

**The Clean Water Act up “Poop” Creak:
A Case Study of How Local Dynamics Muddied the
Clean Water Act in New Bedford, Massachusetts**

**By Emma Bassein
21H.802**

Spring, 2005

Introduction

Through the 1970's, the U.S. passed a number of bills that were commonly called the Clean Water Act. They set forth standards for what could be released into bodies of water, including industrial waste and sewage. As many as 10,000 towns and cities suddenly found themselves in violation of federal regulations without the means to fix the multi-million dollar situations¹. The city of New Bedford is one example of how what appeared to be simple national legislation vital for health and safety became complicated economic, and political battles on the local level. The first version of the Clean Water Act passed in 1972 and not until 1996, 24 years later, did New Bedford complete the waste water treatment facility needed to comply with the standards.

New Bedford and Clean Water Act Violations

New Bedford, Massachusetts, once the home of a booming textile industry and a major whaling community, by the time of the clean water act in 1972 was in an economic slump, to say the least, and home to some of the worst water pollution in Buzzards Bay.²

With the new regulations, New Bedford was faced with three very expensive and very complicated water pollution issues. Firstly, electrical companies located in New Bedford had released catastrophic amounts of PCB's into the water, contaminating large portions of underwater

¹ City & State, Crain Communications Inc. 1989

² <http://www.buzzardsbay.org/nbprobs.htm>

sediments, resulting in several closings of all shellfish and bottom feeder fisheries in the harbor.

Secondly, the New Bedford sewer system had evolved, as did many older New England towns', from storm drains, that were then combined with sewage drains, which drained directly, and completely untreated, into the Acushnet river. These drains were redirected through a primary treatment plant built in 1973 at Fort Rodman. However, the system was never fully operational, and 38 separate discharge points were intentionally designed as "relief valves" to overflow into the river and Clark Cove during rain storms so that the plant would not receive too much flow to handle. These are called Combined Sewer Overflows (CSO) and are a violation of the Clean Water Act. In addition to the wet weather CSOs, dry weather overflows also plagued the city. These discharges unintentionally overflowed even in dry weather due to problems with the pipes or illegal connections. Together the wet and dry weather CSOs in New Bedford were estimated at 3.2 billion gallons per year of untreated sewage flowing directly into the surrounding water ways.³

Thirdly, New Bedford had only started treating sewage at all in 1973 when the primary waste water facility was built at Fort Rodman. This plant, however, did not even meet the EPA standards for primary treatment due to excess capacity, poor maintenance and operation.⁴ A primary plant is only mechanical; it simply filters out the solids from the

³ Huage, 1988

⁴ Ibid

sewage and then released the water directly off of the southern most point of the city. This process only removes 30- 40% of suspended solids from the water, leaving it highly enriched in organics and containing many bacterial and chemical contaminants.⁵ After the clean water act of 1977, the federal regulation required a secondary treatment plant. A secondary plant cleans the sewage chemically, meaning that bacteria and chemical contaminants are removed from the water before it is released; it also removes up to 95% of suspended solids. New Bedford was releasing over 23 million gallons a day of waste water was released into Buzzards Bay with less than primary treatment.⁶

The first problem, dealing with the PCB's, was turned over to Federal responsibility when the entire harbor was deemed a superfund site. Former mayor John Bullard, when asked why the PCB problem was not a bigger concern for the city replied that once the site was designated as a superfund site, the city became very passive in the process of cleaning it up. So while the pollution was a major concern for the city, it was not a major issue for the mayor.⁷

At the time of the Clean Water Act, the EPA was providing Capital Construction Grants for projects that were necessary for compliance with the new regulations. These grants could pay up to 90% of the cost of the construction project. In New Bedford, the expected construction costs for a new secondary waste water treatment plant were approximately \$200

⁵ <http://www.buzzardsbay.org/nbprobs.htm>

⁶ <http://www.buzzardsbay.org/nbprobs.htm>

⁷ Personal Communication with John Bullard

million. The mayor of the time, Markey, decided that finding even 10% of this amount, \$20 million, was unrealistic for the city, and sought relief from the Federal requirements in the form of a waiver, postponing the project to a later time. The city also hired scientists to try to prove that with the water conditions particular to New Bedford, including the depth and the location of outfall and the flushing rate, exempted them from needing a secondary treatment plant.⁸ They did not succeed in convincing the EPA that the primary treatment was sufficient. In 1981 President Ronald Reagan eliminated the Capital Construction Grants, leaving New Bedford still in violation of the Clean Water Act and \$180 million further away from a new treatment facility.⁹

Despite the new regulations, New Bedford continued to use only the sub-primary waste water treatment for more than a decade. Neglecting this project, however, became much more of a problem in 1987 when the Conservation Law Foundation of Boston, the EPA and the Commonwealth of Massachusetts filed a law suit against the city for violation of the federal and state clean water regulations. Secondary waste water treatment suddenly became a priority.

Background on New Bedford

What is fascinating about this city is that waste water treatment was not a priority earlier. New Bedford Massachusetts, although bordering

⁸ Personal Communication with Steve Hickox, 5/10/05

⁹ Personal Communication with Bob Bowen

along the same Buzzards Bay that is home to Cape Cod, one of the nations most coveted summer destinations, had incomes well below the state average.¹⁰ Raw sewage was literally washing up on the beaches, producing unpleasant odors and a genuine health concern, not to mention reducing tourism. Productivity in the waters immediately surrounding the city was devastated from dissolved oxygen depletion due to nitrogen loading, and shell fish beds had been closed due to fecal chloroform contamination.¹¹

Ironically, New Bedford was not only the largest pollution source in Buzzards Bay¹², it was, and is, the countries largest fishing port. The fishing industry of the city, however, was virtually unaffected by the highly polluted water washing up on New Bedford's shores. The majority of fish were caught far off the coast in George's Bank. So, although local fisheries and shell fish beds were depleted by the pollution, it was not a major economic priority for the industry.¹³ However, the value of the potential shellfish crop from these beds has been estimated at more than \$6 million per year, with a calculated total economic activity passed on to the community of more than \$22 million annually. Although this does not constitute a huge percentage of the current fishing industry in New Bedford, it could easily add more than 200 jobs to the city. Although the perception was that PCB's were largely responsible for the closing of shell fish beds, by the time of the Conservation Law Foundation report in 1988,

¹⁰ CDM Project Description, 2001

¹¹ Huage, 1988; Personal Communication with Steve Hickox

¹² <http://www.buzzardsbay.org/nbprobs.htm>

¹³ Personal Communication with John Bullard

several areas tested below federal PCB standards, but remained closed due to the sewage.¹⁴

But whether the people of New Bedford did or did not care about the environmental disaster that was their sewage system was not longer an issue by 1987. New Bedford had a limited amount of time to clean up their act before they would be responsible for massive fines. Fall River, for example, was fined 2.3 million in 1991 for continued pollution of the Taunton River.¹⁵

The Mayor at the time, John Bullard, took on the challenge of solving the city's sewage problem that so many before him had ignored, not that he really had an option. Bullard was a life time resident of New Bedford, with a Masters degrees in Urban Planning and Architecture from MIT, and a long history of environmental advocacy. He won the 1985 election against the former Mayor Brian Lawler, who had failed to negotiate with the EPA over previous sewer fines, costing the city \$340,000.¹⁶ Bullard wanted to work with the EPA, not against them, to solve New Bedford's sewer problems once and for all. He signed a Consent Decree with the Federal EPA and the Massachusetts Department of Environmental Protection, which included schedules for locating, designing, and constructing a new secondary sewage treatment plant. The engineering design for the new plant was set to be due May 1, 1991.¹⁷

¹⁴ Huage, 1988

¹⁵ New Bedford Standard Times, 6/23/91

¹⁶ New Bedford Standard Times, 8/27/85

¹⁷ New Bedford Standard Times, 5/2/92

Bullard's progress towards dealing with the problem, along with his other works in office, won him wide support with the city. In 1987, he won re-election with a two thirds majority, much stronger than his first election.¹⁸

Sitting the Plant

When it became clear that the sewage treatment plant had to be built, and built soon, the questions remained, where and who's paying? The location of the old primary treatment plant was on the southern most tip of the city which is a peninsula with the Acushnet River on the east, Clark Cove on the west, and Buzzards Bay to the south. The piece of land was the site of Fort Rodman, a civil war site. The 80 acres on the tip of the peninsula was broken into 10 separate parcels, five of which were city-owned, but with federal deed restrictions; 3 were still federally own and used as a reserve training center, and two that were city-owned but designated as historic district.¹⁹ The land was almost completely unused except for the sewage treatment plant and the army reserve; the old fort and barracks were often inhabited by vagabonds or gangs.²⁰ The city of New Bedford is broken up into wards; Ward 6 the comprised the south end of the city near the old plant. The residents of Ward 6 are among the

¹⁸ Rioux, 1992

¹⁹ CDM, Project Description, 2001

²⁰ Personal Communication with Steve Hickox

wealthiest in New Bedford, with property values exceeding those of the rest of the city.²¹

The design and engineering firm that took on the secondary waste water treatment plant with the city was Camp Dresser and McKee Inc. (CDM). They had already worked with the city's CSO problem for a number of years. As part of the EPA regulation, CDM was required to evaluate every site in the city with more than 15 acres of open space. For the City of New Bedford, this consisted of more than 30 sites that had to be looked at and evaluated before a final decision could be made. "[This] delayed it a lot... we even had to look at cemeteries. Someone brought up the idea of having the plant on a boat in Buzzards Bay, so we had to evaluate that too. And every site met resistance, no one wanted it in their backyard" recalled the senior vice president of CDM, Steve Hickox.²² As part of the Consent Decree, the city was also required to initiate a non-point source pollution abatement program.²³

Eventually the site selection was narrowed down to three sites. The first was the location of the existing primary plant at Fort Rodman. One alternative site was Standard Times Field which, at the time, was a vacant area on the north east side of the city, just inside the hurricane barrier on the mouth of the Acushnet River. The land was owned by a developer who had hopes of building condominiums. The site was also adjacent to the

²¹ City of New Bedford Assessor's Office, <http://www.ci.new-bedford.ma.us/Assessors/Welcome.htm>

²² Personal Communication with Steve Hickox

²³ Voyer, 2000

fish processing plants of the city and zoned as a Designated Port Area, meaning that only marine water dependent, marine industrial, or supporting industries were allowed to be developed there. The residents of Ward 4, the ward that contained Standard Times Field, were primarily Latino and lived in low income housing.²⁴ Strictly from an engineering stand point, this site was somewhat better than Fort Rodman. "It's not hard to see that if you want to build something, you build it behind the hurricane barrier." Hickox commented. But the Standard Times field was also at a higher elevation than Fort Rodman, meaning that sewage from some locations would have to be pumped there, instead of driven by gravity. Overall feasibility was equivalent between the two sites.

The second alternative was in the far north end of the city, near the airport and route 140. This location was not on a waterfront and was uphill from virtually the entire city, meaning that all of the waste water would have to be pumped to the site and the water would then have had to be piped out to the shore. From an engineering standpoint, this site was much worse than the other two, but the area was completely non-residential, making it popular with residents near the other two locations.

Almost from the moment it became clear that a new sewage treatment plant would be built, the residents of Ward 6 began their campaign to move it out of their back yard. Among the complaints from Ward 6 residents were fears of offensive odors from the plant, increased noise from both construction and operation, the need to transport solids

²⁴ Personal Communication with John Bullard

from the plant through their neighborhood, increased traffic during construction and generally decreased property values.²⁵ The city councilor from Ward 6, Ralph Saulnier, was also very vocally opposed to building the new plant on the same site as the old one.

Bullard did two things to try to avoid major controversy over the location of the new treatment plant. The first was that in 1987 he created a Citizens' Advisory Committee (CAC) to work with CDM to consider the alternative sites for the plant. Secondly, he pledged \$7 million in revitalization works for the neighborhood that finally hosted the new plant.²⁶

The CAC consisted of 14 members who were essentially self-appointed. The vast majority turned out to be residents of Ward 6. The CAC, not surprisingly, officially recommended to the city that the new secondary treatment plant should be built in the inland location near the airport. The decision was reached by a vote of 13- 1 in favor of that site, with the one opponent recommending the Fort Rodman site. The one dissenter was named Bob Bowen and is now a professor at UMass Boston. Recalling the process that took place he said, "I don't remember what their logic was... But I know what mine was. The Standard Times Field was too valuable a piece of property for this project; it had too much economic potential." He continued to say that the site proposed by the committee was completely illogical; it would have doubled the price of the project

²⁵ Personal Communication with Bob Bowen

²⁶ Personal Communication with John Bullard

and the sewage would have had to be pumped uphill to the plant.

“Their logic was that they didn’t want it in their back yard, and even they could tell that the Standard Times Field was too valuable for private development, so the third site was the only one left.”²⁷

Mayor Bullard faced a decision that was challenging economically, socially, and politically. Putting the new plant in at Fort Rodman clearly made the most economic sense. The construction costs would be lower and the land was already government owned in one way or another. Socially, Ward 6 was the area with the least need for the \$7 million that was compensation for hosting the plant. The most obvious problem was that putting the plant in Ward 6 would be a political nightmare, possibly costing Bullard the upcoming election in November, 1989.

If the plant was instead built in Ward 4, the property would have to be purchased from the private owner, possibly negating the benefits that the planned condos would have on the community and costing more to the city. Another concern was the site’s proximity to the fish processing plants. Food processing near a sewage treatment plant is, at the best, bad publicity and, at the worst, an actual health hazard. It would be a dangerous game to play with the city’s major industry. The benefits of building the plant in Ward 4 were mainly social and political. Socially, the community of Ward 4 could benefit more than Ward 6 from the \$7 million designated for the community development in the ward hosting the plant.

²⁷ Personal Communication with Bob Bowen

Politically, Ward 4 was much less vocal on their opinions about having the plant in their neighborhood.

The final option in the north end was a virtual economic impossibility. The infrastructure needed to move the sewage up hill, and then disposal of both the solids and the cleaned water would have at least doubled the costs.²⁸ The location was remote, therefore less politically dangerous, but also the \$7 million would have been less socially beneficial.

The CDM did not even consider the North site an option from an engineering point of view; it was totally impractical. To them, the remaining two sites were essentially equal, so the decision came down to social welfare. Hickox said, “we sat down with John [Bullard] and said ‘here are the two sites, we can build on both for about the same cost, so whatever you want to do,’ we even said that we would officially recommend whichever site he wanted so that he wouldn’t have to take the blame politically, but he wouldn’t let us do it... he wasn’t a very good politician, he always wanted to do what was right no matter what the consequences”²⁹

In the end, Bullard decided upon the Fort Rodman site in Ward 6. There were many different reasons for this decision. Bullard summarized a major point for his decision, “I always believe that, whenever possible, public projects should be done on public land.”³⁰ Hickox also commented, “I think the idea of the waste water treatment plant next to the fish

²⁸ Ibid

²⁹ Personal Communication with Steve Hickox. 5/10/05

³⁰ Personal Communication with John Bullard

processing plants kind of spooked him out... From a community standpoint, it was the right decision.”³¹ Bullard’s overarching idea was that the Standard Time’s Field site had potential as a private development and the city should work to make city owned property that was currently unused into useful public space. He had a vision of a revitalized Fort Rodman site that turned the whole tip peninsula into a public park with the new plant incorporated into the design.

People were skeptical of this vision, and reasonably so. A waste water treatment center had never been integrated into a public recreation space anywhere in the country.³² Waste water treatment had a not entirely underserved reputation of being smelly and loud. The residents of Ward 6 were outraged that Bullard had chosen this site, and, as expected, showed it at the poles in the 1989 election. Although he still won re-election, it was only by 51% of the final votes, and votes for him from Ward 6 fell from 63% in 1987 to 35% in 1989.³³ Despite his unpopular decision, he remained in office to see the plan to the next phase: design and financing.

The engineering designs by CDM for the secondary treatment plant at Fort Rodman and the surrounding park, including historic and educational areas, were submitted to the state and federal environmental officials just days before the May first, 1991 deadline.

Finding Money for the Plant

³¹ Personal Communication with Steve Hickox

³² CDM, Project Description, 2001

³³ Rioux, 1992

Bullard searched the country for the funds to bring his treatment plant to life. The construction project averaged a cost of more than \$5,000 per resident³⁴, in a city where the median household income is \$37,000 and more than 20% of the population is below the poverty line.³⁵ Some funding was expected to come from the city, but for the vast majority of it, Bullard applied for no-interest loans from the state and federal governments.

In 1989, Bullard successfully lobbied the state legislature to pass the Hayes Bill that provided low interest loans for communities to fund major water works projects.³⁶ 100 communities had been certified for funding by 1991, yet the new governor, Weld, had yet to establish the loan fund by June 1991. Construction on the project needed to start in 1992 in order to comply with the consent decree signed in 1987, and by not providing the loans, the state was hindering the city's ability to move forward with the project.³⁷ The plant also needed financial approval from the New Bedford City council.

In June of 1991 the city council approved \$224.3 million for the secondary treatment plant. It was a major step towards starting construction. Bullard was pleased, but commented, "The celebration is similar to the Bruins winning against the Penguins. You celebrate for about 30 seconds and then you think about what's next."³⁸ All the parties

³⁴ New Bedford Standard Times, 1990

³⁵ U.S. Census Bureau, 1989. <http://quickfacts.census.gov/qfd/states/250001k.html>

³⁶ New Bedford Standard Times, 5/29/91

³⁷ New Bedford Standard Times, 5/2/91

³⁸ Quoted in New Bedford Standard Times, 5/2/91

involved understood that the city needed support from outside to accomplish the task at hand.

To add stress to the financing effort was the persistent attacks from Ward 6. Ralph Saulnier, still Councilor for the Ward 6 said after the council approved the funding “I want to make it clear that the fight continues... The issue of sitting has not been decided.” Saulnier continued with comments that one newspaper reported called “personal and desperate,” saying that “You have a stubborn, arrogant, mayor. No one’s ever said ‘no’ to him. He’s a poor little rich boy... He looks like a mayor, talks like a mayor, but he just ain’t got it.”³⁹ Saulnier claimed that the land at Fort Rodman was zoned for single family homes, and could therefore not be used for the treatment plant. This, however, was patently false. The land at Fort Rodman was, as is mentioned above, either city or federally own and zoned for recreational, educational and historical uses, a restriction which was already being lifted through extensive negotiations with multiple federal government agencies. What’s more is that even if it was zoned for single family housing, the plant would have been allowed because it is a public service building. ⁴⁰ Saulnier’s threats did not succeed in slowing progress on the plant. Ward 6, however, still posed a sizable threat for Mayor Bullard’s re- election in November.

The EPA intended to make New Bedford construct a longer outfall pipe so that waste water would be further dispersed. The price tag on the

³⁹ New Bedford Standard Times, 6/23/91

⁴⁰ CDM Project Description

four mile long pipe was \$70 million. Bullard and CDM worked hard with the EPA to negotiate using the existing outfall with certain modifications. In early July, 1991 the EPA gave their official approval for the Fort Rodman site, including the allowance of the existing outfall pipe. This was a major victory for New Bedford and Mayor Bullard because it reduced the projected cost of the project by up to a quarter of the \$200 million. At this point the major barrier to starting construction was still the absence of loans from the state. The Weld administration had still not set up the account.⁴¹

Bullard was also concerned that, when the funding finally did get approved, the construction of the plant would not benefit the city financially. His goal was to keep as much as possible of the millions of dollars spent on the project in the community. To do this, he not only set up incentives and restrictions for use of local labor, but also tried to get local companies involved. He explained his logic in the following statement, "You can ensure that local people get hired even if local firms are not, that ensures the wages stay in the community, but the profits do not." He emphasized that it was equally important to make sure that the project was designed to facilitate the participation of local vendors. He established four committees to oversee this effort: Vendor's Fair, Legal, Financial Assistance for Local Firms, and Training. The goal was to give local vendors and workers the assistance and skills needed to be competitive in the bidding process for work at the new plant, as well as

⁴¹ New Bedford Standard Times, 7/11/91

writing the bid in such a way as to favor local businesses.⁴² Bullard also signed an executive order requiring the use of 40% local labor by any contractor working on the plant.⁴³ According to Hickox, this order was successfully carried out during the project.⁴⁴

As chairman of the Energy, Environment, and Natural Resources Committee of the National League of Cities (NCL), Bullard brought New Bedford's financial woes to a national audience. He testified for the Senate Environment and Public Works Subcommittee on Environmental Protection, pointing out the shortfalls of the federal government's financial commitments to the Clean Water Act. He declared, "a federal commitment of \$15 billion over the next six years in light of the \$200 billion in required Clean Water expenditures facing the nation's cities and towns falls far short."⁴⁵

The state loans finally materialized in the fall of 1991. Eventually, the city received financial assistance from a variety of different sources, including: the afore mentioned DEP State Revolving Fund, the EPA, The Massachusetts Executive Office of Environmental affairs (EOEA) Division of Conservation Services Urban Self help Program, and the New Bedford Harbor Trust Council.⁴⁶

In October, Mayor Bullard spent some time campaigning for re-election. He sent out a lengthy letter to the residents of Ward 6 trying to

⁴² New Bedford Standard Times, 5/2/91

⁴³ New Bedford Standard Times, 6/8/91

⁴⁴ Personal Communication with Steve Hickox

⁴⁵ Nation's Cities Weekly, 1991

⁴⁶ CDM Project Description

address the concerns with the placement of the plant. In the closing paragraph, Bullard writes, "I'll be working very hard to ensure that the Fort Rodman improvement plan, which we jointly and cooperatively developed, becomes a reality that will enhance Fort Rodman and our City's south end for future generations to come."⁴⁷ His appeal to the south enders did not succeed. In November of 1991, John Bullard lost the election by 390 out of 25,218 total votes to Rosemary Tierney. Although he received more than 51% of the votes in ward 1-5, he received only 37% of the votes in Ward 6.⁴⁸

Despite Bullard's absence from office, the following year brought the beginning of construction at Fort Rodman. The contractors were given special orders as to how and when construction could occur. The first thing that was built was a 15ft. high sound barrier between Fort Rodman and the south end neighborhood. Construction was limited to the time between 7a.m. and 7p.m. and workers were not allowed to park in the neighborhood. Any dirt excavated also had to be reused on site so that it would not be transported through the neighborhood. This resulted in the creation of "earthen berms," mounds vegetated with grasses and trees, used to conceal the treatment plant.⁴⁹

There were several significant challenges with the selected site that the CDM had to address. First was the odor and noise control at the new plant. Unlike most waste water treatment facilities, the entire facility was

⁴⁷ Bullard, 10/24/91

⁴⁸ Rioux, 1992

⁴⁹ CDM, Project Description 2001

covered so that there were no open vats of waste water to emit noxious odors. “All odorous spaces were ducted and routed to odor control systems, and special attention was paid to potential fugitive odors. The Facility includes three separate odor control systems.” Noise was addressed in a similar way by making noise proof walls in the buildings and silencers on stacks.⁵⁰

Another complication was that much of the site had historic value, which ideally would be preserved. This meant fitting the plant to the side of the barracks, while still moving far enough away from Fort Tabor display the Fort’s majesty.

The third complication was that the new facility had to be completed before the old facility could be removed and the new facility had to be interfaced with the existing fall out pipe. This meant that the park would not be finished until well after the treatment plant.

Picture 1: Fort Rodman in 1995⁵¹

⁵⁰ Ibid

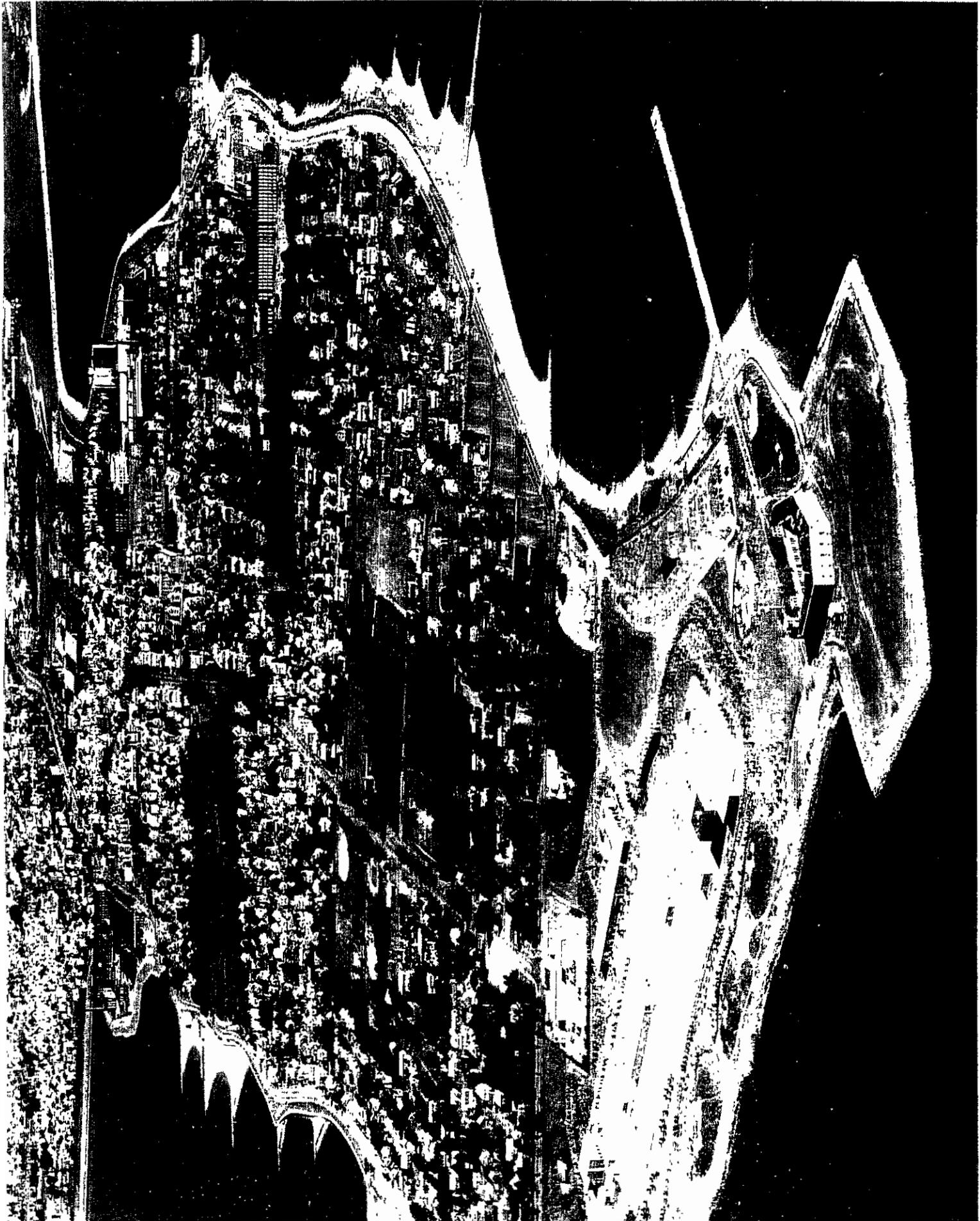
⁵¹ TerraServer USA



This is an aerial photo of the Fort Rodman site in 1995. The new plant is still under construction on the west side of the area, the old plant can be seen at the southern most tip, and just north of it is Fort Tabor. The houses to the north are ward 6.

During the actual construction, the residents of the south end remained fairly quiet, seemingly having reconciled themselves with the reality. When the new treatment facility was completed, the old one had to be decommissioned. This process involved transferring the sludge from the old plant to the new, which released unpleasant odors in the process. The south end residents rose up in arms again to protest the newly built plant. They reformed the Citizen's Advisory Committee and demanded money from the city to hire an outside contractor to double check CDM's work. Ward 6 had shown its strength by ousting former Mayor Bullard, and the point was well taken by future politicians. Consequently, they received thousands of dollars for their investigation.⁵²

⁵² Personal Communication with Steve Hickox



No major faults were ever found, however, and the plant was completed on schedule in 1996. It successfully removes 91% of suspended solids from all 30 million gallons per day.⁵³ The park facilities were completed in the summer of 2000 and has been a great success. As one visitor stated, "We thought nobody would want to come down here, right next to a wastewater plant... but its great...I love it."⁵⁴ Several shell fish beds have been reopened in Clark Cove since the new treatment plant has been in operation.

Conclusion

New Bedford shows a case where a slow start to address the Clean Water Act ended in a success story. But it also shows how dependent that success is upon individual politicians and communities. Ideally, environmental and public safety legislation should not take 25 years to implement.

Major barriers to the secondary treatment plant for New Bedford included the long, and expensive, sitting process, the unavailability of funds, and the politicking of community residents. While local politics may not be in the hands of the federal government, financing these projects has been a major barrier to success nation wide. Many programs have helped, such as the State Revolving Fund in Massachusetts, but much more could be accomplished. Facilitating money saving compromises,

⁵³ New Bedford Standard Times, 11/11/96

⁵⁴ CDM, Program Description, 2001

such as the outfall pipe in New Bedford, or relaxed siting requirements could also help speed up the process of implementation.

Primarily it is important to see how legislation affects towns differently. While it is important to strive for high national standards and enforcement of those standards, it is also important to work with the local leaders individually and appreciate the role that town dynamics has on how legislature can be carried out.

Sources:

Bowen, Bob; Interview on 5/4/05

Bullard, John; Interview on 5/4/05

Bullard, John; Letter to residents of Ward 6, 11/24/1991

Buzzard's Bay Project National Estuary Program, Chapter 6.
<http://www.buzzardsbay.org/nbprobs.htm>

CDM Project Description (2001). Boston, Massachusetts.

City & State newspaper; Fed aid dries up; cities sink deeper in waste- water woes, 1989.

EPA History of New Bedford, <http://www.epa.gov/nbh/html/history.html>

Hickox, Steve; Interview on 5/10/05

Hauge, Paul. (1988) *Lost Harvest: Sewage, Shellfish, and Economic Losses in the New Bedford Area. Conservation Law Foundation of New England*, Boston, Massachusetts.

Rioux, Peter; Nomination of John Bullard for The John F. Kennedy Profile in Courage Award, 1992. Boston, Massachusetts.

Articles From the New Bedford Standard Times:

8/27/85 Sewer fee battle costs \$340,00. Settlement is reached on construction delay

5/02/91 Sewage plant model unveiled on deadline, work should start in 1992

5/02/91 Panel to aim sewer plant profit at area

5/29/91 Bullard presses for sewer funds

6/08/91 Mayor to push for local vendors

6/20/91 Council OKs sewer plant funding

6/23/91 Treatment plant funding vote a feather in City Council's cap

7/11/91 Sewer plant gets EPA go- ahead

11/91 The Standard- Times endorses Mayor Bullard for re- election

11/6/91 It's Tierney's Turn

1/05/92 Voters saw John Bullard as knight or knave

11/11/96 New sewage plant results in cleaner bay

<http://www.buzzardsbay.org/nbprobs.htm>

Voyer, R.A., C.E. Pesch, J. Garber, J. Copeland and R. Comeleo. (2000) New Bedford, Massachusetts: A Story of Urbanization and Ecological Connections. *Environmental History*, Vol. 5. No. 3, p. 352- 377.

TerraServer USA

MIT OpenCourseWare

<http://ocw.mit.edu>

11.013J / 21H.231J American Urban History I

Spring 2010

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.