses the Harbor Estuary Plan("the Estuary Plan").[224] The Estuary Plan exhibits sound and somewhat specific long-term planning; endorsing the study of harbor contaminants and attempting to trace and sanction the upriver polluting entities.[225] This process reduces the level of toxicity in harbor sediments and thereby in dredged spoils.[226] As less toxic dredged spoils are environmentally safer and cheaper to dispose of,[227] the Estuary Plan exhibits sound, innovative thinking. Unfortunately, the Estuary Plan is an innovative anomaly in the otherwise uninspired Joint Plan.

Furthermore, the "Immediate Term" section of the Joint plan offers no salvation. This part of the plan prioritizes shipping channels by dredging needs.[228] The plan then outlines how these spoils will be disposed of in light of the Clinton-Gore plan's closure of the Mud Dump site by September 1997.[229] According to the Joint plan, Category I materials will continue to be disposed

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221. *See supra* Part I.A.

222. *See* Janet Porter, *AP Moller Unveils World's Largest Boxship*, J. COM., Jan. 25, 1996; *see also* OFFICE OF CONGRESSMAN JERROLD NADLER, THE FUTURE OF THE PORT: BROOKLYN STUDY (Mar. 6, 1996) [hereinafter BROOKLYN PORT STUDY].

223. *See* JOINT DREDGING PLAN, *supra* note 194, at 7.

224. *See id.* at 7 (describing the Estuary Plan as an anti-pollution effort to study harbor contaminants, trace them to their sources, and impose sanctions on those responsible).

225. *See id.* at 7-8.

226. *See id.*

227. *See id.*

228. *See id.*

229. *See id.* at 3.

of at the Mud Dump site.[230] Category II materials will also be dumped at the Mud Dump site if, "no reasonable alternative is available."[231] The plan suggests an upland site for part of the Category III spoils.[232] However, the plan itself admits that this site does "not meet current requirements."[233] The plan suggests use of the Newark Bay Barrow Pits for ocean disposal of the remaining Category III sediments.[234]

The short term aspects of the Joint Plan are flawed because they offer no innovation. In sum, the plan suggests more ocean dumping supplemented by expensive and potentially dangerous landfill disposal. The plan's reliance on partial ocean dumping is flawed as it necessarily relies on the MPRSA. The plan relies on dumping at the current Mud Dump site for Category II materials. However, as previously discussed,[235] the very categorization and permit process implemented by the Army Corps is riddled with possible delays and judicial reinterpretation. Any plan that incorporates ocean dumping faces this level of uncertainty and is thereby flawed.

While it is something of a step in the right direction, the plan does not change much. Still, policy makers are sketching broad strokes, proffering future solutions while maintaining that environmental sacrifice is the only way to solve present dredging problems. Perhaps ocean dumping of dredged spoils and the uncertainty that goes along with dealing with the MPRSA is a necessary sacrifice. If this is true, we may be forced to accept a plan such as the Joint Plan. But until that time, any practical, predictable, and specific plan that raises our choice above the multimedia method must be endorsed.

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230. *See id.*

231. *Id.*

232. *See id.* at 4. The ORION site in New Jersey is currently a "demonstration project for construction fill using dredged materials." *Id.*

233. *Id.*

234. *See id.*

235. *See supra* Part II.B.

C. *The Nadler-McHugh Plan*

The plan championed by Representative Jerrold Nadler and maritime attorney John McHugh envisions rebuilding the practically dormant Brooklyn piers and the creation of an underwater rail tunnel to create a link between the piers and the extensive rail lines in New Jersey.[236] These rail lines have extensive connections all over the U.S. and Canada.[237]

This plan is unique in that it recognizes that to date no genuinely cost effective and environmentally safe plan to solve New York's dredging problem has been proposed.[238] The plan, in a very detailed and specific way, provides solutions to both the economic and environmental concerns that surround the dredging problem.

First, the plan addresses the environmental issues. Most importantly, the project will use dredged materials from the Elizabeth port to create upland space in the new Brooklyn Harbor.[239] Dredged material which would normally be ocean dumped or disposed of expensively in land-based sites will be coated with non-porous concrete.[240] This coating renders the most toxic of spoils environmentally innocuous.[241] These blocks will then be used to build the new harbor area in Brooklyn.[242] This is a truly innovative solution. It obviates the need for dredged spoil disposal, land or ocean based. Rather than investing in geotextile bags and the like, dredged spoils, in the Nadler-McHugh plan, are used as an "environmentally beneficial resource."[243] This is precisely the type of use envisioned by the Group.[244] The possibility of immediate implementation of this method is without question.

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236. *See* BROOKLYN PORT STUDY, *supra* note 222 (defining the terminals in question as the Red Hook Container Terminal, which is currently operating at 50% capacity, and South Brooklyn Marine Terminals, which are now dormant).

237. *See* Michael Tomasky, *Port in a Storm*, N.Y. MAG., July 29, 1996, at 26, 27-28.

238. *See generally*, BROOKLYN PORT STUDY, *supra* note 222.

239. *See id.* at 30.

240. *See* Tomasky, *supra* note 237, at 30.

241. *See id.*

242. *See id.* at 28.

243. DREDGING PROCESS ACTION PLAN, *supra* note 5, at 1.

244. *See generally id.*

This method was used to successfully extend Los Angeles Harbor recently.[245] This "West Coast Model" is so successful that the port of Los Angeles used it to build a 265 acre expansion to accommodate new and deeper vessels.[246] As this self-containment strategy avoids ocean dumping, the Nadler-McHugh plan avoids use of the MPRSA completely, which would inject a souring element of unpredictability into any plan.

New York Harbor's dredging requirements are likely to increase over time. By the year 2000, 20 million cubic yards of sediment will need to be dredged.[247] The Brooklyn Harbor Project has an eye to this future. While in Elizabeth, expensive rock blasting and constant silt dredging are necessary to create a port any deeper than 40 feet, the Brooklyn Harbor is mud down to 65 feet.[248] Silting from the Hudson and Hackensack rivers requires continued dredging to keep the Elizabeth port open.[249] The Brooklyn Harbor, in contrast, has lower silting rates simply due to geography. In addition to lower silting rates reducing dredging costs, the Brooklyn Harbor sediments are also not exposed to upriver contaminant sources and may provide less environmental barriers to safe disposal.[250] With new, larger ships drawing up to 50 feet, the Brooklyn port could stay competitive and draw these ships now and in the future.[251]

Additionally, Brooklyn Harbor's incoming ships would not need to enter by the treacherous Kill Van Kull. Deeper water is also environmentally important when it comes to lightening or unloading ships at sea so that they draw less water and can enter a shallower port.[252] For example, in 1992-93, when Elizabeth was awaiting a dredging permit, 14 vessels ran aground, risking po-

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245. *See* Dori Meinert, *EPA Accused of Easing Up on Toxic Mud New Dredging Rules Threaten Ocean, Say Environmental Lists*, SAN DIEGO UNION-TRIB., Mar. 8, 1996, at A13.

246. *See* BROOKLYN PORT STUDY, *supra* note 222.

247. *See id.*

248. *See* Tomasky, *supra* note 237, at 29-30.

249. *See* BROOKLYN PORT STUDY, *supra* note 222.

250. *See id.*

251. *See* Tomasky, *supra* note 237, at 29.

252. *See id.*

tentially disastrous ocean spills.[253]

The Brooklyn Harbor Project addresses economic concerns in the area as well. Costs of the existing New York port are rising. Maintenance projects for the port alone could cost up to $1 billion.[254] The Army Corps of Engineers spent $500 million recently to deepen the Kill Van Kull to 40 feet recently, and is now considering a $1 billion dollar project to deepen it to only 45 feet.[255] Already, ports such as Hong Kong are finding even 48 foot depths insufficient.[256] With new tanker ships drawing 50 feet and beyond, this expenditure makes little sense. The Brooklyn Harbor is a cost effective way for local governments to deal with the dredging problem. The project's self-containment strategy saves local governments the cost of contracting out to expensive waste disposal companies.[257]

With the Brooklyn Harbor dredgable down to 65 feet, the project is also the most cost effective way to capture a market with high demand. The success of the Red Hook Container Terminal from a low of 15,000 containers a year to a recent high of 36,000 containers demonstrates regional market demand.[258] In addition, increasing numbers of developing countries are entering the world economy through the breakbulk and container markets.[259] The Port Authority estimates, at current capacities, container volume growth of 700,000 by 2003, 1.1 million by 2008, and 1.8 million by 2015.[260] New York is poised to take advantage of this growth market through expansion to the Brooklyn Harbor. As the dredging problem is not going away, not only would the Port of New York be unable to take advantage of the expanding market demand, it would be unable to operate at current capacities,

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253. *See* Wahrman, *supra* note 3, at 193.

254. *See* BROOKLYN PORT STUDY, *supra* note 222.

255. *See id.*

256. *See* Lotte Chow, *Future of Hong Kong's Port Threatened by a Harbor Too Shallow For New Ships*, WALL ST. J., Sept. 29, 1995, at A7.

257. *See* Letter from Jerrold Nadler, *United States Congress*, to Charles Gargano (Mar. 6, 1996) (on file with the FORDHAM ENVIRONMENTAL LAW JOURNAL).

258. *See* BROOKLYN PORT STUDY, *supra* note 222.

259. *See id.*

260. *See id.*

especially considering the move in the shipping industry to larger, deeper draft ships.[261]

Within the immediate New York area, the Brooklyn Harbor would bring a decrease in the cost of consumer goods, and, more importantly, it would bring jobs. About 9,000 people are directly employed on the Elizabeth docks, with ancillary activities generating an additional 166,500 jobs.[262] The Port Authority estimates that the Brooklyn Harbor would bring in around 50,000 new jobs within 10 years.[263]

Time is of the essence for this project. Economic constraints are moving the shipping industry to a "hub and feeder" system for each coast, similar to the airlines.[264] The port that can most easily accommodate these ships and provide ready access to North American markets will likely become the East Coast hub port. The Brooklyn Harbor, working in conjunction with Elizabeth, would be the nation's largest port and should easily win hub status.[265] But the future of New York's ports depends on prompt action. As Congressman Nadler has pointed out, "[o]nce established, a pattern of commerce which features [a port other than New York] as the major [port] on the eastern seaboard will be very difficult to dislodge."[266]

Other ports, such as Halifax, have openly announced their intention to become the East Coast hub port, and have backed their words up with action.[267] The Canadian National Railway just completed a $200 million rail tunnel from Halifax to Chicago.[268] This tunnel is similar to the tunnel proposed for Brooklyn Harbor that Nadler called, "the linchpin of the whole plan."[269]

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261. *See supra* text accompanying note 222.

262. *See* Tomasky, *supra* note 237, at 28.

263. *See id.* at 31.

264. *See id.* at 29.

265. *See id.*

266. Congressman Jerrold Nadler's speech to Coalition of Business, Labor and Commerce Organization of New York, November 17, 1992; *see also* Mark Magnier, *Feeder Frenzy: Ports in a Race to be Hubs*, J. OF COM., May 1, 1995 *available in* 1995 WL 8771277.

267. *See* Tomasky, *supra* note 237, at 57.

268. *See New Tunnel Open*, WINDSOR STAR (Ontario), Apr. 5, 1995 *available in* 1995 WL 3619217.

269. Tomasky, *supra* note 237, at 30.

The tunnel could have ancillary benefits other than the harbor. Nationally, 38% of goods are transported by rail.[270] New York, on the other hand, depends extensively on energy intensive trucking, transporting only 2.8% of goods by rail and 90% by truck.[271] This is due mainly to bottlenecks and resulting delays in New York Rail lines.[272] The tunnel could reduce this bottleneck, and ease rail transport of goods.[273] This would create several benefits. More goods would be transported by rail, reducing the price of transportation of goods overall. The tunnel would also reduce traffic on roads, leading to an increase in regional air quality.[274] The lack of traffic may also lead to increased commercial activity in the region, as local road traffic has been cited by transportation experts as the biggest impediment to operating in the New York area.[275]

While critics of the plan point to the tunnel and elements like it as potential "white elephants" to be avoided,[276] the simple reality is that ports such as Halifax are investing in their future with success. There may be concern that the acreage at the Brooklyn site is insufficient to handle hub status, but with new technology, ports such as Los Angeles and Hong Kong are doing many times the volume of the current New York Port at the same acreage.[277] The Brooklyn Harbor Project seems a sound, practical, and far reaching solution for not only the dredging problem, but for the economic and environmental future of the region as well.

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270. *See* Letter from Jerrold Nadler, *United States Congress*, to New York City Mayor Rudolph Giuliani (Mar. 4, 1994) (on file with the FORDHAM ENVIRONMENTAL LAW JOURNAL).

271. *See id.*

272. *See id.*

273. *See id.*

274. *See supra* notes 51-61 and accompanying text (discussing regional air quality).

275. *See* Wahrman, *supra* note 3, at 178 (citing NEW JERSEY ALLIANCE FOR ACTION, INTERMODAL COORDINATION STUDY: A SURVEY AND CONSULTANT RECOMMENDATIONS ON CONTAINERIZED TRANSPORTATION IN NORTHERN NEW JERSEY 36 (Aug. 1994)).

276. *See id.* at 178.

277. *See* Letter from Congressman Jerrold Nadler, *United States Congress*, to New York City Mayor Rudolph Giuliani (Sept. 1, 1995) (on file with the FORDHAM ENVIRONMENTAL LAW JOURNAL).

CONCLUSION

As the Interagency Working Group has suggested, innovative solutions to New York's dredging problem are possible. These solutions are innovative not in the traditional, "inventive" sense, but because their vision is free of conceptions of environmental compromise inherent in the multi-media method of waste disposal endorsed by the EPA. The plan also innovates because it obviates the need to dump in the ocean. This eliminates the applicability of the MPRSA in the plan, and with it, all the uncertainty caused by judicial interpretation of the EPA and the Army Corps criteria for dumping. Aside from being both practical and logistically viable, the Brooklyn Harbor Project secures present and future economic and environmental prosperity for the port.

As with many seemingly overwhelming problems, this one seems to have a commonsense solution. As early as March 18, 1996, New York Harbor pilot Captain Ray V. Keenan, in a conversation with New York Times reporter Andrew C. Revkin, pointed out the 40 foot channel along the Brooklyn piers as a more practical and safer 90 minute journey for larger ships rather than the twisting, 3 hour, 26 mile run to the port of New York.[278] "There has got to be some kind of meeting point where everyone can agree," he said.[279] Fortunately, the Brooklyn piers are a common ground upon which environmentalists and economists can agree. Voices of reason, the voices of Jerrold Nadler, John McHugh, Captain Ray Keenan, and others, must reach the ears of policymakers, and be heard and understood as the environmental and economic future of the New York port region hangs in the balance.

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278. Andrew C. Revkin, *Curbs on Silt Disposal Threaten Port of NY*, N.Y. TIMES, Mar. 18, 1996 at A1.

279. *Id.*