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2 CITY COUNCIL

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CITY OF NEW YORK

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THE TRANSCRIPT OF THE MINUTES

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of the

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COMMITTEE ON ENVIRONMENTAL PROTECTION

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November 8, 2002

Start: 10:27 a.m.

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Recess: 2:56 p.m.

12

City Hall

Council Chambers

13

New York, New York

14

B E F O R E:

15

JAMES GENNARO

16

Chairperson,

17

COUNCIL MEMBERS:

Bill DeBlasio

18

Oliver Koppell

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Jose Serrano

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2 A P P E A R A N C E S

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Commissioner
NYC Department of Environmental Protection

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Alfonso Lopez
Deputy Commissioner
NYC Department of Environmental Protection

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James Mueller
Director of Planning
NYC Department of Environmental Protection

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Gateway National Recreation Area

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Chief, Environmental Analysis Branch
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Daniel Mundy
Jamaica Bay EcoWatchers

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Adam Brown
Working Waterfront Association
New York/New Jersey Baykeeper

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2 A P P E A R A N C E S (CONTINUED)

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5 Columbia University

6 Ellen Kracauer Hartig, PWS

7 R. Lawrence Swanson, Ph.D

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Ronald Bourque

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New York City Audubon Society

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John E. Pearson

18 Sierra Club - New York City Group

19 Michelle Bicek

Program Associate

20 Environmental Defense

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1 COMMITTEE ON ENVIRONMENTAL PROTECTION

2 CHAIRPERSON GENNARO: Good morning. My
3 name is Jim Gennaro, Chair of the New York City
4 Council Committee on Environmental Protection, and
5 I'd like to welcome you to this hearing.

6 Today the Committee will hear
7 testimony on a very important matter, the future of
8 Jamaica Bay. See, I got this place, I was out there
9 on the bay, I got my pin, I'm all set.

10 October 27th of this year marked the
11 30th anniversary of Gateway National Recreational
12 Area, which in large part includes Jamaica Bay.

13 In fact, Gateway was the first urban
14 national park created, and has brought the national
15 park experience to the residents of the New York
16 City area.

17 One of the first tasks undertaken in
18 creating Gateway was to remove the tons of debris
19 that has been dumped along Jamaica Bay's shorelines
20 for decades.

21 Years ago the bay was not in a good
22 state and was considered by some to be nothing more
23 than a smelly swamp. Today, after much clean-up and
24 stricter environmental regulations, Jamaica Bay is
25 an oasis of great ecological importance, offering a

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2 sanctuary to more than 300 species of birds and
3 nearly 100 species of fish, as well as amphibians,
4 reptiles and small mammals.

5 Now, when I was out on the bay the
6 other day, I didn't actually count all 300 species,
7 I counted some but not all of them. I'm so excited
8 having been out there, it was terrific.

9 However, for the base marshlands, who
10 serve as nesting and feeding areas for an abundance
11 of birds and other wildlife and perform the central
12 role in controlling floods and protecting Brooklyn
13 and Queens shorefront from storms and erosion, they
14 are rapidly and mysteriously vanishing, and numerous
15 theories have surfaced that attempt to explain this
16 phenomenon, such as filling and dredging of the bay,
17 treated wastewater from some of the City's sewerage
18 treatment plants that is released into the bay,
19 changes in the tittle flows, which have adversely
20 affected sediment flows in the bay, a rise in sea
21 level as a result of global warming, and the growing
22 population of geese eating marsh grass buds before
23 they can grow.

24 Nonetheless, the scientific and
25 environmental community has yet to determine a

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2 definite cause which brings us to today's hearing
3 and we're going to figure this all out, again, by
4 1:00.

5 We may not know the cause behind the
6 erosion of marshlands of Jamaica Bay, but we surely
7 cannot afford to sit back and watch them vanish
8 before our eyes.

9 It is the hope of this Committee that
10 testimony presented today will provide the New York
11 City Council with the information necessary to
12 develop a Jamaica Bay preservation action plan.
13 Certainly we want to have a role in that, but there
14 are many other good people who have come before us
15 who have done great work and who continue to do work
16 and I think we just want to try to play our small
17 role, you know, to try to catalyze that.

18 Simply put, it's vitally important
19 that this Committee work together with the
20 scientific and environmental community to rescue the
21 marshlands of Jamaica Bay. And on a personal note
22 I'd like to thank all the folks from Gateway who
23 took us out on the water the other day, it was a
24 great experience, and it got us all excited.

25 I would also like to thank the staff

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2 of the Committee, Donna DeCostanzo and Richard
3 Colon, for their work in bringing this hearing
4 about, and I would certainly like to recognize my
5 colleague Oliver Koppell, former Chair of the
6 Environmental Committee of the New York State
7 Assembly, for his interest in this issue, and I'd
8 like to call our first panel, DEP Commissioner Chris
9 Ward and his associates.

10 COUNCIL MEMBER KOPPELL: Mr. Chairman,
11 if I just might?

12 CHAIRPERSON GENNARO: Oh, sure.

13 COUNCIL MEMBER KOPPELL: I want to
14 indicate my support for the Committee's work in this
15 area and apologize because I will not be able to
16 stay for the entire hearing, but will certainly read
17 all the testimony, and I appreciate your
18 consideration.

19 CHAIRPERSON GENNARO: Thank you.

20 And, so, our first panel, I already
21 mentioned Commissioner Ward, and James Mueller,
22 Director of Planning for DEP, and Alfonso Lopez, is
23 that -- there it is, Alfonso Lopez.

24 So, thank you all very much for
25 coming. As we do always in this Committee, we do

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2 this oath thing, and we have Donna DeCostanzo, the
3 Counsel to the Committee, who will administer the
4 oath, and after that I would like you to state your
5 name for the record and proceed with your good
6 testimony.

7 MS. DeCOSTANZO: Please raise your
8 right hand. In the testimony that you're about to
9 give, do you swear or affirm to tell the truth, the
10 whole truth and nothing but the truth?

11 COMMISSIONER WARD: I do, yes.

12 MR. MUELLER: Yes.

13 MR. LOPEZ: Yes.

14 MS. DeCOSTANZO: Thank you.

15 COMMISSIONER WARD: Thank you, Mr.
16 Chairman. Council Member Koppell, good to see you
17 again. I have a long presentation that I'd like to
18 go through for the Committee today. I think the
19 Committee's recognition and leadership on, (1) the
20 importance of Jamaica Bay, but at the same time the
21 complexity of issues that we face going forward
22 requires a stage setting, if you will, both on the
23 history of the Bay, somewhat of a sense of where the
24 Department of Environmental Protection has been with
25 its mandate and discuss the project specific and

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2 capital budget programs that we have, give you a bit
3 of a framework for the good science and
4 collaborative effort that has been going forward
5 with the Army Corps, the National Park Service, and
6 our other City agencies, to a sense give people a
7 context for where we might go and address this very
8 difficult issue, but, obviously, critical issue.

9 The first slide you have is a great
10 one in the sense that you are looking at a
11 navigational chart from 1899 which shows what
12 Jamaica Bay looked like over a century ago, and as
13 you can see, beach and broad channels located along
14 the southern portion of the bay are evident and had
15 similar depths as they do today, and Grassy Bay is
16 located in the northern portion and had depths
17 raising one to five feet. And as you can see,
18 Jamaica Bay was bordered mostly with tidal wetlands.

19 I use this slide because I think it's
20 interesting in how often we think we know the
21 environment that we are seeking to protect, and I
22 was struck when I read the book Gotham on the early
23 settlers of New York, Dutch and English settlers,
24 describe Manhattan, and the Island of Manhattan and
25 Long Island as these pristine gardens, these hedonic

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2 gardens untouched by human hands when, in fact, the
3 Island of Manhattan had been cultivated, had been
4 geographically changed and had been settled by the
5 Native Americans that dotted the Island, and they
6 were not looking at a pristine hedonic environment,
7 they were looking at a working society in a
8 functioning economy within a different ecological
9 setting.

10 So, I start with this slide to give
11 some context on how often we are thinking about our
12 ecology as a way that we are the first to come upon,
13 and that's particularly in Jamaica Bay not the case.

14 As you can see in the next slide, in
15 the past century, but mostly in the past 40 to 60
16 years, Jamaica Bay has been altered by man's
17 activities, population growth and urban development
18 have resulted in the hardening of shore lines on the
19 northern portion of the bay, thereby eliminating
20 most of the tidal wetlands. The Northern Channel has
21 been dredged to about 25 to 30 feet, and the Grassy
22 Bay was dredged to a maximum depth of 50 feet to
23 support the development of JFK Airport and its
24 runways. And in the spirit of full disclosure, my
25 previous position had been with the Port Authority

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2 of New York and New Jersey and with intimately
3 involved with Kennedy Airport issues.

4 The Broad Channel community has also
5 developed, which together with the JFK extension has
6 effectively separated Grassy Bay from the western
7 portion of Jamaica Bay.

8 So, what has been the environmental
9 impacts of this urbanization? Population growth and
10 the pollutant inputs into Jamaica Bay have obviously
11 increased over time.

12 And this table illustrates the forces
13 of the pollutants, the inputs and particularly
14 identifies the pollutants of concern, as well as
15 what the science community has identified as the
16 possible impact that these have had on the
17 ecosystems of Jamaica Bay.

18 During dry weather, this is an
19 innovation that I, as the recent Commissioner, have
20 really come to focus on, during dry weather the
21 combined sewer system servicing Jamaica Bay convey
22 only the sanitary flow to the water, or wastewater
23 treatment facility.

24 However, during large rainfalls, the
25 volume of sanitary and stormwater flow exceeds the

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2 capacity and this results in overflows known as the
3 CSO program or combined sewer.

4 And seepage and leachate from
5 landfills may contain elevated levels of toxic
6 materials which may affect aquatic and ventic life.

7 So, you can see that there are a
8 variety of potential impacts that are occurring in
9 and around Jamaica Bay which are loading, if you
10 will, the bay, and then having a variety of effects,
11 eutrophication, low dissolved oxygen for aquatic
12 life.

13 I think DEP, to its credit, has
14 recognized its role in addressing the long-term
15 ecology in Jamaica Bay, and what I'd like to go
16 through now is a very aggressive capital intensive
17 program approach to addressing the potential
18 nutrient loading in the bay.

19 And I'll start with the construction
20 of the four wastewater treatment facilities
21 servicing Jamaica Bay, which began in the
22 mid-thirties and was completed in the early 1950s.
23 And Al Lopez, we were out at the 26th Ward the other
24 day, and, again, the history of wastewater treatment
25 is a facility that we are essentially implementing a

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2 wastewater treatment plant, that was formulated a
3 master planning effort in I think around 1918, and
4 the foresighted wisdom of the City leaders then to
5 begin to put together a plan is what we are building
6 on, and the challenges are going to be will we put
7 together a plan for the next 100 years.

8 So, currently all the facilities are
9 meeting the secondary treatment goals of the Clean
10 Water Act; however, DEP has continued to expand and
11 modernize these facilities in order to provide a
12 much greater level of pollution abatement, and DEP
13 has spent, or is committed to spend \$1.3 billion on
14 this expansion and modernization program.

15 In addition, DEP is currently under a
16 judicial order to develop a comprehensive nitrogen
17 control plan, for the bay, which may require
18 additional treatment and class.

19 We'll provide hard copies to the
20 Council so you can see (1) the four plants that are
21 around the bay, when they were built, the time for
22 completion, and then the system's upgrades that we
23 are going through. But as I said, we will spend, or
24 we have spent, and then we will spend \$1.3 billion
25 on the wastewater side.

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2 In addition, our combined sewer
3 overflow abatement program is part of our additional
4 efforts to control and reduce CSOs, and this started
5 with our Spring Creek facility in 1970. It's
6 currently undergoing a design upgrade to the cost of
7 about \$87 million, and construction of the 50
8 million gallon Paerdegat Basin storage facility was
9 recently begun, and this project alone is expected
10 to cost \$300 million. And the wet weather capacity
11 of the Jamaica water treatment facility will be
12 expanded by 50 million gallons per day to reduce the
13 CS overflow in the Bergen Basin. And this will come
14 as part of a theme throughout where we are with this
15 community in Jamaica, but additional sewers are
16 being constructed to reduce CSOs to Thurston Basin,
17 a facility plan is being developed for Fresh Creek
18 that will likely require a storage facility and an
19 increase of wet weather capacity at the 26th Ward by
20 about 50 million mgd. So, as you can see we have an
21 integrated CSO wastewater treatment facility program
22 which is (1) capital intensive, but seeks to address
23 the capacity that we built on the wayside, augmented
24 with the CSO program.

25 Next, one of the main programs that

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2 we have implemented which has a high visibility to
3 New Yorkers and is a critical quality of life
4 indicator, has been our aggressive floatable
5 control, and this, as you can see on the slide, is
6 really addressing the discharge of floatables from
7 CSOs, and it presents both a quality of life and an
8 aesthetic problem.

9 Far too often, and I hope the Council
10 has seen DEP's program in advertising to highlight
11 that sewer systems should not be litter receptacles.
12 When we have a storm surge and people have used the
13 sewer system to drop litter, it ends up on beaches
14 or floating in the bay.

15 Our floatable program with skimmer
16 boats and barriers is to address that problem, and
17 we issued just recently our water quality report
18 which has indicated the success of that floatable
19 program, and how much debris we are actually taking
20 out of the sewer system in making sure it doesn't
21 wash up on City beaches.

22 Again educating New Yorkers will be a
23 real focus of ours that the sewer system is not a
24 litter program, we need to have the sewer system to
25 be part of that network and not the sanitation

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2 system.

3 Sewer system improvements have also
4 been significant for DEP, obviously to improve the
5 tributary system for Jamaica Bay. We're building new
6 storm sewers to keep rainwater out of the sanitary
7 sewer systems, and we're replacing sanitary systems
8 and redirecting existing ones where historically
9 they may have been candidly interconnected in an
10 inappropriate way.

11 CHAIRPERSON GENNARO: Could you go
12 over that again? What was that last point?

13 COMMISSIONER WARD: Sure. We're
14 upgrading the sewer system in the tributaries to
15 Jamaica Bay by (1) building new storm sewers to keep
16 the rainwater out of the sanitary sewer system. So,
17 we have the right capacity to handle the surges when
18 you've have a large rainfall and not have the
19 problem of sanitary discharge to the bay.

20 CHAIRPERSON GENNARO: So right now
21 that area is largely served by combined sewers where
22 you have the sanitary and storm flow?

23 COMMISSIONER WARD: Right.

24 CHAIRPERSON GENNARO: And, so, the
25 additional storm sewers that are going to be built

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2 will be dedicated storm sewers?

3 COMMISSIONER WARD: Right, increase
4 the storm sewer capacity.

5 CHAIRPERSON GENNARO: It won't ever go
6 to the plant, right?

7 COMMISSIONER WARD: Right, exactly.

8 And, again, we're replacing some
9 systems where we had had overlap where we shouldn't
10 have overlap, and we're building new sanitary sewers
11 to pick up illegal discharges in areas not currently
12 served by sanitary sewers.

13 This program alone also will cost
14 about \$100 million going forward.

15 Last, in terms of the actual
16 programmatic implementation from our capital plan, I
17 would like to talk a bit about landfill remediation,
18 and the Department is committed to remediating the
19 Pennsylvania Avenue and Fountain Avenue landfills.
20 Remediation plans include installation of a
21 geomembrane liner, a gas collection and flaring
22 system, and permanent grading of the fill in a
23 barrier protection soil layer, topsoil establishment
24 in order to create an environment appropriate for
25 the planting of vegetation for that ecosystem. And

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2 then over time the restoration of Penn and Fountain
3 could be a real ecological pilot project, which is
4 showing how you can close landfills, bring in
5 environmental remediation and then recreate an
6 environment the public can use for public access,
7 and we're working with the Army Corps of Engineers
8 and the National Park Service to return that asset
9 to the Jamaica community.

10 But one of the things that I
11 highlighted as the front of this presentation is
12 where are we in terms of knowing where the sources
13 of problems that are creating the loss of wetlands?

14 So, we have also, in addition to the
15 capital intensive program, run a very extensive
16 water quality monitoring and modeling program, and
17 we have been active in this and going back to the
18 early 1900s, and it's known as our Harbor Survey
19 Program, and I would be glad to provide copies of
20 that, that was just published earlier this year.

21 But in order to better understand the
22 interrelationship between nutrient inputs, the
23 primary production in algae growth, as well as the
24 dissolved oxygen in the bay, we funded the Jamaica
25 Bay eutrophication study which led to the

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2 development of the eutrophication model, and
3 special water quality monitoring was conducted as
4 part of that effort. We need to build the science to
5 understand exactly what the solutions will be.

6 And the JEM, or the Jamaica Bay
7 Eutrophication Model, is currently being used to
8 assess the nutrient control needs and strategies for
9 the Department, but also for the region under the
10 judicial order for nitrogen control, as well as
11 working with the Army Corps of Engineers and their
12 ecosystem restoration project. And the total cost of
13 this study is going to probably be somewhere to be 2
14 to 3 million dollars, and it is the science that the
15 Corps will need and we will need to identify both
16 nitrogen and ecosystem restoration, what is the next
17 steps for our capital plan.

18 But we have worked hard at ecosystem
19 restoration out in the Jamaica Bay, and beginning
20 around 1996, DEP has been the local sponsor with the
21 Corps on this restoration project. As I said, we
22 provided about \$3 million in both funding and
23 in-kind services. And the final stages of the
24 ecosystem restoration study will be completed in
25 2003. And while I recognize that 2003 seems like,

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2 you know, a long way off, the complexity and the
3 sensitivity of this system, and in a sense getting
4 the science right, is going to be critical and it
5 will be the basis of the Army Corps going forward to
6 seek authorization and funding from Congress, for
7 whatever are the necessary restoration projects that
8 this study has in fact identified.

9 But we have done a lot already, and
10 to be fair and candid, Jamaica Bay EcoWatchers are
11 really to be commended for identifying the issue of
12 wetland loss and bringing it to the attention of the
13 National Park Service.

14 In working with State DEC the
15 Department has confirmed a lot of the observations
16 made by the EcoWatchers. And DEC interestingly, and
17 this is a larger environmental question for the
18 region as a whole, that we have unfortunately
19 identified wetland loss as a regional issue, we need
20 to understand that this might not be, it is not just
21 Jamaica Bay and the sources and causes of wetland
22 loss might not only be found in a Jamaica Bay
23 strategy, but would be part of a much larger
24 regional wetland approach.

25 But faced with the loss of tidal

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2 wetlands, the National Park Service to its credit
3 convened a Blue Ribbon Panel comprised of national
4 experts in wetland functions and ecology to look
5 into what were the causes of the bay loss, and as
6 you can see in this chart there has been significant
7 loss and deterioration of wetlands in a variety of
8 the monitoring parts around this region, and
9 particularly the loss of Spartina in Jamaica Bay was
10 a sort of key ecological indicator that something
11 was wrong.

12 CHAIRPERSON GENNARO: These are the
13 results, or these are the findings of the Blue
14 Ribbon Panel, correct?

15 COMMISSIONER WARD: Correct.

16 CHAIRPERSON GENNARO: And the Blue
17 Ribbon Panel was organized under the federal folks?

18 COMMISSIONER WARD: National Park
19 Service.

20 CHAIRPERSON GENNARO: National Park
21 Service.

22 COMMISSIONER WARD: Right.

23 CHAIRPERSON GENNARO: I expect that
24 you'll be speaking --

25 COMMISSIONER WARD: I'm sure they'll

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2 talk at length.

3 CHAIRPERSON GENNARO: Okay.

4 COMMISSIONER WARD: The box chart that
5 you saw earlier is just a comparative table of loss
6 of marshes at a variety of locations, highlighting
7 that it's not solely Jamaica Bay that we need to be
8 concerned about, although it is important that there
9 is a regional question that we're going to have to
10 address as well.

11 But let's talk a bit about the
12 findings of that panel in the marshes of Jamaica
13 Bay. The marshes were originally built by sandy
14 sediments coming from the ocean inlet to Jamaica
15 Bay, and they were in a sense maintained by the
16 finer sediments moving with the tidal flow and the
17 land-side sources, you know, the natural erosion
18 that occurs, as well as the plant process, peat,
19 which was developing. And this was the sort of
20 baseline ecology that the Blue Ribbon Panel was
21 looking at, and I just give you some anecdotes here
22 of what might be the changes which have really
23 affected it.

24 The inlet moved to the west and
25 stabilized. Sediment movement near the inlet was

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2 managed, which is a sort of casual way of saying
3 that it was involved with dredging.

4 Barrier island and shore line
5 developed.

6 What has often been highlighted and
7 then identified as a potential problem was the work
8 that the Port Authority did at Kennedy Airport,
9 particularly as it relates to the runway. The Daily
10 News has written a lot about the issue of is that
11 flushing action which was lost as a result of the
12 runway extension part of the larger problem? And
13 then obviously what DEP has been in particular
14 concerned about, the nutrient loading from landfills
15 in wastewater sewage treatment facilities, and then,
16 finally, the whole regional questions about changes
17 in development in and around all of these wetland
18 areas.

19 But the Blue Ribbon Panel found the
20 following to be the likely primary contributor as to
21 wetland loss in Jamaica Bay.

22 The dredging, as I mentioned, the
23 high diversity of mussels that present proper marsh
24 drainage, and the extension and stabilization of the
25 Rockaway inlet.

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2 The extension and stabilization was
3 begun in the thirties and led to the construction of
4 the Jacob Reese Park and the Marine Parkway Bridge.
5 And it's the interrelationship of these various
6 potential causes of marsh loss that we need to begin
7 to understand in a much better way.

8 And as this next slide makes clear,
9 it's not only these primary ones that we're focusing
10 on, but there are also going to be secondary
11 potential impacts.

12 The Ulva, the lettuce, the
13 natural-growing lettuce there might limit vegetation
14 and limit growth. The proliferation of jet ski's and
15 boating which occurs in the bay might also be
16 contributing to marsh loss, and then sea level rise,
17 which you can see in this chart has been
18 accelerating and this is something that a variety of
19 locations are struggling with, in terms of how the
20 ecology is changing with sea level loss, and then
21 bird foraging during spring season reduces this
22 initial plant growth.

23 So, all of this the Blue Ribbon Panel
24 has really been working hard to struggle and find
25 where are the key interrelationships which has led

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2 to deterioration.

3 CHAIRPERSON GENNARO: We have people
4 here who are going to speak to that, as well. I
5 think we have a member of the Blue Ribbon Panel, and
6 I think the federal folks are going to speak on
7 that. And, so, if we could sort of summarize, I
8 guess.

9 COMMISSIONER WARD: Yes.

10 CHAIRPERSON GENNARO: So if we could
11 sort of summarize, I guess, because I want to get to
12 --

13 COMMISSIONER WARD: I'll finish right
14 now.

15 In summary, Jamaica Bay represents
16 the ecosystem of enormous complexity, but I would
17 hope that the Council would recognize that the
18 Department has been aggressive in its capital
19 planning efforts for wastewater treatment.

20 CHAIRPERSON GENNARO: Obviously.

21 COMMISSIONER WARD: And that we are
22 committed to working with all of our partners to
23 find out what will be the next phase of the DEP
24 program and identification of a restoration project
25 for Jamaica Bay.

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2 CHAIRPERSON GENNARO: Thank you. Thank
3 you, Commissioner. Thank you for your comprehensive
4 testimony and thank you and your great people who
5 are doing so much to help this critical resource.

6 I just have a couple of things, I
7 made some notes during your presentation.

8 Before I begin, I would like to
9 acknowledge the presence of Council Member Serrano
10 from the Bronx, who has joined us. Thank you. Thanks
11 for being here, and we have some other guests as
12 well.

13 Hi. How is it going up there? Thanks
14 for coming.

15 My name is Jim Gennaro. I'm Chair of
16 the Committee on Environmental Protection. Some
17 members of the Committee are hearing testimony from
18 the Commissioner of the Department of Environmental
19 Protection, Christopher Ward. That's him right
20 there. And we have other people here from the
21 federal government and we're talking about Jamaica
22 Bay.

23 Has anybody heard of Jamaica Bay?
24 It's a big bay. It's a big bay. It's very important.
25 It's very, very important that we try to protect it

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2 so that when you grow up your kids and your
3 grandkids will have this great vital resource.

4 Now, let's see what we've got here.
5 It looks like we've got, this is Public School 77
6 from Manhattan, and your Council Member is Eva
7 Moskowitz. Oh, you've got a great Council Member.
8 You folks are lucky. You folks are lucky to have
9 Eva, she's a great Council member.

10 Let's see, this is fifth grade,
11 right? Fifth grade, good. Good, good, good. I
12 wouldn't want to confuse you with fourth graders.
13 Fourth graders are small, you guys are big.

14 And Donna Savarian? Donna Savarian,
15 are you the teacher?

16 MS. SAVARIAN: Yes.

17 CHAIRPERSON GENNARO: I'm a teacher,
18 too, at Queens College. So, as a teacher and as a
19 Council member, I welcome you to our City Hall here
20 and hope you have a great tour.

21 Okay, thanks very much. How about a
22 big round of applause for the kids from PS 77.
23 (Applause.)

24 Thank you. Say hi to Eva for me.
25 She's a very good Council member. You're very lucky

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2 to have her.

3 Okay, I was glad to hear about all
4 the great things you're doing with regard to the
5 water treatment facilities there.

6 Now, we had some discussion the other
7 day, when we're out on the bay, you know, since
8 we've stopped ocean dumping of the sludge ten years
9 ago, whatever it was, of course, everyone knows that
10 we process the stuff and we take the sludge, we
11 don't dump it anymore out at sea, we put it through
12 the centrifuge or whatever, then you dry it, and
13 then you've got the cake or whatever comes out of
14 that, then that goes for beneficial reuse, and
15 you've got this liquid that's been sort of squeezed
16 out of the sludge. Do you call that the centrate? Is
17 that right? Is that what you call it? Is that what
18 it's called?

19 COMMISSIONER WARD: Right.

20 CHAIRPERSON GENNARO: And the centrate
21 is laced with nutrients. So, what are we going to do
22 with this stuff, right? So, it's got to go back into
23 the plants. And, of course, this is a burden on the
24 plants I'm sure, because that, you know, high
25 nutrient centrate, which used to get dumped out at

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2 sea now has to be fed back into the plants, correct?

3 And I think two of these plants -- I think all four

4 of these plants, of course, produce sludge, of

5 course, and then the sludge is processed. Two of

6 them I believe there? Two of them?

7 COMMISSIONER WARD: Yes.

8 CHAIRPERSON GENNARO: And then the

9 centrate gets filtered back into two of the plants

10 also, right? Is that right? And, now, this has got

11 to create a real nutrient challenge for us to have

12 this stuff mixed back into the plants, I'm sure.

13 I'm just wondering if there's any

14 other way. Now, what if -- maybe I'm talking totally

15 out of school here, would it be a big help for the

16 nutrient loading for the, you know, Jamaica Bay

17 ecosystem, if that centrate did not get fed back

18 into the plants that ultimately discharge into

19 Jamaica Bay? Is that fair to say, that that would

20 help the nutrient loading, if that centrate didn't

21 have to get funneled back into the plants? That

22 would be a fair statement?

23 COMMISSIONER WARD: Yes. In a sense

24 what you've raised, Councilman, is the next

25 generation of wastewater treatment, and our BNR

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2 Program, that Al Lopez can tell you about, is in
3 fact our next major capital upgrade for dealing with
4 nutrient loading.

5 CHAIRPERSON GENNARO: Just so I can
6 complete my thoughts so-to-speak, to give you the
7 benefit of responding to my whole concept such as it
8 is?

9 And, so, you know, one thought is
10 that, well, if that centrate didn't have to get fed
11 into these plants, then maybe it could go some place
12 else or whatever, I don't know, into these other
13 plants that would discharge it some place else. I
14 don't know what kind of volume we're talking about
15 of the centrate, or what the quality of the stuff
16 is, but I know that for example we're capping the
17 landfills. We're going to put some membrane line
18 over the landfill and we're going to put a whole
19 bunch of dirt or whatever it is over that and we're
20 going to create this natural area.

21 Would it be possible to use this
22 centrate to sort of disseminate it over the capped
23 area of the landfills, such that the centrate would
24 sort of almost be beneficially reused for the
25 purposes of nourishing the plant life that would be,

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2 you know, growing on top of the landfill, maybe if
3 we made the layer of dirt like a little thicker, so
4 we could like better assimilate this stuff? Or, I
5 don't know, I'm just trying to think outside the box
6 a little bit, because I see this centrate getting
7 sort of wrung out of the sludge and I'm just
8 wondering if any of these concepts will make any
9 sense to figure. Because if it should be a goal to
10 keep the centrates kind of out of the plants that
11 feed into Jamaica Bay, if that is like a worthwhile
12 goal, then it could either go some place else or we
13 could find something creative to kind of do with it.
14 And we're certainly beneficially reusing the solid
15 part of the sludge, and I'm just thinking in my
16 dream of dreams if we could do something beneficial
17 with the centrate and have those nutrients used for
18 good like in this landfill cover, rather than for
19 evil so-to-speak, in the water.

20 COMMISSIONER WARD: Right.

21 CHAIRPERSON GENNARO: So, that's my
22 concept.

23 COMMISSIONER WARD: Okay. Well, your
24 concept is a good one, and it's one that DEP has
25 demonstrated particularly on Staten Island where we

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2 have created our Blue Belt Program where we are
3 using natural restoration ways of dealing with storm
4 overflow, so we're not having to build large
5 combined sewer systems to capture that runoff
6 problem.

7 But that is really a storm sewer
8 solution, and it's been very successful and we'll be
9 back actually to the Council to talk about the
10 Midland Beach initiatives going forward.

11 Al Lopez will go through why for
12 Pennsylvania and Penn and Fountain the nutrient-rich
13 aspect of this centrate and the pathogens that are
14 associated with it is really not appropriate for
15 that type of reuse strategy, but we are addressing
16 the discharge issues through our BNR program, and Al
17 can give you a sense of both in terms of as you had
18 asked, the volume, and then the size and scope of
19 that program.

20 CHAIRPERSON GENNARO: Okay.

21 You can't spread the stuff out on the
22 thing, it's not going to work.

23 MR. LOPEZ: No. Essentially what we're
24 talking about is a liquid material, the centrate is
25 a liquid. It contains a pretty good amount of

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2 contaminants and pathogens and, so, it requires
3 treatment, it's not something you would want to put
4 on the landfill. So, it makes sense actually to
5 bring it back to the head of the plant and treat it
6 on site.

7 The volumes we're talking about for
8 26th Ward, for instance, are about 1 million
9 gallons, that's well within what the plant can
10 treat. It's 1 million gallons a day, well within
11 what the plant can treat and handle within the
12 process.

13 CHAIRPERSON GENNARO: Well, certainly
14 if you can handle it, but certainly if it didn't
15 have to handle that, you know, the nutrient load of
16 the effluent would be less than it is now,
17 obviously.

18 MR. LOPEZ: Right. But essentially
19 it's still a million gallons that if we wanted to
20 move somewhere else would be very difficult to move,
21 number one, very difficult, very expensive, and just
22 from a programmatic point of view, it makes sense to
23 treat it on-site.

24 So, our approach is to take the
25 material where it is produced, treat it on site,

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2 neutralize it, if you will, on site through the
3 treatment process, rather than moving it somewhere
4 else.

5 Moving it to the landfill, it's a
6 liquid material against transportation, it would be
7 an issue, but aside from that it still has
8 contaminants and pathogens which would not make it
9 appropriate for landfill application.

10 CHAIRPERSON GENNARO: I see. I see.
11 Now, is it the case that -- so, if we have to handle
12 and treat the stuff here, is it the case that any
13 sludge or centrate or whatever, that's like not
14 generated in sort of like the Jamaica Bay area, sort
15 of finds its way into that?

16 I mean, it's one thing if we've got
17 to deal with the sludge and everything that's like
18 produced locally by these plants, but we're not like
19 importing anything, are we?

20 COMMISSIONER WARD: No, absolutely
21 not.

22 CHAIRPERSON GENNARO: Okay.

23 COMMISSIONER WARD: I want to follow
24 up. We do have a very aggressive beneficial reuse
25 program and where we are taking the sludge, whether

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2 it's composting, whether it's for a clean cover and
3 the like. But one of the things that I maybe didn't
4 get across in my testimony as well as I should, the
5 whole nitrogen program is the next phase of these
6 plant upgrades to deal with this issue. And out of a
7 \$400 million plus program for both of these
8 facilities, about two-thirds of that will be the
9 next level of treatment.

10 CHAIRPERSON GENNARO: I heard that, I
11 was just trying to make it easier on you.

12 COMMISSIONER WARD: Okay, sorry.

13 CHAIRPERSON GENNARO: I was just
14 trying to --

15 COMMISSIONER WARD: When you spend
16 \$400 million you like to tell people about it.

17 CHAIRPERSON GENNARO: No, I heard. I
18 just thought maybe there was another -- sometimes
19 there's an easy way out sometimes. But we certainly
20 have to do that, even if we could find something
21 else to do with the centrate, certainly we'd have to
22 do that nutrient removal anyway and not just
23 proceed. I just had a thought, that's all.

24 We've certainly covered the -- I
25 guess to a certain extent you've spoken to this in

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2 your testimony, when we talk about large scale
3 development projects that are kind of going around
4 the bay or whatever, there's always concern for--
5 we've talked about the points, you know, runoff and
6 so on, I guess you've spoken to it to some extent
7 because you're putting in storm drains and so on and
8 whatever?

9 COMMISSIONER WARD: Yes, I talked
10 about the \$100 million upgrade for the storm sewer
11 and the sanitary sewer. I think one of the other
12 things in addition to the combined sewer overflow,
13 Paerdegat Basin in particular, often coming back to
14 us in community issues about if there is development
15 in this community, the size and extent of that
16 development, do we have an appropriate envelope to
17 handle, say, for example, a large residential
18 development out there. I think one of the things the
19 Department prides itself on is that the size and
20 scope of the facilities we have are in fact capable
21 of addressing, you know, potential residential
22 development in the Rockaways, or I think everyone is
23 well aware of the Arverne Project, that we have a
24 design capacity of about 45 million gallons a day
25 and our current capacity is about 23. That's not to

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2 say that there is obviously a significant amount of
3 infrastructure work that would need to take place
4 when you're accommodating that type of growth, but
5 we've always recognized that plant size, wastewater,
6 CSO, storm sewer and sanitary sewer needs to reflect
7 those sort of changing and growing dynamics in any
8 community, but obviously this one as well, which
9 many people talk about being as the next large
10 residential development within the City.

11 CHAIRPERSON GENNARO: Thank you.

12 With regard to the landfill
13 remediation, you know, do we know when the capping
14 is going to be complete? And I'm curious as to --

15 COMMISSIONER WARD: Yes, we're working
16 right now. Actually, that contract, I was just
17 asking John, the contract was just let and we've
18 just started that work and Penn is 2006 and Fountain
19 is 2007. But that work is just now starting.

20 CHAIRPERSON GENNARO: So it will be
21 capped by then?

22 COMMISSIONER WARD: Yes. What I
23 alluded to in my testimony is not only will it be
24 capped, but working with Gateway and the National
25 Park Service, we have a real partnership to restore

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2 to a way that would allow passive public access
3 within the Gateway framework.

4 CHAIRPERSON GENNARO: Right.

5 COMMISSIONER WARD: It's a beautiful
6 location. It gives you a majestic view of the bay,
7 and, so, it's not only capping, it's greening
8 potential paths and the like.

9 CHAIRPERSON GENNARO: Sure.

10 COMMISSIONER WARD: So, it is a long
11 time frame. They were there for a long time, and it
12 will take about three to four years each to complete
13 that.

14 CHAIRPERSON GENNARO: How much
15 leachate is currently -- do we have some handle on
16 how much leachate is kind of working its way into
17 the Jamaica Bay ecosystem?

18 COMMISSIONER WARD: You know, there
19 have been numbers thrown around that are like
20 upwards of a million gallons.

21 I don't know the exact number and
22 I'll have to get back to you on that, but that
23 number is so disproportionate, we're talking in a
24 hundredth of that in terms of leachate. So, we'll
25 get back to you with a definite answer on that. I

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2 wasn't prepared to give you --

3 CHAIRPERSON GENNARO: The hundredth? I
4 don't understand.

5 COMMISSIONER WARD: There's been a lot
6 of speculation about what in fact --

7 CHAIRPERSON GENNARO: As to how much
8 leachate --

9 COMMISSIONER WARD: -- Gets out.

10 CHAIRPERSON GENNARO: Right.

11 COMMISSIONER WARD: And there have
12 been people in community meetings who talked about a
13 million gallons, you know.

14 CHAIRPERSON GENNARO: Like per day of
15 leachate?

16 COMMISSIONER WARD: Yes. And that is
17 so off the scale for what would be occurring at that
18 location. I need to get back to give you --

19 CHAIRPERSON GENNARO: And certainly
20 whatever it is, once it's capped, I mean that will
21 be the way to speak to that.

22 This is a question I'm going to ask
23 all the witnesses; what do you think of turning this
24 place into a national park? What do you say? We
25 should do that, right? You like it?

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2 COMMISSIONER WARD: Turning all of
3 Jamaica Bay --

4 CHAIRPERSON GENNARO: The Gateway, the
5 whole thing, it's part of the national park system
6 now, let's make it a national park.

7 COMMISSIONER WARD: My answer to that
8 question, Councilman, is I leave it to the political
9 wisdom of the elected leaders to work through that
10 issue.

11 CHAIRPERSON GENNARO: It's just
12 something I got kind of excited about when I was out
13 there. It certainly is part of the national park
14 system, but the whole notion of having a full
15 fledged national park within New York City, I just
16 got excited about it.

17 COMMISSIONER WARD: I think one of the
18 things the City of New York should recognize is the
19 extent that the National Park Service is involved
20 already. I mean, Gateway is in many respects Jamaica
21 Bay, and Gateway extends also over into Staten
22 Island. So, Gateway, in terms of what an ecology of
23 Jamaica Bay within an urban setting is from a
24 National Park Service is a majestic achievement
25 already.

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2 CHAIRPERSON GENNARO: Thank you for
3 endorsing the concept of turning this into a
4 national park, I appreciate that. That's great.

5 Thank you very much, Commissioner.
6 Thanks for your good testimony. Thanks for all your
7 great work.

8 Every time we had an issue, you have,
9 you know, hundreds of millions of dollars are being
10 directed in that area, so thanks very much.

11 And our next witness is Alexander
12 Brash of the Urban Parks Service of the New York
13 City Department of Parks and Recreation.

14 Thank you, Mr. Brash. Thank you for
15 coming. I know that everyone, we've kind of heard
16 the story of Jamaica Bay, and the Commissioner took
17 us through the charts and so on, and to the extent
18 that in your testimony there's no need to kind of
19 retail what's been told already, so of course you've
20 got your specific value added that you bring to this
21 process, and your thoughts on areas that weren't
22 covered by the Commissioner. I just want to thank
23 you both for coming, and Donna will administer the
24 oath and then ask you to state your name for the
25 record and proceed with your testimony.

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2 MS. DeCOSTANZO: Please raise your
3 right hand.

4 In the testimony that you're about to
5 give, do you swear or affirm to tell the truth, the
6 whole truth and nothing but the truth?

7 MR. BRASH: I do.

8 MS. DeCOSTANZO: Thank you.

9 CHAIRPERSON GENNARO: Thank you very
10 much.

11 Please state your name for the record
12 and proceed with your testimony. And to work the
13 microphones, as you probably know, when the light is
14 off, the microphone is on, and you have to speak
15 right into the microphone, just like I'm doing, and
16 then we'll be able to hear you well.

17 MR. BRASH: Terrific.

18 Good morning, Mr. Chairman, and
19 members of the Environmental Protection Committee.
20 My name is Alexander Brash, and I am the Chief of
21 the New York City's Park and Recreation's urban park
22 service, and with me today is also Mike Feller, our
23 Senior Scientist from Natural Resource Group.

24 On behalf of Commissioner Benepe, I'm
25 pleased to be here to discuss environmental issues

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2 concerning the future of Jamaica Bay. New York City
3 Parks and Recreation, through the work of our
4 Natural Resource Group and the Urban Park Rangers,
5 have long been tirelessly working to restore and
6 preserve New York City's remaining ecosystems.

7 Established in 1984, the Natural
8 Resource Group was responsible for the acquisition,
9 restoration and management of the City's natural
10 parkland. NRG works with federal, state and other
11 agencies, as well as a multitude of non-profit
12 organizations to ensure the proper repair and
13 ongoing maintenance of such natural areas in the
14 City.

15 The Urban Park Rangers were launched
16 in 1979 and in order to be the City's visible
17 uniformed stewards of its parklands, the Rangers
18 patrol most of the City's larger parks. They enforce
19 the rules and regulations, the protect its wildlife
20 and plants, and they simultaneously educate the
21 public about their proper use.

22 As you may know, and many of you
23 know, Jamaica, the largest wildlife preserve in the
24 City, was once New York City parks land. It was
25 given to the federal government in the early

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2 seventies during the depths of the City's financial
3 crisis. Along with Golden Gate Park in San
4 Francisco, Jamaica Bay became the first federal
5 holding of a national urban parkland. Though the
6 Jamaica Bay Wildlife Refuge is part of the 26,000
7 Gateway national recreation area, our agency is
8 responsible for much of the beach to the south on
9 Rockaway and many of the surrounding wetlands along
10 the tributaries to the north on the Belt Parkway,
11 which you may see on the map behind.

12 In essence, Gateway national areas,
13 in this area Jamaica Bay, New York City parks takes
14 care of the beach.

15 CHAIRPERSON GENNARO: Pardon me, but
16 you've got to speak into the microphone, otherwise
17 it won't be recorded, because all of this is being
18 recorded for the record, and so the Court
19 Stenographer listens to the audiotapes, that's how
20 it gets done.

21 MR. BRASH: As you may see, the New
22 York City Parks Department takes care of the beach
23 on the south side of Rockaway, and then all of the
24 green spaces north of the Belt Parkway surrounding
25 Jamaica Bay.

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2 Before the first Earth Day in 1970,
3 few City planners understood the importance of
4 wetlands. They do not realize the great number of
5 plants, invertebrates, fish and bird species all
6 depend upon the salt marshes for food, resting areas
7 and breeding sites.

8 They did not know that the bay itself
9 was a beneficial engineering component of New York
10 City.

11 The bay's configuration prevented
12 waves from eroding the shoreline in Brooklyn and
13 Queens, provided a great number of recreational
14 opportunity to the area residents, and helped filter
15 toxic waste from polluted waters.

16 Among other environmental issues
17 facing Jamaica Bay in the course of the last decade,
18 it has become apparent that the salt marshes are
19 shrinking.

20 The marsh islands have shrunk in size
21 by nearly 12 percent and a vegetated cover has
22 decreased by as much as 38 percent.

23 The theories regarding the causes
24 behind these losses include global warming, the
25 ongoing affects of channel dredging, wave

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2 refractions generated by the bulkhead and the
3 effects of recreational boating.

4 Our role. As ecosystems are never
5 contained by the human derived boundaries, such as
6 park perimeters, county lines or other such
7 political demarcations, Parks has long worked with a
8 great number of partners in order to ensure the
9 long-term integrity of the City's parks and other
10 natural areas.

11 With respect to Jamaica Bay, parks is
12 committed to working with the scientists, non-profit
13 groups, elected officials, corporate partners, and
14 others to identify what is causing marsh erosion and
15 to prevent further damage in the bay.

16 Protecting our urban environment
17 becomes all the more important as the expanding
18 metropolitan area consumes more open land along the
19 periphery.

20 Parks has been and will continue to
21 work closely with the National Parks Service, the
22 Army Corps of Engineers, the City's Department of
23 Environmental Protection, New York State's
24 Department of Environmental Conservation, as well as
25 its Department of State, the Environmental

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2 Protection Agency, the National Audubon Society, the
3 Trust for Public Land, local community groups, and
4 the elected officials, in order to help safeguard
5 Jamaica Bay.

6 Commissioner Benepe recently attended
7 a conference on Jamaica Bay sponsored by the Gateway
8 National Recreation area and the Brooklyn College
9 Aquatic Research and Environmental Assessment
10 Center.

11 And this past week I attended a
12 conference at Columbia University where the plight
13 of the bay was discussed.

14 Conferences, papers and hearings such
15 as this are all key to educating the public about
16 the issues, maintaining an open dialogue among all
17 interested parties, and helping to assemble the
18 fragments of information ultimately needed to create
19 a management plan for the bay's future.

20 Since the launch of the Buffer of the
21 Bay Program in 1987, Parks has acquired nearly 300
22 acres of land on the edges of Jamaica Bay, and
23 maintains and enhances these parks.

24 By restoring the wetland areas along
25 the tributaries that surround the bay, we will

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2 proactively repair the parks under our care, while
3 we're also helping to protect the Corps, the Jamaica
4 Bay Wildlife Refuge.

5 Some of the projects that parks are
6 actively working on at the moment include the
7 following, and they are shown behind me on the map.

8 Four Sparrow Salt Marsh is a 67-acre
9 marsh which was recently cleaned out and restored.
10 Before this restoration, phragmites covered nearly
11 three acres in the center of the marsh, the area was
12 a dumping ground for more than 5,000 cubic yards of
13 old auto batteries, and debris and garbage clogged
14 the channels.

15 That's all been cleaned out, marsh
16 grasses and some upland shrubs will now be planted
17 this forthcoming spring.

18 In the fall of 2003, the grasslands
19 at Gerritsen Creek in Marine Park will be restored
20 with funding from the City, State and a three to one
21 match from the Army Corps of Engineers.

22 An old landfill currently covered
23 with phragmites will be excavated and converted into
24 11 acres of maritime grassland and 19 acres of tidal
25 wetland.

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2 Starting in Year 2005, Parks will
3 restore the 90-acre White Island in the core of the
4 Marine Park, and recover it with upland grasses
5 characteristic of neighboring Floyd Bennett Field.

6 The restoration of grassland at
7 Spring Creek, scheduled to begin also in 2005 is
8 still in its preliminary design phases, but at the
9 moment we are planning a 30-acre restoration, 15
10 acres of coastal upland and 15 additional acres of
11 tidal wetland.

12 Parks and the Department of
13 Environmental Protection are working closely to
14 design a 40-acre restoration at Paerdegat Basin that
15 will include again both tidal marshes and associated
16 uplands.

17 We are planning a smaller restoration
18 down at Vernon Barbadoes on the south side of
19 Jamaica Bay to compensate for their two-acre loss of
20 salt marsh habitat over the past eight years. We
21 will be expanding this area from a one-acre salt
22 marsh to four acres.

23 Down on Rockaway Beach, the Urban
24 Park Rangers are protecting a piping plover and
25 least tern colony for the past five years, and it is

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2 now probably the largest and most productive colony
3 of its kind on Long Island.

4 This past year 14 pairs of endangered
5 piping plovers, eight pairs of American Oyster
6 Catchers, one pair of Common Terns and roughly 120
7 pairs of Least Terns successfully nested there.

8 Finally, with funding from the New
9 York State Environmental Protection Fund in the
10 City, we're going public with our Forever Wild
11 Program, and in this project we will install more
12 signage demarcating the agency's Forever Wild sites,
13 delineate and post a set of standardized rules
14 governing these sites and place fences around
15 particularly ecologically sensitive areas.

16 Parks is also protecting Jamaica Bay
17 through its environmental education programs. By
18 increasing public awareness of the importance of
19 salt marshes and wetlands we hope to foster a sense
20 of stewardship in the community.

21 Our urban park rangers provide a
22 variety of school programs and other programs for
23 families and visitors in the cities, and these
24 include the natural classrooms, which is a series of
25 programs created in collaboration with the National

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2 Geographics Society, the new Department of Education
3 and the Park Rangers.

4 Using our parks as classrooms, the
5 rangers and teachers can pick from a variety of
6 topics, including botany, ecology, ornithology,
7 native American history and conservation.

8 The Rangers also run a Ranger
9 Conservation Corps. This is an after school program
10 aimed at high schoolers, and involves opportunities
11 for hands-on wildlife management and conservation,
12 and any of our 12 nature centers Citywide.

13 The Rangers offer Explorer Programs.
14 These are weekend and evening programs that are
15 really aimed at families and adults and they offer
16 an opportunity of active recreation in our parks,
17 including such things as canoeing, camping, hiking,
18 cycling, fishing.

19 And, finally, we recently opened the
20 Salt Marsh Nature Center in Marine Park, down in the
21 bottom left corner of our map.

22 This beautiful facility, located on
23 Gerritsen Creek and Avenue U offers exhibits and
24 programs.

25 More than 45,000 people visited this

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2 center last year to specifically learn about and
3 explore the Jamaica Bay ecosystem, its salt marshes
4 and learn in addition about migratory birds and
5 conservation.

6 Therefore, for obvious reasons parks
7 has always been and will continue to be concerned
8 about the issues that confront the fragile
9 ecological webs that hold together each of the
10 remaining ecosystems in New York City.

11 Jamaica Bay's disappearing marshes
12 are a symptom of some of these issues.

13 Given the importance of the bay to
14 New York City's environment, we are committed to not
15 only prevent further damage, but more so to restore
16 as many surrounding wetland areas as possible.

17 All parks, whether under federal,
18 state or City jurisdiction, are important assets
19 that we are entrusted to protect.

20 Through our environmental
21 programming, the Parks Urban Park Rangers hope to
22 educate the public about the value of wetlands, and
23 instill in them and instill in future generations a
24 responsibility to protect them. At Parks, our
25 natural resource group is committed to protecting,

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2 preserving, and if possible, improving every piece
3 every piece of nature that we hold in trust for all
4 future New Yorkers.

5 Through restoration and education the
6 Parks Department will continue to protect Jamaica
7 Bay and all other fragile ecosystems in the City.

8 Thank you.

9 CHAIRPERSON GENNARO: Mr. Brash, thank
10 you very much. I appreciate your testimony and all
11 the good work that Parks is doing. Please give my
12 best to Commissioner Benepe.

13 Now, the total number of acreage of
14 restoration projects that Parks has going on now,
15 this is a considerable amount of acreage, correct?

16 I mean, do we have the sum total of
17 the number of restored acres that --

18 MR. BRASH: I believe, and I'll ask
19 Mr. Feller to correct me, I believe on the order
20 we've acquired 300, we're in the order of working
21 non-rehabilitative restoring roughly another 600 or
22 700 in the properties that surround the bay.

23 CHAIRPERSON GENNARO: That's got to be
24 a terrific benefit. Do you have any sense of what
25 the impact on water quality enhancement is going to

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2 be, or is that in your job to assess that?

3 MR. FELLER: For the quality --

4 CHAIRPERSON GENNARO: You've got to
5 speak right into the microphone, just like I'm
6 doing. You've got to speak right into the
7 microphone.

8 MR. FELLER: We are monitoring before
9 and after conditions with the restoration in the
10 tributaries. Primarily the benefits will be on the
11 order of habitat improvement certainly will be water
12 quality improvement, but slight increments relative
13 to DEP's CSO abatement --

14 CHAIRPERSON GENNARO: Sure.

15 MR. BRASH: Most of our monitoring
16 work has really been with vegetation and the
17 terrestrial animals in the area.

18 CHAIRPERSON GENNARO: Right.

19 MR. BRASH: And for those we have
20 different protocols, some developed, for instance
21 with, in conjunction with the HEP, the Hudson River
22 Estuary Program, the HEP Program, which looks at
23 plants and salt marshes. Some, for instance, are
24 simply done with partners, such as the annual,
25 Audubon does their annual Christmas count in bird

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2 surveys, which give us an indication of what's going
3 on.

4 CHAIRPERSON GENNARO: Do you meet with
5 the folks from the National Park Service on some
6 sort of like regular basis, or some sort of like
7 ongoing cooperation? Or is it the relationship
8 between you and the Gateway folks? Is it based on,
9 you know, is it like project specific? Is it like
10 some sort of ongoing relationship where you meet on
11 a regular basis? Or like what's the nature of the
12 interaction between you folks --

13 MR. BRASH: All of the above. Green
14 people often spend a lot of time together. We
15 certainly attend, for instance, many of the
16 conferences that are given. There's a whole series
17 of different workshops that people get involved in
18 over the course of time and we certainly communicate
19 very well on any specific details that have come up.
20 For instance, both Mike and the Commissioner
21 attended the recent conference only a couple of
22 weeks ago.

23 CHAIRPERSON GENNARO: Great. Well,
24 thanks.

25 National park, yes?

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2 MR. BRASH: We believe it already is a
3 national park in the core.

4 CHAIRPERSON GENNARO: Okay. I want
5 that. Okay. Thank you for your endorsement, I
6 appreciate it.

7 Thanks very much for your great work,
8 and please give my best regard to the Commissioner.

9 And now Mark Matsell has moved on,
10 right?

11 MR. BRASH: Mark Matsell is taking
12 care of many of the same issues in the fair state to
13 the south.

14 CHAIRPERSON GENNARO: Okay. Good luck
15 to him as well. Okay, thank you. Thank you very
16 much.

17 Okay, Councilman Weiner, who had
18 intended to be here with us, unfortunately is not
19 able to join us, what we do have is Chief of Staff
20 Veronica Sullivan, who not only is Anthony's Chief
21 of Staff, but is a friend of mine. And, so,
22 Veronica, it's my understanding, is going to read a
23 statement from the Congressman?

24 MS. SULLIVAN: I am, yes.

25 CHAIRPERSON GENNARO: And after that

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2 we are going to have Billy Garrett from Gateway and
3 the Gateway presentation. So they will be next. And
4 after Gateway will be the Army Corps.

5 MS. SULLIVAN: Congressman Weiner is
6 sorry that he could not be here today, so allow me
7 to read his statement.

8 CHAIRPERSON GENNARO: Sure. State your
9 name for the record.

10 MS. SULLIVAN: Veronica Sullivan,
11 Chief of Staff for Congressman Anthony Weiner.

12 CHAIRPERSON GENNARO: Welcome.

13 MS. SULLIVAN: Thank you.

14 Thank you, Mr. Chairman and members
15 of the Committee for this opportunity to testify on
16 the critically important issue of the disappearing
17 Salt Marshes in Jamaica Bay.

18 I am proud to be here today, not only
19 because I am heartened to see the Council on which I
20 once served focusing its energies on this issue, but
21 also because today's hearing is further proof that
22 when private citizens commit themselves to making a
23 difference, they can spur action at every level of
24 government from City Council to Congress.

25 The fact is the Salt Marshes in

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2 Jamaica Bay have been disappearing for years, but
3 the Park Service, as well as City and State
4 environmental officials did not see it. That is,
5 until a group of concerned citizens led by Dan
6 Mundy, and known as the Jamaica Bay EcoWatchers
7 shone the light on this crisis in a manner that
8 could not be ignored.

9 CHAIRPERSON GENNARO: These guys are
10 the heroes, right? They're the hero here.

11 MS SULLIVAN: The EcoWatchers began to
12 notice something was wrong in the bay in the
13 mid-1990s, and slowly but surely they began to
14 collect data to back up their observations.

15 Once they thought that they had built
16 a strong case, they shared this information with
17 government officials. Unfortunately their claims
18 were largely ignored.

19 These setbacks, however, only
20 strengthened their resolve to save this natural
21 resource from eventual destruction.

22 They continued to collect data, and
23 in the late 2000, efforts were finally rewarded when
24 the State Department of Environmental Conservation
25 decided to conduct a study to explore if there was

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2 any merit to the EcoWatchers' concerns.

3 The DEC study confirmed a loss of
4 more than 800 acres of wetlands since 1974 and
5 predicted that the total disappearance would occur
6 by 20/20 if nothing was done.

7 The study, as a result of the
8 persistence of these concerned citizens, galvanized
9 the entire community to action.

10 I worked with officials and Gateway
11 National Recreation Area and the National Park
12 Service to assemble a Blue Ribbon Panel of experts
13 to analyze the problem and develop possible
14 solutions to save the wetlands.

15 The panel confirmed the accelerating
16 erosion, called for studies to determine the best
17 fixes to the problem, and recommended pilot projects
18 to begin to restore some of the habitat until they
19 were able to find a long-term solution.

20 Many members of this panel met again
21 just last week to provide updates on their findings.

22 They identified additional causes of
23 marsh eroding and destruction, such as the feeding
24 of birds on marsh grasses and made recommendations
25 for further studies.

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2 Perhaps more important, the Park
3 Service disclosed that we were poised to remove
4 beyond just studying the issue, and in the early
5 part of 2003, we will begin some targeted
6 reconstruction projects to test strategies, to not
7 only halt the deterioration of the marshes, but also
8 to bring them back stronger than ever.

9 These initial studies were made
10 possible by \$150,000 that was secured by the State,
11 and as I was pleased to work with Gateway to help
12 secure \$598,000 grant from the Park Service to
13 complete the needed studies and fund some of the
14 reconstruction efforts.

15 Our progress has been great but is
16 clearly not enough. That is why we must act fast and
17 as a cohesive group to save this unique ecosystem.

18 The science community, which is
19 represented on today's panel needs to do more. They
20 were essential to confirming that a problem exists
21 and to identifying the causes of that problem. But
22 they must also be willing to help identify the
23 solutions.

24 And while it is important not to rush
25 into the restoration phase, the fact is that

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2 scientists in their desire to be thorough can
3 sometimes study things to death.

4 Since we not only have a limited time
5 before it is too late to save the marshes, we must
6 ask the science committee to expedite the
7 recommendations with the utmost urgency.

8 The community groups need to do more.
9 They are the engine that has driven the process, and
10 we need them to keep up their efforts to sustain our
11 momentum.

12 In addition, the expertise of citizen
13 groups who have spent decades observing the bay
14 firsthand will be critical.

15 Finally, the government at all levels
16 needs to do more. The \$748,000 in resources we have
17 brought to this project thus far are just a drop in
18 the bucket.

19 Therefore, the federal, state and
20 city governments must all be prepared to contribute
21 additional resources for this worthy cause because
22 they are each an integral part of the solution.

23 We also need to be prepared to
24 transition smoothly from the study phase to the
25 restoration phase of this project.

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2 As I mentioned earlier, this spring
3 will mark the beginning of a sample restoration
4 project, and it is our duty to ensure that these
5 projects start on schedule.

6 The many years of neglect in the bay
7 have left us no choice but to move quickly. Jamaica
8 Bay is a unique ecological resource. It serves as
9 the cornerstone of an estuary habitat, with only one
10 habitat of its kind in existence and it is the
11 nationally significant migrating bird resource.

12 Maintaining the bay is also an issue
13 of national and international concern. Cities all
14 over the world are trying to preserve natural
15 habitat in the face of expanding urbanization.

16 People across the world are looking
17 to Jamaica Bay as a test case for how we balance the
18 preservation of environmental resources with
19 economic growth.

20 The Jamaica Bay EcoWatchers recognize
21 the enormous importance that these wetlands play in
22 New York City, and if not for them the wetlands
23 might have faded away without our knowledge, taking
24 a precious resource from the State of New York.

25 Their perseverance must be matched in

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2 full, lest we discourage citizens for taking an
3 active role in helping their communities in the
4 future.

5 We must not let this important
6 national treasure be destroyed.

7 Thank you.

8 CHAIRPERSON GENNARO: Veronica, thank
9 you very much. And I think we talk about Dan being a
10 hero here, but I think clearly Anthony has been a
11 hero on this issue and we thank him for all of his
12 great work. He's really helped catalyze a lot of the
13 action.

14 MS. SULLIVAN: It's something he cares
15 very much about, yes.

16 CHAIRPERSON GENNARO: Pardon?

17 MS. SULLIVAN: It's something he cares
18 very much about.

19 CHAIRPERSON GENNARO: Yes. And I've
20 seen him for the last couple of nights, as well. And
21 he goes, oh, you've got the hearing coming up, it's
22 good. You know the way he is.

23 MS. SULLIVAN: He's very sorry he
24 couldn't be here.

25 CHAIRPERSON GENNARO: I just saw him

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2 last night, and he goes, oh, I've got this funeral
3 and I'm going to really try to be there, I'm so
4 concerned about the issue, so he's very energized
5 about it, as he is about a lot of very good issues,
6 and we thank him for his leadership. And we thank
7 you for coming here and sharing Anthony's views with
8 us, and for your friendship.

9 MS. SULLIVAN: You're welcome.

10 CHAIRPERSON GENNARO: I appreciate it.

11 MS. SULLIVAN: Thank you.

12 CHAIRPERSON GENNARO: Please give
13 Anthony our collective best, okay? Thank you.

14 And now we have our next witness,
15 Billy Garrett, from the Gateway National Recreation
16 Area.

17 You didn't write your precise title
18 down here, but Superintendent. Superintendent of the
19 Jamaica Bay Unit of Gateway National Recreation
20 Area.

21 Mr. Garrett, thanks for joining us
22 today, and I want a special thank you to all of the
23 folks from Gateway without whose good work, God
24 knows what condition Jamaica Bay, the marshes would
25 be in, so I want to thank you in a special way for

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2 making arrangements for the tour that we took the
3 other day and I was very grateful to be able to see
4 everything firsthand. So, I'd like to thank you very
5 much for coming, and Donna will proceed with the
6 oath, and then you can state your name for the
7 record and deliver your testimony.

8 MS. DeCOSTANZO: Please raise your
9 right hand.

10 In the testimony that you're about to
11 give, do you swear or affirm to tell the truth, the
12 whole truth and nothing but the truth?

13 MR. GARRETT: I do.

14 MS. DeCOSTANZO: Thank you.

15 MR. GARRETT: My name is Billy
16 Garrett. I'm the Superintendent of the Jamaica Bay
17 Unit of Gateway National Recreation Area.

18 Mr. Chairman, on behalf of the
19 National Park Service, I would like to thank you for
20 this opportunity to discuss the issue of wetland
21 loss within Jamaica Bay.

22 My comments will focus on four
23 points: First, the role of the National Park Service
24 issue; second, our understanding of the problem;
25 third, what is being done to address the problem;

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2 and, fourth, what we believe will be needed over the
3 long term.

4 The mission of the National Park
5 Service is to preserve unimpaired the natural and
6 cultural resources and values of the National Park
7 System for the enjoyment, education and inspiration
8 of this and future generations.

9 Our mission statement goes on to add
10 "The Park Service cooperates with partners to
11 extend the benefits of natural and cultural resource
12 conservation and outdoor recreation throughout this
13 country and the world."

14 The National Park System currently
15 contains more than 380 units ranging in size from
16 hundreds of thousands of acres to less than one
17 acre.

18 In and around New York harbor, the
19 national park service manages such well known icons
20 as the Statue of Liberty and Ellis Island, six
21 historic sites, including Federal Hall and Hamilton
22 Grange, and Gateway National Recreation Area.

23 Gateway was established 30 years ago
24 as this country's first national urban park. The
25 recreation area encompasses more than 26,000 acres

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2 in Sandy Hook New Jersey, Staten Island, Brooklyn
3 and Queens.

4 The Brooklyn and Queens part of the
5 park is managed as a single entity we call the
6 Jamaica Bay Unit.

7 The Jamaica Bay Unit takes in 18,560
8 acres, of which approximately two-thirds are aquatic
9 in nature. Most of the islands, waters and submerged
10 lands of Jamaica Bay are located within the boundary
11 of the national recreation area.

12 Although Gateway is designated as a
13 recreation area, we're subject to the same basic
14 laws, policies and regulations that apply to all
15 units of the National Park System.

16 This means we are responsible for two
17 fundamental objectives. First, we must protect the
18 significant natural and cultural resources that are
19 located within the park, second, we must create
20 high-quality opportunities for people to enjoy the
21 park without impairing the resources that make
22 Gateway a special place.

23 With respect to the responsibility
24 for stewardship of Jamaica Bay, the parks enabling
25 legislation is even more explicit. The Act states,

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2 the Secretary of the Interior, shall administer and
3 protect the islands and waters within the Jamaica
4 Bay Unit with the primary aim of conserving the
5 natural resources, fish and wildlife located therein
6 and shall permit no development or use of this area
7 which is incompatible with this purpose.

8 Consistent with this mandate, park
9 management has issued a set of seven objectives to
10 guide protection, enhancement and use of the Jamaica
11 Bay ecosystem. Formalized in late fall of 2000, the
12 objectives address inventory and monitoring, water
13 quality, toxic materials, habitat and bio-diversity,
14 education, recreation and public involvement, and a
15 copy of that document is included in the binder that
16 you have.

17 In December of 2000, parks management
18 first heard that wetland loss could be a serious
19 problem within Jamaica Bay. Prior to that time, most
20 park staff had thought that losses of wetlands were
21 a natural phenomenon and were being offset by growth
22 of new marsh in other parts of the bay.

23 However, after talking with Dan Mundy
24 of the Jamaica Bay EcoWatchers and seeing GIS maps
25 prepared by the New York State Department of

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2 Environmental Conservation, we felt that additional
3 information was needed about this condition and its
4 potential causes.

5 On May 1st of 2000, a Blue Ribbon
6 Panel was convened to consider the issue of wetland
7 loss.

8 The panel was made up of 12
9 scientists, all with extensive experience in various
10 aspects of wetland ecology or marine estuaries.

11 In addition to reviewing evidence of
12 wetland loss, the panel discussed probable causes of
13 this condition and outlined a number of near-term
14 investigations that might help clarify the problem.

15 The Blue Ribbon Panel concluded that
16 numerous interrelated factors are causing the loss
17 of salt marshes in Jamaica Bay. They identified a
18 number of likely explanations, including changes in
19 sediment deposition, build up on wrack on the
20 marshes, contamination and so forth. You've heard a
21 number of those things already.

22 Research suggestions by the Blue
23 Ribbon Panel closely followed their assessment of
24 the factors that were contributing to wetland
25 deterioration.

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2 The report of the Blue Ribbon Panel
3 provided insights into wetland dynamics and
4 direction for the park, but it also gave credence to
5 the issue of wetland loss in Jamaica Bay, and helped
6 galvanize support for action to address the problem.

7 The strategy that has evolved in
8 response to this issue is in my opinion,
9 comprehensive, well coordinated, and remarkably
10 expeditious, given the number and types of agencies
11 and groups that are involved in the effort.

12 On one level the strategy involves a
13 three-track approach narrowly focused on research,
14 protection of existing wetlands and restoration of
15 graded or lost salt marsh.

16 On another level, the strategy seeks
17 to put the issue of wetland loss in a broader
18 context of resource stewardship and the interface
19 between urban and natural systems.

20 Project funding in support of this
21 effort has grown steadily over the past 18 months.

22 To begin with, Marc Koenings, General
23 Superintendent of Gateway NRA, allocated \$50,000 out
24 of the general park budget to support the Blue
25 Ribbon Panel and initiate research.

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2 That was followed by a grant of
3 \$150,000 from the State of New York and recently by
4 the award of \$650,000 from the National Park Service
5 for wetland work over the next three years.

6 We are now in discussions with the
7 Army Corps of Engineers, the New York City
8 Department of Environmental Protection and the New
9 York State Department of Environmental Conservation
10 regarding a \$6.5 million marsh restoration project.

11 Research projects currently underway
12 include evaluation of wrack, bird impacts,
13 contaminants and sediments.

14 In addition to the involvement of
15 park staff and the agencies previously mentioned,
16 work is being done by Brooklyn College, Dowling
17 College, Columbia University, Rutgers University,
18 the University of Rhode Island and the United States
19 Geological Survey.

20 As funds are appropriated and
21 projects finalized, the list of participants in this
22 initiative will expand significantly.

23 As I mentioned earlier, our strategy
24 is not limited to the wetlands themselves. Jamaica
25 Bay is a remarkably rich ecological system, situated

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2 within the largest City within the United States.
3 Ultimately protection of Jamaica Bay and
4 conservation of its natural resources will depend
5 upon how well all of us understand the affect of
6 urban systems on the bay, and whether or not we
7 choose to promote environmental health through our
8 decisions and our actions.

9 As the federal trustee for most of
10 Jamaica Bay, the National Park Service should be an
11 advocate for strong environmental stewardship.

12 More important, we should lead by
13 example and help others understand the meaning of
14 environmental stewardship.

15 In this spirit, Gateway is developing
16 a greening plan that will evaluate all aspects of
17 park operations, and guide our efforts to eliminate
18 use of toxic materials, increase recycling and the
19 use of recycled products, reduce energy and water
20 consumption, and expand use of renewable energy
21 sources.

22 We have also established a center
23 dedicated to promoting use of the park as a natural
24 laboratory and outdoor classroom. One of 16 such
25 learning centers being created by the National Park

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2 Service, our center will specialize in urban
3 ecology, and is referred to as the Jamaica Bay
4 Institute.

5 Finally, we have taken the lead in
6 understanding the various plans, agency missions,
7 organizational initiatives, and personal dreams that
8 might affect some aspect of Jamaica Bay.

9 This project, which is currently
10 underway, will culminate in a Jamaica Bay report,
11 outlining what we share in common, where there are
12 differences and potential conflicts and how we might
13 move forward.

14 We are at the beginning of a long and
15 complex journey. We do not want to misstep through
16 ill-conceived or hasty action. However, stopping
17 deterioration of the salt marsh in Jamaica Bay and
18 restoring portions that have been lost should be
19 pursued as aggressively as is prudent to do so this
20 year, next year and for many years to come.

21 Three variables will control the rate
22 and effectiveness of this effort - funding,
23 scientific knowledge and broad-based public and
24 political support.

25 Saving the Jamaica Bay wetlands will

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2 take lots of money.

3 Consider that the proposed Corps of
4 Engineers project will cost at least \$6.5 million to
5 restore several dozen acres of wetlands, and that
6 the rate of current wetland loss may be as much as
7 45 acres per year. The sums needed can easily be
8 extrapolated into hundreds of millions of dollars.

9 Sobering as this picture may be,
10 given our current economic climate and the state of
11 all government budgets, consideration should also be
12 given to the long-term hard and soft cost associated
13 with continued loss of wetlands in the bay.

14 Research is also expensive. However,
15 if we are to minimize wrong turns and hope to find a
16 solution that maximizes natural processes, we will
17 need a good scientific base upon which to proceed.

18 However, research need not be
19 conducted in a kind of academic vacuum.

20 We are dealing with real problems and
21 scientific investigations should play a major role
22 in the design, implementation and monitoring of
23 pilot projects focused on restoration or protection.

24 Given the high cost and scientific
25 nature of this issue, continued public and political

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2 support will be essential to its successful
3 resolution.

4 To date, the level and range of
5 support we have received is very encouraging. A
6 number of local and state elected officials have
7 endorsed the effort and helped with initial funding.

8 Governor Pataki, Assembly Member
9 Audrey Pheffer and Congressman Anthony Weiner have
10 been particularly noteworthy for their advocacy of
11 this issue.

12 City agencies have also come together
13 with their state and federal counterparts to get
14 projects moving. Environmental groups, neighborhood
15 organizations, and concerned citizens have
16 contributed with ideas and expressions of interest.

17 In conclusion, the National Park
18 Service recognizes the seriousness of wetland laws
19 within Jamaica Bay, and as the federal trustee
20 responsible for much of the bay is committed to
21 leading a long-term effort to address this issue.

22 We believe that the wetlands
23 initiative should be based on the best available
24 science, aggressively pursued and underpinned by
25 broad based support for environmentally sustainable

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2 practices. I should add, we can't do this alone.

3 Much of Gateway National Recreation
4 Area is located within New York City.

5 More importantly, the park contains a
6 number of historic landmarks and natural areas that
7 are an essential part of New York's heritage and
8 legacy.

9 The Jamaica Bay Unit may be part of a
10 proud federal institution, but we are also proud to
11 be part of New York City.

12 We would welcome the opportunity to
13 forge a common vision with you regarding the future
14 of Jamaica Bay, and to pursue that vision in the
15 interest of the wild things that live in the bay and
16 the millions of people who benefit from this special
17 place, as a recreational venue, outdoor classroom
18 and quiet source of inspiration.

19 Thank you.

20 CHAIRPERSON GENNARO: Thank you, Mr.
21 Garrett. I appreciate your testimony and your hard
22 work, you know, and Dave Arvin and all the folks who
23 labor day-to-day on these very important issues. Oh,
24 right, and Dr. George Frame as well, and others.

25 Let me just, I made some notes during

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2 your testimony, and it certainly is good to hear
3 about all of the good things that are taking place,
4 but we're all seeking I guess some ultimate
5 synthesis of all these efforts and to work
6 cooperatively, and you made reference to the Jamaica
7 Bay report, so it's you, meaning the park service,
8 that's been taking the lead in this, because I'm
9 reading from your statement, "this project underway
10 will culminate in the Jamaica Bay report," I guess
11 outlining what all the stakeholders share and how we
12 might move forward.

13 I guess that's what I want to talk
14 about a little bit, sort of how, you know, we can
15 all best come together on this and synthesize all of
16 the good works and it's so nice that we have good
17 works to be synthesized, right? You have DEP doing
18 their thing and Parks doing their thing, and various
19 elected officials and people from the scientific and
20 ecological communities. I mean, are you confident
21 that we're all, that the level of cooperation and
22 synthesis is working as it should or do we have to
23 get to some other sort of higher level of
24 organization in order to make it work better?

25 If you could just speak to that for a

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2 minute, if you could?

3 MR. GARRETT: I've been particularly
4 struck by the goodwill that I believe permeates the
5 various agencies, the people that certainly I've
6 interacted with regarding Jamaica Bay and the
7 concern about the wetlands.

8 I think that there are times when
9 people are not clear about how their particular
10 agency mission relates to say the mission of the
11 Natural Park Service or another agency's mission.

12 There also are times when projects
13 get put together because of the way that particular
14 funding guidelines are established and so forth.

15 There are, in some cases, some
16 differences of opinion about the, if you will, the
17 scientific nature of the bay, and I believe that in
18 order to be really efficient about tackling this
19 problem, and I think people are saying there's
20 urgency here, and so we need to be able to do that,
21 it is really important that we sit down and share
22 what it is that we believe we're responsible for in
23 the bay, everybody that has an interest, and that's
24 really what this is intended to do, is to provide
25 that first step.

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2 We won't know whether we need another
3 layer, so to speak --

4 CHAIRPERSON GENNARO: Right.

5 MR. GARRETT: I would comment also
6 that the process that we're using is exactly the
7 same process that was used in South Florida, when
8 the agencies there started to get together to look
9 at the problems with losses there.

10 CHAIRPERSON GENNARO: So you're
11 confident that we're following sort of like a good,
12 you know, paradigm so-to-speak.

13 MR. GARRETT: And we've got the same
14 people who led the issue in South Florida in the
15 Everglades. So, I think we're on a good base to move
16 forward.

17 CHAIRPERSON GENNARO: In other words,
18 so the project that will culminate in the Jamaica
19 Bay report will be sort of that all encompassing
20 document that says here's what we're doing here.

21 MR. GARRETT: Right.

22 CHAIRPERSON GENNARO: Here's all the
23 various pieces of it, here's the science, the
24 various actors, and here's all the various
25 interests, and this is where we can sort of bring

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2 this thing?

3 MR. GARRETT: Correct.

4 We're not trying to do a plan at this
5 level. There's a lot of people that have been doing
6 plans so we need to see where they all fit and how
7 they fit together.

8 CHAIRPERSON GENNARO: Right.

9 MR. GARRETT: And see where there's
10 commonality and where there are divergences.

11 One of the things that I would --

12 CHAIRPERSON GENNARO: Who are the team
13 members of this whole thing? I mean, this is all
14 coming together, so I guess you've got the City and
15 the feds and the state.

16 MR. GARRETT: Well, we've invited
17 people but not everybody understands yet how
18 critical this could be at a policy level, and, so,
19 we've been trying to get agencies, federal, state
20 and City, to participate. I would simply say if you
21 and the Committee endorsed participation, that might
22 be helpful.

23 CHAIRPERSON GENNARO: By all means, I
24 mean I'd like to participate, you know.

25 MR. GARRETT: We'll see that you're

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2 invited.

3 CHAIRPERSON GENNARO: Now, how often
4 does --

5 MR. GARRETT: The way that we're
6 proceeding is through a series of workshops, and
7 actually we have another workshop for agencies set
8 up on the 15th of this month, and then we'll be
9 moving on to organizations and other stakeholders
10 beginning in January.

11 CHAIRPERSON GENNARO: Oh, I see. So,
12 it's kind of compartmentalized, you're talking with
13 agencies and you're talking about with other
14 stakeholders.

15 MR. GARRETT: Part of this is intended
16 to keep the size of the discussion, it's not to
17 screen anybody out. We want to meet with all the
18 people who have things to say.

19 CHAIRPERSON GENNARO: Right.

20 MR. GARRETT: Then gradually build a,
21 if you will, a matrix, a management matrix that
22 shows what people are doing, or what agencies are
23 doing about different aspects of management in the
24 bay.

25 CHAIRPERSON GENNARO: And this is

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2 funded, this is federally funded?

3 MR. GARRETT: The National Park
4 Service, yes.

5 CHAIRPERSON GENNARO: And of course
6 the National Park Service is the lead on this?

7 MR. GARRETT: Correct.

8 CHAIRPERSON GENNARO: Terrific.

9 I'd like to recognize the presence of
10 Bill DeBlasio from Brooklyn, a member of the
11 Committee.

12 MR. GARRETT: Mr. Chairman, if I could
13 just make one more point --

14 CHAIRPERSON GENNARO: Oh, sure.
15 Please.

16 MR. GARRETT: -- Regarding the report.
17 Under tab 2 in your binder, the first
18 map that's shown there is an illustration of where
19 the park boundary is, where Jamaica Bay is, and
20 where the Jamaica Bay watershed is, and it's clear
21 that the Jamaica Bay watershed extends into Brooklyn
22 and Queens, covers a large amount of urban area, and
23 I think the previous testimony that we had from --

24 CHAIRPERSON GENNARO: It also includes
25 my house.

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2 MR. GARRETT: Great.

3 As well as into Nassau County. We've
4 heard from DEP and Parks regarding their awareness
5 of the connection to the bay, but I think by
6 beginning to look at the bay as part of this larger
7 urban setting, it clearly suggests that there's
8 important linkage that needs to happen between the
9 federal government and the City.

10 CHAIRPERSON GENNARO: Sure. That's
11 clear. And thank you for this detailed document that
12 you gave us. And, so, let's just kind of walk
13 through the process a bit.

14 So, we're doing this Jamaica Bay
15 report, so when is your -- and I guess there are
16 sort of, you know, big milestones in the life of
17 this effort to kind of bring everybody together, and
18 what are the kind of critical dates by which you
19 expect to have some deliverable in terms of, okay,
20 we figured out this aspect of it, and this is when
21 we're going to have like the grand plan to move
22 forward; what's the timetable on that?

23 MR. GARRETT: Toward the end of spring
24 we should have a document out.

25 CHAIRPERSON GENNARO: Oh, I see.

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2 MR. GARRETT: Yes, the first level of
3 this is simply let's talk, and let's record what's
4 going on.

5 CHAIRPERSON GENNARO: Right.

6 MR. GARRETT: And we don't think that
7 that's particularly complicated if we get the right
8 people at the table, and then present the
9 information and that should then help us get some
10 idea about how to move forward.

11 CHAIRPERSON GENNARO: And do you have
12 the local elected officials participating in this
13 effort?

14 MR. GARRETT: I don't believe that
15 that is a formal part of the frame of reference, but
16 I'm open to suggestions.

17 CHAIRPERSON GENNARO: I mean, I know I
18 could help.

19 I know that when I talk to any of my
20 colleagues that represent a piece of this, whether
21 it's on a city level or a state level, I mean we
22 would all like to help or whatever, and to the
23 extent that might be a thought, might be a thought
24 to either by, either because they represent a
25 geographic area that that's part of the system, or

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2 they chair a committee that's critical to the issue
3 such as -- and you also happen to be blessed with
4 the -- the Parks Chairman of the Council lives right
5 there, the economic development chairman also
6 represents a piece of the bay. You know, the youth
7 chairman represents a piece of the bay as well. So,
8 these are all people that I guess by geography and
9 by their committee chairmanship have some interest
10 in this.

11 MR. GARRETT: Certainly one of the
12 uses that I saw of this document was to take it out
13 to elected officials and to help perhaps in a fairly
14 concise way be able to present what lots of
15 different groups and agencies are doing.

16 I'm not sure anyone has a sense of
17 that whole picture.

18 The other thing that, as you and I
19 talked the other day when we were out in the bay,
20 I'm not sure that there is a shared common vision
21 that in a certain way works at a policy level that
22 serves as an umbrella, where all the individual
23 projects and programs can be entered.

24 CHAIRPERSON GENNARO: And that is
25 absolutely critical, because, you know, it's like if

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2 you have an orchestra and people are all playing
3 notes, or whatever they are, certainly you're going
4 to get a sound, but it's not going to be quite what
5 you would expect.

6 It would be great if we could have a
7 symphony, and to the extent that we could get that
8 orchestration would be great, and this I see as a
9 critical piece of that puzzle.

10 Is there anything that we here at the
11 Council could do with regard to the problem of the
12 marshland loss in Jamaica Bay? I know we've got the
13 City agencies working on that, I'm just trying to
14 find some kind of constructive role for what it is
15 that we do. Certainly just this hearing and just the
16 trip the other day, we're calling attention to the
17 issue, making people more aware of it, anything that
18 we could -- I mean, I've got some
19 environmentally-oriented schools in my district and
20 PS 219 has a focus on the environment, Balan High
21 School (phonetic) has a focus on the environment,
22 I've got the Rachael Carson School in my district.
23 And, so, all these little pieces, maybe not big
24 pieces, I mean of course we had the DEP Commissioner
25 here, \$100 million here, \$500 million here, and all

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2 these valuable projects, but the local electeds
3 could sort of select the hearts and minds aspect of
4 it.

5 And if I could, let's talk for a bit
6 about the notion of this full fledged national park
7 status and to what extent has that been kicked
8 around?

9 MR. GARRETT: That actually, the first
10 time I think I heard that was at a meeting when
11 Commissioner Castro mentioned that she thought --

12 CHAIRPERSON GENNARO: For the State?

13 MR. GARRETT: Yes, for the State. She
14 just thought that it would be a whole lot easier for
15 people to understand that this was a national park,
16 not just little letters but also was something
17 terribly important and had a stewardship function if
18 the tidal was different.

19 Certainly, I mean the tradition of
20 the National Park Service is one of not only having
21 national parks but of identifying other units that
22 are still parks with special names.

23 I'm open to whatever it is Congress
24 wants to do. I do think that it's important for the
25 people of New York to know that we're here, and what

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2 our mission is, and if that's --

3 CHAIRPERSON GENNARO: How would that
4 work? How would something get to become a national
5 park?

6 MR. GARRETT: It is simply a matter of
7 changing the existing legislation. As a matter of
8 fact, one of the recreation areas in Ohio, two years
9 ago, I believe, had their name changed to national
10 park. That was introduced by the local Congressman.

11 CHAIRPERSON GENNARO: Sure.

12 MR. GARRETT: So, it's certainly --

13 CHAIRPERSON GENNARO: Certainly, you
14 know, symbolic things can give a big shot in the
15 arm, and, so, I'd like to be open to that as well.

16 MR. GARRETT: This is not an official
17 endorsement. It's something I can't officially
18 endorse.

19 CHAIRPERSON GENNARO: Oh, sure. Of
20 course.

21 MR. GARRETT: You know, you did ask
22 about what things the City might do, and I just
23 would offer three particular points. One is,
24 continued support for the City agencies working on
25 projects that have to do with this. That's really

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2 important.

3 I do think that coming out of the
4 Jamaica Bay report, it would be helpful to consider
5 the possibility of some kind of a formal, whether
6 it's a resolution or a policy or something, that we
7 can hang a number of references on.

8 CHAIRPERSON GENNARO: We could have a
9 hearing on the results of the Jamaica Bay report and
10 get everybody in here and make, you know, sort of
11 like a big whoop to do about it, and maybe that
12 could help as well. I mean, we've got, you know,
13 like a little bit of a bully pulpit here. We invite
14 great people, they come, we've got television, we've
15 got reporters, we'd be happy to play that role.

16 And the timetable for that would be
17 spring; is that correct?

18 MR. GARRETT: Late spring, early
19 summer.

20 CHAIRPERSON GENNARO: Okay, so, we can
21 talk about that, and to the extent that members of
22 this Committee, myself as chair of this institution
23 at large, meaning the Council, can be, you know,
24 helpful in navigating some of the issue that you
25 have with City government and please consider me and

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2 the members of this Committee and my Committee
3 counsel and the staff, the resources for you, and,
4 so, I'd certainly like to play whatever helpful role
5 I could, and I thank you for your great service and
6 we'll be working together on this.

7 I'm glad we went in the boat. I'm
8 glad we went in the boat. So, we go there, a little
9 digression for a second, we're going to take this
10 tour of the thing, and he's like, Council member,
11 it's kind of rough out there, and we could take the
12 van and we could sort of look at what's going on
13 from the land, I'm like, let's take the boat. Let's
14 rock. We're here, you know? And we went out there
15 and it was terrific. And, so, thank you for that,
16 and thanks, everyone from Gateway, for your great
17 service, and we'll continue to work together on this
18 and any way that that could be of help.

19 Thanks.

20 MR. GARRETT: Thank you.

21 CHAIRPERSON GENNARO: Thanks very
22 much.

23 And the next witness is Len Houston,
24 of the U.S. Army Corps of Engineers, and after that
25 we'll have a series of panels, to get all of the

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2 very good people in today under the deadline.

3 I'll be back in 60 seconds, don't go
4 anywhere.

5 (Recess taken.)

6 CHAIRPERSON GENNARO: Okay, Donna.

7 Thank you, Mr. Houston. Thank you for
8 coming and being with us today. Thank you for
9 representing U.S. Army Corps, and Donna will
10 administer the oath. Please state your name for the
11 record and proceed with your testimony.

12 MS. DeCOSTANZO: Please raise your
13 right hand.

14 In the testimony that you're about to
15 give, do you swear or affirm to tell the truth, the
16 whole truth and nothing but the truth?

17 MR. HOUSTON: I do.

18 MS. DeCOSTANZO: Thank you.

19 MR. HOUSTON: My name is Leonard
20 Houston. I'm the Chief of the Environmental Analysis
21 Branch at the New York District Offices at the U.S.
22 Army Corps of Engineers.

23 Good morning, or perhaps more
24 properly, good afternoon. And thank you for offering
25 the Corps of Engineers this opportunity to clarify

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2 what we and our partners are doing to address the
3 problem of marsh loss in Jamaica Bay and what other
4 actions we may be able to bring to bear on this
5 issue.

6 Before looking at the question of
7 marsh loss, I would like to briefly summarize the
8 more traditional roles the Corps is undertaking in
9 Jamaica Bay, in partnership with both the City and
10 the State.

11 First, there is the federal entrance
12 channel to Jamaica Bay which was originally
13 constructed by the Corps and is dredged about every
14 other year to maintain its authorized 20-foot depth.
15 In the more recent past the dredged material has
16 been used to address erosion problems at Plumb Beach
17 and Neponsit Beach, and is now being sought by the
18 City Parks Department to assist in restoring a very
19 rare grassland community on White Island, within the
20 Gerritsen Creek tributary.

21 Second, restoring the ocean beaches
22 along the Rockaways as part of a larger storm
23 protection project is another past activity, and one
24 that is currently being re-examined as authorization
25 for its beach nourishment program is ending.

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2 And third, as part of our harbor-wide
3 Dredged Material Management Plan, we have partnered
4 with the New York State Department of Environmental
5 Conservation to investigate the value and potential
6 for using dredged material to refill and thus
7 restore the deep holes, borrow pits, created to
8 obtain material for use in creating new land along
9 the shores of the bay, including JFK Airport.

10 Currently both agencies are
11 completing an extensive biological, chemical and
12 physical characterization of several pits in Norton
13 Basin along the southern shore of the bay. This will
14 serve as a base for determining if the pits need to
15 be restored and how best to accomplish this.

16 More recently, Congress has added a
17 significant environmental restoration role to the
18 more traditional navigation, flood control and storm
19 protection beach nourishment activities of the
20 Corps.

21 The New York district has focused
22 much effort under these new authorizations on
23 Jamaica Bay, in keeping with its designation by the
24 Harbor Estuary Program as a target habitat of
25 special concern.

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2 feasibility study was identification of the types of
3 degradation that could be addressed and a wide
4 variety of alternatives for restoring these areas.

5 This large pool of often-conflicting
6 opportunities was screened down initially to
7 thirteen areas of interest.

8 Three of those areas involved
9 modeling studies to determining what effect, if any,
10 various features, such as borrow pits, runways,
11 channels and bridges had on water flow and flushing
12 rates of the bay. Ten of the areas were sites for
13 specific habitat restorations.

14 These areas were selected on a
15 combination of technical feasibility, individual and
16 system-wide benefits, cost effectiveness and agency
17 and public support.

18 Another important factor in some
19 selections was the presence of Combined Sewage
20 Overflow, or CSO facilities, at the head of some of
21 the tributaries.

22 These facilities, either in place or
23 planned by New York City DEP, would greatly improve
24 water quality and thereby the success of restoration
25 in that tributary.

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2 The overall "culling" of sites
3 resulted from an extensive outreach effort that
4 included agency work groups, landowners, potential
5 sponsors, and the public.

6 The sites selected were located along
7 the periphery of the bay as that was the area
8 believed to be suffering from the greatest impacts
9 and habitat loss.

10 In the mid-1990s, the issue of marsh
11 loss in the central part of the bay was not a
12 perceived problem and none of our partners or other
13 cooperating agencies identified this as a concern at
14 that time.

15 As the ten restoration sites moved
16 into the detailed site-specific investigations
17 necessary to design a suitable restoration plan for
18 each, the New York City Parks Department applied for
19 and received New York State Environmental Bond funds
20 to construct several of the selected restoration
21 projects that were located on their lands.

22 Since these funds had to be used in a
23 short timeframe, New York City Parks requested that
24 the Corps pull the Garritsen and Spring Creek sites
25 out of the larger feasibility study to expedite

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2 construction under the Corps continuing authority
3 program.

4 This program allows the Corps to
5 design and implement specific habitat restoration
6 projects without the need to prepare a formal
7 feasibility study and have congress approve its
8 recommendations.

9 These two CAP projects, which will
10 restore approximately 40 acres of salt marshes, are
11 moving toward construction in the Year 2004. The
12 remaining eight sites, which could include up to an
13 additional 650 acres of restored marshes, will
14 complete their designs as part of the larger
15 feasibility study.

16 More recently, New York City DEP has
17 approached the Corps about the possibility of
18 undertaking another CAP study to restore and create
19 fringe salt marsh around the periphery of the
20 Pennsylvania and Fountain Avenue landfills.

21 Both landfills are currently being
22 remediated and approximately 20 more acres of
23 historical marsh would be recreated around their
24 shoreline, bringing the total of potential marshes
25 restored along the periphery of the bay to 700

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2 acres.

3 The central marsh losses that are the
4 subject of this committee's hearing are also being
5 addressed. This loss, which was just being brought
6 to the attention of the resource and regulatory
7 agencies at about the time the initial areas of
8 interest were identified, was documented by the
9 Jamaica Bay EcoWatchers.

10 This local citizens group undertook
11 an extensive campaign of public awareness and
12 monitoring of marsh loss that raised this issue to
13 the forefront and helped to initiate the DEC
14 evaluation that confirmed an extensive and
15 apparently accelerating loss of marsh from the
16 central islands of the bay.

17 This loss was distressing not only
18 because it seemed to be continuous but because it
19 seemed to be occurring from inside out, with most
20 islands suffering extensive losses over small
21 periods of time.

22 The New York State DEC study
23 confirmed a significant loss of central wetlands
24 over the past 50 years and predicted that, if
25 unchecked, all but the largest wetland island would

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2 disappear by Year 2020.

3 These findings galvanized the
4 community to action. Gateway National Recreation
5 Area assembled a Blue Ribbon panel of experts in
6 2001 to look into the problem and possible
7 solutions.

8 The panel confirmed the loss and
9 offered a myriad of potential causes and a series of
10 investigations to get a better handle on the causes
11 in order to better identify a "fix". The panel also
12 recommended pilot projects to begin restoring some
13 of the habitat lost while the longer-term
14 investigations tried to uncover the underlying
15 causes.

16 New York State DEC investigators also
17 recommended --

18 CHAIRPERSON GENNARO: Mr. Houston, if
19 I could, with regard to the Blue Room Panel, I
20 believe we're going to have other witnesses that are
21 going to kind of speak to that a little bit, but I
22 know that you have more testimony here like with
23 regard to the Corps specifically and all that, so to
24 the extent that we could focus on that, that would
25 be great.

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2 MR. HOUSTON: Okay. Let me see --
3 going back to the pilot projects, the restoration
4 projects that were recommended by the Blue Ribbon
5 Panel, because implementing these would be expensive
6 and time sensitive, the major players were looking
7 to the Corps of Engineers to address this element of
8 the panel's recommendation.

9 DEP New York City took an active lead
10 in this by requesting the core initiate another CAP
11 study to implement one or more pilot restoration
12 projects.

13 In October, Commissioner Crotty of
14 New York State DEC announced our agency had secured
15 \$1 million to put towards these marsh island
16 restoration efforts, greatly increasing the total
17 non-federal share and therefore the scope and
18 potential magnitude of the restoration the Corps
19 could be involved in.

20 The study is completing its
21 preliminary recon phase, with a draft preliminary
22 restoration plan that lays out the costs and schedule
23 for the design and implementation of one or more
24 pilot restoration projects, including environmental
25 assessments and all necessary permits.

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2 The Preliminary Restoration Plan is
3 currently under review by the interagency team
4 assembled to implement the pilot projects.

5 This team, in addition to the Corps,
6 New York City DEP and New York State DEC consist of
7 the National Park Service, owner and agency of
8 Gateway Area and the New York State Department of
9 State, which has Costal Zone Management oversight
10 for activities in the bay.

11 Once approved by the team, the PRP
12 will be forwarded to our regional offices, along
13 with a letter from our sponsor supporting the
14 activity, allowing us to initiate the environmental
15 restoration report and construction of the selected
16 pilot.

17 Once funds are released, sites and
18 restoration techniques will be selected, plans
19 developed to implement the recommended pilot or
20 pilot projects.

21 This will include a detailed
22 post-construction monitoring effort that in
23 combination will provide immediate relief to the
24 marshes, slow the pace of future losses and help
25 formulate the most effective long-term solution.

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2 Jamaica Bay has been identified along
3 with the Hackensack Meadowlands, as two of the most
4 important remaining largely intact systems in the
5 estuary.

6 Both have benefitted from this status
7 in terms of interest and resources, preserving what
8 remains and restoring at least a portion of the area
9 that was lost.

10 The Corps has been very active in
11 both areas and has benefitted from partners who have
12 been similarly committed to restoring these key
13 systems.

14 The partnering agreements described
15 previously in this testimony will result in over \$6
16 million being invested in studies to restore Jamaica
17 Bay, studies that in turn could lead to a total
18 federal investment in excess of \$100 million, if all
19 the study recommendations currently in design are
20 implemented.

21 And the opportunities do not stop
22 there. Under its most extensive congressional
23 mandate to date, the Corps has been directed to
24 undertake investigations to identify environmental
25 improvements throughout the Hudson-Raritan estuary,

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2 of which Jamaica Bay is a critical part.

3 In our Reconnaissance report released
4 in 2001, the District identified still another site
5 in Jamaica Bay, Brookville Marsh, as one of 13 sites
6 for expedited action under HRA authorization.

7 A companion report to the recon
8 identified additional restoration sites in Jamaica
9 Bay to be considered for inclusion in part of the
10 comprehensive restoration plan that will be
11 developed in partnership with the New York and New
12 Jersey Port Authority.

13 This study, when completed, has the
14 potential to incorporate findings relevant to
15 long-term solutions to the central marsh losses that
16 may result from the ongoing Gateway studies or our
17 own pilot projects.

18 Finally, protection and substantial
19 restoration of marsh islands can be a desired
20 outcome of the large scale HRE study, with the CAP
21 project addressing immediate needs and the HRE
22 Feasibility recommendations addressing the longer
23 term needs. The timing is good and the interest is
24 peaking.

25 All that remains is to complete the

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2 studies and identify a local sponsor willing to put
3 up the non-federal of such an implementation.
4 Ongoing efforts, though substantial in scope and
5 funding compared to a decade ago can be the tip of
6 the iceberg. Jamaica Bay is uniquely situated to
7 benefit even more under HRE authorization, and to do
8 so in a big way.

9 Thank you.

10 CHAIRPERSON GENNARO: Thank you, Mr.
11 Houston. Thank you for your testimony. Thank you for
12 being here. Thank you for your work and the work of
13 the Corps on this important issue. Thank God we have
14 you folks that are in the wetlands restoration
15 business.

16 And I'll just call attention to that
17 one thing that you need to move at least part of it
18 forward, the whole notion of local sponsors willing
19 to put up non-federal shares, could you go over
20 that? Could you expand upon that a little bit?

21 MR. HOUSTON: Okay. We have local
22 sponsors for the Jamaica Bay Feasibility Study, so
23 that's proceeding. We have local sponsors for the
24 CAP projects, those are proceeding.

25 CHAIRPERSON GENNARO: You mean like

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2 funding sources?

3 MR. HOUSTON: Funding sources.

4 CHAIRPERSON GENNARO: Right.

5 MR. HOUSTON: Because my agency
6 requires a local match for everything we do. It's
7 not a granting agency, it has to have a cost share
8 with a local sponsor. The HRE, the bigger study
9 which could look at the larger picture of Jamaica
10 Bay is just beginning.

11 CHAIRPERSON GENNARO: Right.

12 MR. HOUSTON: So, what it requires is
13 when it reaches its conclusions is to have some
14 local agencies ready to come up and step forward and
15 share in the local cost. That's still a couple of
16 years away, but it's always good to identify that
17 need.

18 CHAIRPERSON GENNARO: Sure. Sure.

19 And, so, when you talk about the
20 state doing their piece with the million dollars --

21 MR. HOUSTON: This is for the CAP
22 project that deals with the immediate pilot
23 projects. So, we have funding, or the state and the
24 City has sort of lined up funding to be the match
25 for the CAP project, which will deal with the

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2 immediate problem.

3 CHAIRPERSON GENNARO: And so that's
4 going on?

5 MR. HOUSTON: That's going on right
6 now.

7 CHAIRPERSON GENNARO: And then you
8 also indicated earlier in your statement that we
9 could be looking at 650 acres worth of restoration?

10 MR. HOUSTON: If you look at all the
11 restoration in the CAP projects that were currently
12 undertaken with the parks, and we're currently
13 undertaking with DEP, around the periphery of the
14 bay, this doesn't include Central Park or the bay,
15 they add up to over 700 acres of marshes that would
16 be restored.

17 CHAIRPERSON GENNARO: I see. I see.

18 With regard to restoring the marshes
19 in the interior of the bay, what's your prognosis
20 for how that can and should happen?

21 MR. HOUSTON: I think we're handling
22 that pretty well with the partners that I mentioned
23 before.

24 We're trying to deal with two things
25 at one time. We're trying to deal with stopping the

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2 loss now, and trying to restore some of what's going
3 on while the other, the larger groups are going out
4 to try to identify the cause so they can come up
5 with a long-term solution. So, we're dealing with
6 short term and long-term activities.

7 CHAIRPERSON GENNARO: And I guess you
8 folks are also participating in the Jamaica Bay
9 project?

10 MR. HOUSTON: Yes, we are.

11 CHAIRPERSON GENNARO: Okay. How are
12 you finding that?

13 MR. HOUSTON: I think it's an
14 excellent collaboration of groups that in the past
15 might sometimes not have agreed in things and in
16 philosophy. I find an incredible amount of
17 cooperation coming on now in the last two years.

18 CHAIRPERSON GENNARO: I'm still
19 looking forward to what comes out of that process in
20 the spring.

21 Okay, I have a question that's been
22 brought to my attention here regarding a restoration
23 project that may involve a plan. It's dredge spoils
24 in the borrow pits, in the bay and some potential
25 concern that there might be toxic elements within

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2 the dredge spoils, is this something which is
3 happening or contemplated?

4 MR. HOUSTON: As I indicated in one of
5 our non-traditional, our traditional activities, we
6 are looking as part of beneficial use of dredge
7 material, to use dredge material to restore large
8 borrow areas that might have been degraded.

9 We're currently doing that with DEC.
10 We don't know whether that's the appropriate thing
11 to do at this time, so we're doing this at a very
12 systematic phase with DEC.

13 We currently two small pits in
14 Jamaica Bay in Norton Basin and we're evaluating
15 them to determine if the pit is actually degraded.
16 Is the biological conditions in a poor case, is the
17 physical conditions poor? Do they warrant some
18 action at all? That question hasn't even been
19 answered. The information is being collected for
20 that.

21 The next stage of that is if they do
22 warrant some action, what is the appropriate action?

23 The appropriate action might be to
24 fill the pit up partially or completely back to what
25 it originally was. The question would be what kind

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2 of material do you use? We haven't even gotten to
3 the point where we determine if you even need to use
4 dredge material.

5 There's a concern of the citizens out
6 there, whenever they hear the term contaminated
7 dredge material. The use of contaminated dredge
8 material, if appropriate in this area, would be as a
9 base layer and it would be covered by clean
10 material. And the only reason you would even
11 consider that is because there's a large volume of
12 contaminated material available for use, and if you
13 didn't use contaminated material but had to go back
14 in and buy that same large volume of clean material,
15 it might become cost prohibitive and those areas may
16 never be restored.

17 CHAIRPERSON GENNARO: Oh, I see. And
18 is this something that's been done in the past in
19 the bay?

20 MR. HOUSTON: It has not been done in
21 New York. That's why we're progressing in very, very
22 short measured steps. It has been done elsewhere in
23 the country.

24 CHAIRPERSON GENNARO: What is the
25 usual method of getting rid of dredge spoils? If

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2 dredge spoils in certain inner harbor area are
3 certain to be, you know, have some toxic materials
4 in them and what is ordinarily done with these
5 dredge spoils?

6 MR. HOUSTON: A variety of actions
7 have occurred with them in the past. Other Corps
8 districts, for instance, have distinct disposal
9 areas, containment islands have been constructed
10 where the materials were put in. That option is not
11 looked with a lot of favor on in the metropolitan
12 area, so currently what's happening with
13 contaminated materials, is that they are being
14 treated and used for landfill remediation and other
15 beneficial uses such as that.

16 CHAIRPERSON GENNARO: I see.

17 MR. HOUSTON: So, it's conceivable
18 that you might even treat this material and then use
19 it to fill a pit.

20 CHAIRPERSON GENNARO: I see. Up til
21 now we haven't been using this sort of, you know, we
22 haven't done much borrow pit where we --

23 MR. HOUSTON: No, nothing has been
24 placed in the borrow pit up until now, and if you
25 follow the plans that DEC is developing in

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2 conjunction with the Corps, it won't even be I
3 believe until the Year 2005, 2006 before any
4 material is actually placed in a pit.

5 CHAIRPERSON GENNARO: Has this type of
6 thing been done in other areas --

7 MR. HOUSTON: Yes.

8 CHAIRPERSON GENNARO: -- Where we're
9 using dredge spoils?

10 MR. HOUSTON: It's been done more
11 specifically in Boston and in Seattle.

12 CHAIRPERSON GENNARO: I see. I see.

13 Okay, we'll keep our eye on that as
14 well.

15 Thank you very much for your
16 testimony. I appreciate it. Thank you for being
17 here.

18 Just a couple of things, a couple of
19 housekeeping items.

20 There's another hearing in this room
21 at 1:00, but we're not going to be done by 1:00, so
22 we're going to go into the cozy Committee Room, you
23 know, at the appropriate time, should we need to.

24 I feel compelled to let people say
25 what they have to say and not kind of cut people

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2 off. And, so, I want to hear everything that has to
3 be said, if we can't accomplish that by 1:00 in
4 here, then we can do it in there. And, so, we've got
5 a little, you know, I guess more time to work with.

6 Of course, I've got respect for
7 everyone's timing here, and, so, we're not going to
8 belabor things that don't have to be belabored, but
9 we're not under the 1:00 deadline anymore.

10 I would also like to, because during
11 Mr. Houston's testimony and others, have mentioned
12 the state, and I should state for the record, I'm
13 happy to state for the record, that although the
14 State DEC could not be at this hearing, they're very
15 concerned about the issue. I did get a call from the
16 Region 2 Director, Mr. Cunkill, about this issue, I
17 got a personal phone call from Erin Crotty, the DEC
18 Commissioner, she called me personally about this
19 hearing, so both the Commissioner and the Region 2
20 Regional Director are very involved, are very
21 interested, and we all know that they've done a lot
22 of good work in this area.

23 They were sorry that they weren't
24 able to be here, but they did each speak to me
25 personally about the issues and what was going to be

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2 going on at the hearing, and, of course, they want
3 me to brief them after the fact, which I will do.

4 And we heard the statement from
5 Congressman Weiner, but we also have written
6 testimony from State Senator Malcolm Smith, who has
7 been very involved in the issue. Dr. Martin
8 Schreiber, I hope I'm saying that right, from
9 Brooklyn College and Dr. John Tencriti (phonetic)
10 from Dowling College. So, I just wanted to state for
11 the record the participation of those folks who
12 couldn't be here today but are very interested
13 nonetheless.

14 And, so, we're going to the panel
15 phase of our hearing. We're going to be putting some
16 folks in panels, and the next panel to be heard
17 from, Dan Mundy of Jamaica Bay EcoWatchers, Don
18 Riepe, of the American Littoral Society, and Adam
19 Brown, of the Working Waterfront Association for New
20 York and New Jersey Baykeeper.

21 I've got Baykeeper testimony, and
22 I've got Jamaica Bay EcoWatcher testimony.

23 Do you have written testimony, Don?
24 Do you have written testimony?

25 MR. RIEPE: No.

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2 CHAIRPERSON GENNARO: No, okay.

3 So, I'd like to thank you very much
4 for your patience, for being here, and we're
5 grateful to have you and to get the benefit of your
6 views. Having said that, we'll put you through the
7 oath ritual, and I would ask you to each state your
8 name for the record and proceed with your testimony.
9 We'll take testimony from this way to that way.

10 MS. DeCOSTANZO: Please raise your
11 right hand.

12 In the testimony that you're about to
13 give, do you swear or affirm to tell the truth, the
14 whole truth or nothing but the truth?

15 MR. MUNDY: I do.

16 MR. BROWN: I do.

17 MR. RIEPE: I do.

18 MS. DeCOSTANZO: Thank you.

19 CHAIRPERSON GENNARO: Okay. And then
20 in turn, I guess, starting with Dan, just state your
21 name and proceed with your testimony.

22 What we'll probably do is we'll
23 probably wait til we have heard from all three of
24 you before I proceed with questions or comments,
25 whatever. And I may direct the question to any one

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2 of you, or to just in general and anybody can jump
3 in and answer it.

4 So, once again, thank you. And, Dan,
5 the floor is yours. Please state your name for the
6 record and proceed with your testimony.

7 MR. MUNDY: Thank you, Councilman. I'm
8 wearing two hats this morning, I'm representing the
9 Jamaica Bay EcoWatchers, as well as Community Board
10 14 in Rockaway. I'm the environmental chair and the
11 district manager has asked me to represent him, as
12 he couldn't make it today.

13 Good morning, and I thank you for
14 inviting me to speak on this most important issue.

15 My name is Dan Mundy, and I'm from
16 the Jamaica Bay EcoWatchers. We're an environmental
17 group whose mission is to preserve, protect, enhance
18 and restore the ecosystem of Jamaica Bay.

19 Our members have over 500 cumulative
20 years of knowledge and experience of Jamaica Bay. We
21 are the ones, who as mentioned by others, who seven
22 years ago first discovered the disappearance of the
23 salt water marshes in Jamaica Bay.

24 We then spent the first couple of
25 years confirming and documenting our suspicions. The

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2 next couple of years were spent in trying to
3 convince the different jurisdictional agencies of
4 this problem.

5 And, finally, when we accomplished
6 that, we went on to enlist the help of our elected
7 officials to help us lobby for funding to initiate
8 pilot investigations as to the possible causes, as
9 well as pilot projects to stem the loss of marshes,
10 and that is where we are now.

11 Here are some statistics that were
12 already presented but I'd like to put them in a
13 different context so I can continue on.

14 From 1857 to 1924, there were
15 approximately 3,300 acres of marsh islands, with an
16 annual change of plus or minus ten acres.

17 From 1924 to 1974, a 50-year span, we
18 lost only ten acres per year. But from 1974 to 1994,
19 a shortened 20-year span, we lost 26 acres per year.
20 And then from 1994 to 1999, in only five years we
21 lost 44 acres per year. And now we're losing over 50
22 acres per year.

23 It is predicted that in 20 years from
24 now all of the marsh islands, except for one, will
25 be gone.

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2 This will have a tremendous impact on
3 the bay's ecosystem, as well as the shore line
4 infrastructure of the bay.

5 And I'd just like to expand on that
6 for a minute, because you're wondering why.

7 Well, the fact is that if the marsh
8 islands of Jamaica Bay disappear, the dampening
9 effect that they have on the waves, as we saw the
10 other day when we took our boat ride out there, as
11 we got closer to those marsh islands, the waves
12 subsided, because we were on the least side of them,
13 and one was only to imagine that day that we were
14 there, and those on the boat, what it would have
15 been if those marsh islands weren't there, and I
16 think you have seen that for yourself, Jim, what we
17 witnessed.

18 The wave fetch will increase from
19 three feet to five feet, and with the four or five
20 mile stretch across Jamaica Bay the outer fringes of
21 the bay will be severely impacted, the Belt Parkway.
22 The water is only 50 feet from the Belt Parkway at
23 the present time. I took the Independent A line
24 today in from Broad Channel to here, and at high
25 tide the water was ten feet from the tracks, where

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2 marshes used to be. So, you can see very soon how
3 that's going to be impacted, as well as the
4 landfills and everything else that goes around the
5 side of the bay, all be impacted by the loss of
6 these marsh islands through the increased wave
7 action.

8 Now, I know I'm talking to a Council
9 who will have to make very big decisions in regard
10 to a tremendous deficit we are facing here in New
11 York City, however, I also know that the New York
12 City DEP has one of the largest budgets, and
13 sustains that budget through the New York City Water
14 Board which regulates our water bills, which, by the
15 way, you don't really have impact on, except at
16 their hearings, and myself also.

17 CHAIRPERSON GENNARO: I've got some
18 impact.

19 MR. MUNDY: Okay, that's what I'm
20 trying to say.

21 One of the functions of the DEP is to
22 build and manage the wastewater treatment system for
23 the City, and it's been said before, in Jamaica Bay
24 there are four such treatment plants which discharge
25 over 250 million gallons per day of effluent into

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2 the bay during dry weather conditions and over a
3 billion gallons a day during rain events through
4 CSOs and outfall discharges.

5 Although the DEP has made great
6 strides in enhancing the water quality in Jamaica
7 Bay more can and must be done. Since we have stopped
8 ocean dumping of waste treatment sludge in 1002 and
9 1993, they have through the mandated dewatering
10 process added high concentrations of nitrogen into
11 the bay with this centrate. These concentrations in
12 1993 caused a 20 percent nitrogen increase in
13 effluent loading and a 30 percent increase in 1998.
14 And the reference for that is their regional harbor
15 quality book of 2000.

16 This has caused eutrophic conditions
17 in the waters of the bay. I believe the timing of
18 these events, in conjunction with the disappearance
19 of marsh and the die-off of mussels should be
20 further investigated.

21 The decrease in water clarity and
22 increase in algae blooms during the late '90s are the
23 result of the additional nitrogen load.

24 The DEP is currently under a consent
25 order from the New York State DEC to upgrade the

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2 26th ward treatment plant for biological nutrient
3 reduction. I am requesting that you, the Council,
4 inquire as to the feasibility of the DEP reducing
5 this time schedule for implementation. Also, as what
6 can be done to include the Jamaica dewatering plant
7 into this program.

8 It doesn't make much sense to me to
9 only upgrade one of the facilities while the other
10 continues to degrade the bay.

11 Thank you.

12 CHAIRPERSON GENNARO: Thank you.

13 And I'll ask questions of you once
14 all the panel has completed their testimony.

15 Don, you're up.

16 MR. RIEPE: Hi. Thank you.

17 My name is Don Riepe, and for the
18 past 24 years I have worked --

19 CHAIRPERSON GENNARO: You can move the
20 mic and make it more comfortable for you. Okay.

21 MR. RIEPE: I'm uncomfortable to begin
22 with, so I might as well.

23 CHAIRPERSON GENNARO: Okay.

24 MR. RIEPE: For the past 24 years I
25 have worked for the National Park Service at the

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2 Jamaica Bay Unit, currently I'm the district manager
3 for the Jamaica Bay Wildlife Refuge which is a 9,000
4 acre preserve in the middle of Jamaica Bay.

5 This is an internationally renown
6 estuary and home to over 330 species of birds that
7 have been reported there. It's an amazing diversity
8 of bird life.

9 In addition, there were several
10 fishery surveys undertaken by myself and several
11 other people in agencies over the last 30 years that
12 identified 110 species of fin fish. All of this
13 translates into one for recreational and economic
14 advantages for the City.

15 In January I will retire from the
16 National Park Service and assume the position of
17 Jamaica Bay Guardian. This will be a position with
18 the American Littoral Society, a coastal
19 conservation organization.

20 As the Guardian I will attempt to --

21 CHAIRPERSON GENNARO: That's what I
22 like. I like guys that retire but don't retire.

23 MR. RIEPE: Retire from one job.

24 CHAIRPERSON GENNARO: Yes.

25 MR. RIEPE: As the Jamaica Bay

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2 Guardian, my responsibilities will be to go around
3 the bay and meet and grade all the uses of the bay
4 in an attempt to coordinate and educate all the
5 people about the importance of the resources of the
6 bay. Also to develop a group of watchdog
7 organizations to keep an eye on their area of the
8 bay to protect it.

9 Part of that, it will be education
10 and advocacy networking and coordinating efforts
11 with all the various state, federal and other
12 government agencies and NGOs around the bay.

13 Over the years the Jamaica Bay
14 Estuary has been given several important
15 designations. In the '80s it was declared a critical
16 fish and wildlife area by the New York State DEC, as
17 well as New York State Department of State. In the
18 1990s, the National Audubon Society declared it an
19 important bird area. And, also, in the '80s and
20 '90s, the New York City Audubon Society, together
21 with the Trust for Public Land and the American
22 Littoral Society, another group, developed a Buffer
23 of the Day Program, which looked at all their
24 remaining open space around the bay, most of which
25 was City-owned, and tried to get them put into

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2 protective status. It has been very successful, but
3 still much more work is needed in that area.

4 We tend to look at economic
5 development as utilizing open space to provide
6 economic support for the cities, but I must tell you
7 that over a million people recreate, fish, boat,
8 bird watch and enjoy sunsets in Jamaica Bay, so it's
9 an extremely valuable resource economically to
10 preserve.

11 I hope that in the future I'm glad to
12 see that there is this forward movement, that this
13 can be kept up, that this pace can be kept up,
14 because as Dan mentioned, and thanks to his efforts,
15 we're really making strides now to move forward in a
16 quicker pace. Thank you.

17 CHAIRPERSON GENNARO: Thank you. Thank
18 you very much. I appreciate it.

19 Adam Brown, right? Adam Brown?

20 MR. BROWN: Yes.

21 CHAIRPERSON GENNARO: Okay. Where's --

22 MR. BROWN: It's Baykeepers.

23 CHAIRPERSON GENNARO: Where's Andy?

24 MR. BROWN: Well, that's why I'm here.

25 CHAIRPERSON GENNARO: Okay. We're

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2 happy to have you. I just know Andy.

3 MR. BROWN: And I'm happy to be here.

4 CHAIRPERSON GENNARO: I've got a few
5 Andy stories.

6 MR. BROWN: Don't we all.

7 CHAIRPERSON GENNARO: I won't tell
8 them here. We're talking about Andy Willner, the
9 Baykeeper.

10 MR. BROWN: Baykeeper is a
11 conservation and advocacy organization - citizen
12 stewards. Our mission is to protect and restore the
13 Hudson-/Raritan Estuary, its tributaries and
14 watersheds. An urban estuary, Jamaica Bay has been
15 heavily affected by the pressures of human
16 development. It has been filled in, built upon, and
17 despoiled by garbage. As urban development and
18 impervious surfaces surrounded the Bay, the creeks
19 and streams that fed it were bulkheaded and
20 channeled into storm sewers and sewage discharge
21 conveyances. For a significant period of time,
22 sewage was untreated. These impacts, along with
23 industrial wastes and oil leaking from non-point
24 sources bordering the bay, contributed to a serious
25 pollution problem for its waters.

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2 By the 1960s the marine life was
3 dying off and commercial fishing was banned. Over
4 the last 25 years some headway has been made but
5 there is still a long way to go. Despite its
6 history, Jamaica Bay is a viable, distinct ecosystem
7 containing one of the most important urban wildlife
8 refuges in the United States. It is New York City's
9 urban wilderness, accessible to millions and in need
10 of full-time stewardship.

11 Founded in 1989 to address New York
12 Harbor needs, Baykeeper's accomplishments include:
13 scores of acres of critical wetlands, streams,
14 habitats restored, construction of oyster reefs and
15 an oyster gardening project; establishment of a
16 Meadowlands Conservation Trust; and the acquisition
17 of federal and state funds for a National Estuarine
18 Research Reserve in Raritan Bay; and successful
19 advocacy and litigation on issues ranging from
20 combined sewer overflows to contaminated site
21 remediation.

22 New York/New Jersey Baykeeper remains
23 actively involved in all aspects of the Harbor
24 Estuary program, including developing a priority
25 list of endangered habitats that should be acquired

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2 and restored leading to the \$60 million habitat
3 acquisition project by the Port Authority of New
4 York and New Jersey, and the Army Corps' Hudson
5 Raritan restoration project. Baykeeper volunteers
6 also do stream corridor and wetlands restoration
7 projects. We have been in the forefront of advocacy
8 for unfettered access to all of the 1,000 miles of
9 shoreline in the Estuary, and have defended that
10 right of access using the ancient common law
11 principle, the Public Trust Doctrine.

12 We have been active in Jamaica Bay
13 issues since our inception. Attending hearings,
14 meeting with other organizations, commenting on
15 proposals and EIS's, developing and implementing
16 habitat preservation and restoration projects,
17 patrolling by boat, and actively participating in
18 and contributing to the debate over Jamaica Bay's
19 disappearing wetlands. Our advocacy for the
20 elimination of excess nutrients in Jamaica Bay's
21 ecosystem has resulted in tangible changes in
22 policy. Nitrogen in particular is one of the
23 suspects in the marsh loss puzzle.

24 As a result of a settlement with New
25 York City DEP, Baykeeper and Long Island Soundkeeper

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2 will help to oversee the distribution of a \$4.2
3 million environmental benefit project for Jamaica
4 Bay and Western Long Island Sound. \$100,000 of these
5 funds is dedicated to the purchase, maintenance and
6 operation of a Jamaica Bay sewage pump out boat.
7 This boat will be in service in the Spring of 2003,
8 fighting pollution and excess nutrients one gallon
9 at a time.

10 Shortly, a panel consisting of
11 Baykeeper, Soundkeeper, New York City DEP and New
12 York's DEC, and the State of Connecticut will be
13 deciding how to spend some significant portion of
14 that environmental benefit program money for Jamaica
15 Bay restoration projects. It is our intention to
16 work with government agencies and non-governmental
17 organizations to make sure that the funds are used
18 to put money in the ground and not into studies. We
19 will advocate for and work with organizations and
20 institutions that have viable attainable projects
21 that can be done sooner rather than later to help to
22 abate the marsh loss that has been characterized by
23 Dan Mundy and the EcoWatchers, Natural Resources
24 Protective Association, and the various panels, blue
25 ribbon or otherwise.

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2 It is also our intention to get to
3 the bottom of the causes of the wetlands erosion
4 problem. We believe that it is a combination of high
5 nutrients and other sources of pollution, sea level
6 rise, boat wakes, and some structural problems that
7 have thrown the sediment budget out of balance.

8 We look forward to working with the
9 City Council, and all agencies of government, as
10 well as our colleagues, to make sure that Jamaica
11 Bay is preserved and restored as our urban
12 wilderness and as a legacy to our children.

13 Please feel free to contact us for
14 more information about our programs for Jamaica Bay.

15 Thank you, again, for the opportunity
16 to testify.

17 CHAIRPERSON GENNARO: Thank you. Thank
18 you.

19 After this panel, we're going to be
20 moving next door after this panel.

21 Yes, thank you.

22 Dan, with regard to DEP, you saw that
23 I -- is Mark Flannagan still here? Did he go? You
24 saw that I pressed the Commissioner on the whole
25 centrate thing and all that. Are you satisfied with

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2 this comment? What's your sense?

3 MR. MUNDY: Yes, well, I think the
4 question could be expanded if the centrate has the
5 contaminants and pathogens, then what about taking
6 part of the effluent of the 85 million gallons a day
7 from the 26th ward plant and using that for
8 irrigation on there.

9 CHAIRPERSON GENNARO: Right.

10 MR. MUNDY: That would have less of
11 the contaminants, less of the pathogens, and it
12 would still be higher nutrient value, and anything
13 that we don't put in the bay is better.

14 CHAIRPERSON GENNARO: I'll tell you
15 what, why don't we do this: I don't want to give you
16 like a homework assignment or anything, but if your
17 issues, concerns, questions or, you know, how ever
18 you want to formulate it, if you want to put that
19 down with whatever specificity you want and take as
20 long as you want on it, and get it to Donna, and you
21 know how to get it to Donna?

22 MR. MUNDY: Yes, that sounds good.

23 CHAIRPERSON GENNARO: And then I'll
24 get it to the Commissioner, and he'll respond
25 directly to you. And, so, that will, you know, serve

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2 to educate me and have me think outside the box a
3 little bit and we'll get a response from the
4 Commissioner on that, and if you want to meet or
5 whatever you want to do.

6 MR. MUNDY: Right.

7 CHAIRPERSON GENNARO: Because if I
8 could play like a conduit role here, I would be
9 happy to do that because, you know, all good ideas
10 should get explored, and if we can do something
11 better than sometimes all it takes is a good idea.

12 MR. MUNDY: Right. I agree.

13 CHAIRPERSON GENNARO: So, I'd be happy
14 to play that role.

15 Now, with regard to the process --
16 Jamaica Bay report is going to be produced, and I'm
17 calling the process the Jamaica Bay report, which is
18 probably not the name of the process; does the
19 process have a name? What is it? What's the name of
20 the process?

21 MR. MUNDY: No. Mr. Garrett just
22 talked about that earlier, about coming through with
23 that Jamaica Bay report.

24 CHAIRPERSON GENNARO: Right. I want to
25 ask you about how it's going.

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2 MR. MUNDY: Go ahead, ask me.

3 CHAIRPERSON GENNARO: Yes. So, that
4 unnamed process, which will ultimately result in the
5 production of the Jamaica Bay report, I just want to
6 hear from all of you how you think it's going and
7 also for Baykeeper, I'm curious as to whether or not
8 you're actually participating in it or what, but you
9 know, just start with that one and go that way.

10 MR. MUNDY: Well, as far as the report
11 goes, you know, I'm not going to wait for the report
12 to come out to comment on it because by then it
13 might be too late. This is going to be an ongoing
14 process which I'm going to be involved in and up to
15 now I'm satisfied with the way things are going.

16 CHAIRPERSON GENNARO: Okay.

17 MR. MUNDY: We've got things moving
18 well. The agencies are working together very good,
19 as Delaney (phonetic) said before, and as I had said
20 to them, I asked six or eight months ago for you to
21 initiate these meetings, get the agencies together
22 and now you are doing it, but you forgot to call me
23 in the process.

24 CHAIRPERSON GENNARO: Right.

25 MR. MUNDY: So now they're telling me

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2 they're going to be bringing me in later on.

3 So, that's okay.

4 CHAIRPERSON GENNARO: Fine.

5 MR. MUNDY: As long as things are
6 going along good.

7 But I'm pretty well pleased at the
8 progress, especially with the funding, because when
9 we first started this project, and after convincing
10 them that there was a problem, they did come to me
11 and said, well, now, you know, we know there's a
12 problem but what are we going to do about it? This
13 is going to cost a lot of money, we don't have it.

14 CHAIRPERSON GENNARO: Right.

15 MR. MUNDY: And through the media and
16 the help of our elected officials, you can see the
17 figures that are being thrown around here today. I'm
18 very comfortable with them, and especially for the
19 Army Corps with the ability to put that money in
20 there and resources that they have and the
21 partnership with the DEP, I think we've got a great
22 effort going here.

23 CHAIRPERSON GENNARO: Don?

24 MR. RIEPE: I, too, am pleased with
25 the status of the report so far and how things have

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2 been moving along very quickly.

3 CHAIRPERSON GENNARO: Now, when you
4 participate, and you participated in the capacity
5 with Gateway, and ultimately you'll be participating
6 --

7 MR. RIEPE: Right, as of January --

8 CHAIRPERSON GENNARO: With the
9 American Littoral Society?

10 MR. RIEPE: Correct.

11 So, I'm looking forward to working
12 with the National Park Service after I retire, as
13 well. I just hope that the Park Service includes in
14 their report a hard look at the watershed of Jamaica
15 Bay. We must take a hard look at all the remaining
16 buffer areas around the bay --

17 CHAIRPERSON GENNARO: Right.

18 MR. RIEPE: Because continued
19 development in those areas would set back, even set
20 back our efforts to restore the marsh lands.

21 The areas around the bay, because
22 they've been so hardened around the years, there no
23 places for the marshes to go at this point.

24 CHAIRPERSON GENNARO: Right. Thank
25 you.

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2 Adam, got it.

3 MR. BROWN: I know it's confusing,
4 Adam, Andrew.

5 CHAIRPERSON GENNARO: Do you guys
6 participate in the Baykeeper? Are you part of this
7 process that's going to lead to the Jamaica Bay
8 report?

9 MR. BROWN: Well, Working Waterfront
10 partners with Baykeeper. Baykeeper has been involved
11 in Jamaica Bay for quite some time.

12 CHAIRPERSON GENNARO: I know there's a
13 specified process going on now, which is ultimately
14 going to lead to, you know, I guess it's an attempt
15 to, as Billy had mentioned earlier; are you familiar
16 with it?

17 MR. BROWN: Yes, I am. But I haven't
18 gotten Andrew Willner's answer about that yet, so I
19 don't want to speak on --

20 CHAIRPERSON GENNARO: No, I was just
21 curious.

22 MR. BROWN: I'm sure that they will be
23 involved. In what capacity, I can't say.

24 CHAIRPERSON GENNARO: Do you guys
25 patrol the Jamaica Bay in the boat or whatever?

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2 MR. BROWN: The New York New Jersey
3 Baykeeper absolutely patrols, and they're going to
4 have their pump out boat as well patrolling, which
5 will also act as a secondary patrol boat.

6 CHAIRPERSON GENNARO: You've got one
7 boat now, right? You've got one boat?

8 MR. BROWN: Right now they have one
9 boat and they're purchasing the pump out boat, which
10 will also act as a secondary patrol boat.

11 CHAIRPERSON GENNARO: Oh, I see.

12 And the Baykeeper is part of sort of
13 like national Waterkeeper Alliance Movement?

14 MR. BROWN: Yes. They're affiliated
15 with the American Littoral Society, but they're also
16 a member of the National Waterkeeper Alliance.

17 CHAIRPERSON GENNARO: Right,
18 Riverkeeper and all that, it's all part of the
19 Waterkeeper Alliance, right?

20 MR. BROWN: That's correct.

21 CHAIRPERSON GENNARO: Hang on.

22 I just wanted to follow up with Don
23 on one issue with regard to the watershed question.
24 Has DEP been -- I guess you want to make sure that
25 gets addressed in the Jamaica Bay report, and have

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2 there been discussions with DEP about the Jamaica
3 Bay watershed?

4 MR. RIEPE: I don't believe so, other
5 than just some of the perimeter areas.

6 CHAIRPERSON GENNARO: Right.

7 MR. RIEPE: The landfills are --

8 CHAIRPERSON GENNARO: But of course as
9 we saw from DEP's own map --

10 MR. RIEPE: Yes, not only DEP, but HPD
11 as well, and the Economic Development Corporation
12 have to be involved in this process as well. We
13 can't operate independently of other agencies in the
14 City.

15 CHAIRPERSON GENNARO: Okay.

16 MR. MUNDY: Jim?

17 CHAIRPERSON GENNARO: One last point,
18 because the hearing is starting here like right now,
19 so this will be the last comment.

20 MR. MUNDY: I'd just like to expand on
21 that watershed thing we just talked about. In
22 addition to the watershed there's an airshed, okay?
23 Everything that comes from the air into the
24 watershed ends up in the watershed, and we have JFK
25 Airport in there, all the planes take off, the

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2 runways direct them right over the bay, we have a
3 lot of air pollution from the airport, they have a
4 certain responsibility to the marshes and I think
5 we've got to bring them in.

6 Christopher Ward worked over there
7 before --

8 CHAIRPERSON GENNARO: Is that going to
9 be part of this whole effort?

10 MR. MUNDY: I'm intending to bring
11 them in, yes.

12 CHAIRPERSON GENNARO: Do the airport
13 people participate in this whole thing?

14 MR. MUNDY: Not now.

15 CHAIRPERSON GENNARO: Okay. We should
16 think about that.

17 Gentlemen, thank you very much for
18 your good testimony.

19 MR. MUNDY: Thank you.

20 CHAIRPERSON GENNARO: Why don't we
21 call the next panel. The next panel, we'll actually
22 hear them next door, I'll just call their names
23 here. I'll be out of here in two seconds, I promise.

24 I would like to recognize the
25 presence of former Council Member Steve Fiala from

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2 Staten Island in the back of the room.

3 Hey, Steve. And Council Member Nelson
4 from Brooklyn.

5 Okay, the next panel which will meet
6 next door, Dr. Vivian Gornitz, from the NASA Goddard
7 Institute for Space Studies; and Ellen Hartig, as
8 well from the same group. Dr. David Franz; Dr.
9 Lawrence Swanson; and Dr. Paul Mankiewicz. A lot of
10 doctors, okay. So, they'll all meet next door, and
11 anyone else associated with the hearing on Jamaica
12 Bay, we're going to move next door into the
13 Committee Room in order to yield to the Health
14 Committee that has a very important, obviously very
15 important hearing.

16 And, so, my best wishes to the Health
17 Committee.

18 (Recess taken.)

19 CHAIRPERSON GENNARO: Thank you for
20 joining us for part 2. Thank you all very much for
21 coming and lending your talents to this important
22 issue and also for your patience.

23 We greatly appreciate that you've
24 been here for a long time, and sometimes I get a
25 little worried or whatever and I hope I haven't held

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2 up the proceedings at all, but I'd like to give
3 people the opportunity to kind of give everything
4 that they have to offer, so sometimes it means
5 people have to wait and I'm sorry about that. And
6 particularly a panel with the prestige that yours
7 has, I hate to make folks like you wait, but it's a
8 testament to your commitment to this issue, and I
9 appreciate it very much. And also I'm humbled to
10 some extent. I mean, I do have a degree in geology,
11 so I like to think of myself as some kind of
12 scientist, you know what I mean, it's like, I'm some
13 science guy, I know science, but here I am in the
14 presence of scientific giants so I can't pretend in
15 front of you folks. But I am smart, see, I brought
16 you to the table and so I don't have all the
17 information but I know that you can certainly
18 provide it in your wisdom on this issue, and, so,
19 we'd like to proceed.

20 And if you can give the scientific
21 version of the oath, some sort of special science
22 version or whatever of it.

23 So, Donna DeCostanzo will give you
24 the science version of the oath, and then we'll
25 proceed.

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2 MS. DeCOSTANZO: It's the same as the
3 regular version.

4 Could you please raise your right
5 hands?

6 In the testimony that you're about to
7 give, do you swear or affirm to tell the truth, the
8 whole truth and nothing but the truth?

9 (witnesses sworn.)

10 MS. DeCOSTANZO: Thank you.

11 CHAIRPERSON GENNARO: Thank you very
12 much. And I guess what we'll do is we'll start this
13 way and go that way. We'll follow the same procedure
14 as before. So, I'd like each of you when you begin
15 your testimony to state your name for the record and
16 to proceed, and when the light on the microphone is
17 off, that means the microphone is on. The red light,
18 so you push the button and it goes off.

19 So, if you could start?

20 DR. HARTIG: Since Vivien Gornitz and
21 I work together --

22 CHAIRPERSON GENNARO: Could you state
23 your name for the record, even what you're saying
24 now, so that the stenographer knows who's speaking.

25 Would you state your name for the

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2 record, please?

3 DR. HARTIG: My name is Ellen Kracauer
4 Hartig. I worked on the Jamaica Bay marshes together
5 with Dr. Vivien Gornitz, and it would be best if she
6 gave her presentation first, so that mine will make
7 more sense to the audience.

8 CHAIRPERSON GENNARO: Great.

9 DR. HARTIG: Thank you.

10 CHAIRPERSON GENNARO: You got it.

11 DR. GORNITZ: I'm Vivien Gornitz, I
12 work at the Center for Climate Systems Research,
13 Columbia University, located at the Goddard
14 Institute, Broadway and 112th Street. And I just
15 want to point out that the EcoWatchers are not the
16 only people to observe something amiss in the
17 marshes, and that although we were not part of the
18 Blue Ribbon Panel, our research is certainly
19 relevant to these issues. And starting in 1998, the
20 Environmental Defense Fund, commissioned us to help
21 out in an investigation on the climate change
22 impacts in the New York City area --

23 CHAIRPERSON GENNARO: Who commissioned
24 that?

25 DR. GORNITZ: The Environmental

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2 Defense Fund.

3 CHAIRPERSON GENNARO: Okay.

4 DR. GORNITZ: In 1998.

5 And that was the seed of the research
6 that followed and there is also published in "Hot
7 Nights in the City Global Warming, Sea-Level Rise,
8 and the New York Metropolitan Region," which was
9 published in 1999.

10 In 1999, we began a study for the
11 U.S. National Climate Change Assessment, one of the
12 18 regional assessments, the Metro East Coast
13 Report, which I have submitted a copy thereof. It
14 was a multi-disciplinary team composed of a number
15 of groups from Columbia University, including the
16 Center for Climate Systems Research, Lamont-Doherty
17 Earth Observatory, CIESIN, and the School of Public
18 Health, also New York University and various state,
19 city and government stakeholder partners.

20 In fact, I work very closely with the
21 New York State Army Corps of Engineers and Ellen
22 Hartig and I also work very closely with the New
23 York State DEC. And our purpose was to examine the
24 change, the climate change impacts of the New York
25 East Coast region, and in particular, I was focusing

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2 on sea level rise impacts in the coast, defects on
3 beaches, coastal flooding and the like, and Ellen
4 Hartig focused mostly on wetlands. And specifically
5 we used Jamaica Bay as a case study site in our
6 investigations into the wetlands.

7 As the project began I discussed with
8 Ellen the possibility that the regional sea-level
9 rise could already be affecting the marshes, as it
10 appears to be doing in other parts of the country;
11 for example, Louisiana and in Chesapeake Bay.

12 In Louisiana the local sea level rise
13 is about 10 millimeters a year, .4 inches a year,
14 which is somewhat greater than the world average
15 because of a number of local geological and
16 anthropogenic factors.

17 However, closer to home, Chesapeake
18 Bay, the local sea-level rise there is only just a
19 little bit greater than in this region, and there
20 has been historic loss of island marshes there
21 within the last 150 years and also some of the
22 fringing marshes are also disappearing. So, it seems
23 possible that something similar might be happening
24 here.

25 Now, in terms of the fact global

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2 warming is already occurring, the last 100 years the
3 earth as a whole has warmed about a degree, here in
4 New York it's been about two degrees.

5 The local sea-level rise in this
6 area, nine to 15 inches during the last hundred
7 years is double that of the worldwide average.

8 Now, part of that can be attributed
9 to the global warming that's already --

10 CHAIRPERSON GENNARO: Nine to 15
11 inches, that's what we've experienced here --

12 DR. GORNITZ: In the last hundred
13 years already, and what I'm about to say is that
14 this may be getting worse in the future.

15 Now, this is double the global
16 average, because not only has there been this
17 historic warming, the east coast, this part of the
18 east coast is also subsiding and that is in response
19 to, it's an ongoing response to the removal of the
20 ice sheets, 15,000 years ago, as the land to the
21 north of us is rebounding in Canada, this area
22 subsiding. So that's adding to the global sea level.
23 And in terms of impacts, what really matters is
24 what's happening locally. The local rise is the key
25 issue.

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2 Now, in terms of future projections,
3 we have used both the extrapolating the historic
4 trends and a number of global climate models, and we
5 predict that in the next 80 or 90 years that sea
6 level could rise another nine to 43 inches in this
7 area, depending on which scenario might occur.

8 Even the most conservative issue
9 would say that at least another, almost close to a
10 foot of sea-level rise, so anywhere from one to
11 three feet can be anticipated in the future.

12 Furthermore, the coastal flooding
13 will become a greater issue.

14 The hundred-year floods --

15 CHAIRPERSON GENNARO: Could you focus,
16 like as much as we could, sort of like on the
17 immediate issue, or to the extent of --

18 DR. GORNITZ: All right the upshot of
19 all --

20 CHAIRPERSON GENNARO: Yes, the upshot.

21 DR. GORNITZ: The upshot of all of
22 this is to say that the marshes are currently
23 stressed both by historic sea-level rise, the
24 various anthropogenic factors that we've heard that
25 contribute to a sediment deficiency and possible

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2 nutrient loading that may be increasing or altering
3 the ecology, in the future sea-level rise will
4 become an even greater stressor on the marsh and
5 that needs to be taken into consideration.

6 Now, Ellen will present more the
7 details of the marsh loss that has already occurred,
8 that which she has documented and that which we have
9 done in association with our partners at the New
10 York State DEC.

11 I will just point out, in the
12 interest of brevity, that we also did a sensitivity
13 study using these climate model projections.

14 Now, we don't have good data on past
15 rates of accretion. Now, normally a marsh is in a
16 state of equilibrium between sea-level rise and
17 upward growth or accretion, which has two
18 components, one is organic that of the actual growth
19 of the grasses and the vegetation, and the other is
20 inorganic or input of sediment. And as has been
21 pointed out by others and which is very plausible,
22 we know of the anthropogenic changes that have
23 occurred in the bay within the last 100 years, the
24 building up, the urbanization of Brooklyn and Queens
25 and Rockaways, the stabilization of the Rockaway

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2 spit and the like, all of this has curtailed
3 sediment supply to the bay and so that this is
4 preventing the marsh from accreting as well as it
5 should under normal circumstances.

6 Now, with sea-level rise, and we have
7 assumed certain rates of accretion, and what we have
8 done in our sensitivity study, and that's listed in
9 the table in the second of the two tables that are
10 in the handout, that the negative values in Table 2
11 represent situations where the marshes are not able
12 to keep pace with sea-level rise. Whereas the
13 positive numbers indicate where they are.

14 So, the point is that if accretion
15 rates were high enough, the marshes could maintain
16 themselves under moderate increases of sea-level
17 rise, and they would go under only in the
18 circumstances of the most extreme rise in sea level.

19 The fact that they are already
20 disappearing I think is a good indication that they
21 are not getting enough sediment, that that seems to
22 point to that as one of the most important factors
23 in marsh loss. Not the only factor but an important
24 one.

25 And the other thing that I would

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2 point out is that we also have observed in our field
3 studies the fact that there's encroaching of the sea
4 lettuce onto the marsh mud flats, which have
5 replaced a lot of the grassland, and also the
6 concentration, the unusual concentrations of the
7 mussels, and propose that perhaps these may be
8 indicators of marsh subsidence, rather than a cause
9 of the actual marsh loss itself.

10 So, in other words, the effect, the
11 consequence rather than the cause. And then another
12 thing that we want to point out is that also from
13 the combined aerial photo analysis field studies and
14 aerial survey overflight, we also find that the
15 current, although we do see evidence of slumping and
16 erosion along the edges of the marsh, it seems that
17 the deterioration in the interior, the expansion of
18 the tidal pools and the like do seem to be more
19 significant at this point.

20 CHAIRPERSON GENNARO: Thank you. Thank
21 you very much. I understand that some of your
22 colleagues have got testimony to sort of expand
23 upon?

24 Dr. Hartig, right?

25 DR. HARTIG: Yes. My name is Ellen

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2 Kracauer Hartig. I want to check that everyone has a
3 copy of the testimony because I'll be referring to
4 the photographs.

5 CHAIRPERSON GENNARO: Yes.

6 DR. HARTIG: Thank you.

7 CHAIRPERSON GENNARO: Is your
8 testimony going to be an attempt to sort of document
9 what has happened and what is happening?

10 DR. HARTIG: Yes, to describe the
11 mechanisms of the marsh loss.

12 CHAIRPERSON GENNARO: Briefly, okay?
13 Because we all know that there's problem, we're
14 trying to figure out a way to get it fixed, and
15 anything that you can say that would shed some light
16 on how we can, you know, mitigate some of this, that
17 would be to the extent that there are practical
18 recommendations or that kind of thing, that would be
19 great.

20 DR. HARTIG: Okay, I just want to
21 start by saying one of the key factors has been the
22 analysis of the historic photos and the comparison
23 of them.

24 At the beginning, when we first got
25 our photography back and saw the results, I went to

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2 National Park Service and to New York State DEC and
3 showed them the marsh loss that we were doing at the
4 time New York State DEC was starting to remap the
5 wetlands of New York State for regulatory purposes,
6 and part of the work that they did was because of
7 the work that we brought to them, and this was
8 published in the Wetlands Journal in 2002, but was
9 based on work starting in 1998.

10 Now, I think it is important to
11 understand some of the mechanisms of the marsh loss
12 in order to best find ways to restore the marshes,
13 and it was I think the work of Dan Mundy as the
14 local person who was trying to bring this to the
15 attention of the National Park Service, was also
16 important to have work published so that it gained
17 scientific merit, and between all of us it really
18 did get the attention of everyone.

19 So, if you would just turn to the
20 photos on page --it's right after page five, this
21 was the first aerial photograph that we, some of
22 them that we ordered, this is a small portion of the
23 first photographs. And, so, what you have here, and
24 why I think it's so important that people understand
25 this and not just jump and say, yes, we have a

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2 problem and we must fix it, is to understand some of
3 these mechanisms, and in this 1959 to 1998
4 photograph, if you run your eye from point A to
5 point B you can really see the gouging out of the
6 marsh along the edge. If you bring your eye to C and
7 see the channels, there's also the widening of the
8 channel, and then next page is the New York State
9 DEC source map that everyone is quoting, so it may
10 help the audience to have that kind of evidence, and
11 there you can see from 1924 to the present some of
12 the problems.

13 One thing that Vivien and I have
14 discussed is if you look at the northern end, you
15 will see that there is more of each marsh, you can
16 see there's more eating out to the north than to the
17 south.

18 Also, one issue is that are the
19 marshes, the smallest marshes disappearing the
20 fastest?

21 So, if you go to Elders Point Marsh
22 on the northwest part, all that is left is the part
23 that has the vertical lines, and if you compare that
24 to the largest marsh is Jo Co, you see much more
25 loss in the small islands. So, one question is, are

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2 the smaller islands disappearing faster than the
3 larger.

4 So, again, this kind of analysis will
5 be important in determining the best way to remedy
6 the situation. Do we give up on the smallest marshes
7 or do we try to go right to them and is there still
8 time to do some restoration in those marshes.

9 If you turn to figure 3, again, to go
10 through these mechanisms, and we tried to categorize
11 and classify these mechanisms, in figure 3, in
12 Yellow Bar Hassock, this is, in the shoreline edge
13 of the island you can see a large slumped piece of
14 peat that has fallen down, and that becomes
15 submerged during high tide.

16 In the next figure, figure 4, there
17 is erosion of the low marsh. You can see sort of
18 shelving, or a ledge that has formed where the peat
19 no longer has the marsh growing on it.

20 So that is where the underlying peat,
21 that became exposed, and will eventually become part
22 of the channel, of the Yellow Bar Hassock.

23 Figure 5 is in the internal part of
24 the marsh. This was taken when we were doing a
25 biomass study on the vegetation, and here you can

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2 see the patchiness and you can see large tidal pools
3 that we believe are coalescing to form larger and
4 larger pools, and in the bottom figure six, is the
5 helicopter view of Yellow Bar Hassock, and you can
6 note that there is a part of marsh fragmentation in
7 the marsh and a die-back within the marsh.

8 So, I'd like to just go tell you that
9 in figure 3 are the results of our biomass study. We
10 did first the aerial photo analysis, and then we
11 went into the field looking for these mechanisms
12 that had been written up in Great Britain, whether
13 they have the same situation in some of their
14 marshes, and then we did a biomass study in the
15 vegetation. Every 50 feet we measured how much the
16 grasses weighed in a quarter meter plot.

17 We found that the grasses are
18 actually growing as well as could be expected for
19 this region. It's important to note that the marshes
20 are, where they're growing they are thriving.

21 For future research needs, I list
22 those on page three. For further research it's
23 urgent to establish causes of marsh loss, and this
24 should happen simultaneous to the pilot studies that
25 can go on on to how to restore marshes in this

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2 region, and I'll add that where there's much more
3 experience in restoring marshes is to our south in
4 Louisiana and Florida, the Army Corps often goes in
5 with dredge spoil and plants marshes.

6 In the New York area there's much
7 more experience in restoring marshes where you
8 remove fill material and then you plant, so you're
9 bringing down the elevation to where marshes can
10 thrive. But we have little experience in
11 establishing marshes, where there's already the
12 surface is below the water level.

13 So, this will be new for us, and we
14 need to look to our southern neighbors for their
15 experience.

16 So, with further research we need to
17 know why has the marsh loss accelerated in recent
18 decades, which of the factors discussed by us or
19 others are the most significant historic sea-level
20 rise, a sediment deficit, excess nutrient levels in
21 the bay or others.

22 In addition to the surface elevation
23 tables, the sets that the USGS recently placed in
24 the marsh and soil cores that need to be cored
25 still. Long-term tide gauge stations should be set

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2 up to monitor future sea level change. Biomass
3 studies should be continued to track the viability
4 of *Spartina alterniflora*. Vegetation should be
5 monitored to compare sediment spray sites and their
6 control areas both before and after the application.
7 Trial vegetation planting should be included as soon
8 as possible in restoration of the marshes.
9 Priorities should be established for acquiring
10 additional sites where inland migration of the
11 marshes can take place to compensate for future sea
12 level rise.

13 Thank you for your consideration and
14 effort.

15 CHAIRPERSON GENNARO: Thank you very
16 much. I appreciate your testimony.

17 We'll just have everyone speak on the
18 panel, then we'll ask questions of folks, questions
19 that might be specific to your testimony.

20 Dr. Swanson. Dr. Swanson, I have a
21 little confession to make here, I'm a Stonybrook
22 alum, and Dr. Swanson and his good folks at the
23 Waste Management Institute and the Research Center
24 at Stonybrook are great friends of mine, and Larry
25 is a great friend of mine, and so I'm happy to have

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2 you here today. And I welcome your testimony.

3 DR. SWANSON: Thank you, Mr. Chairman.

4 It's nice to see you in chairmancy.

5 CHAIRPERSON GENNARO: Thank you.

6 DR. SWANSON: I'm Larry Swanson, and
7 I'm Director of the Waste Reduction Management
8 Institute at Marine Sciences Research Center, it's
9 State University at Stonybrook, and I appreciate the
10 opportunity to speak to you a little bit about my
11 belief concerning wetlands marsh or wetlands loss in
12 Jamaica Bay.

13 Certainly one of the things that
14 everybody has concluded is that Jamaica Bay of today
15 is not what Jamaica Bay was a century ago, and in
16 fact dredging has actually created some 70 percent
17 of the present marsh, or the present bay volume.

18 It has been noted before also by
19 others that DEC has observed about 400 acres of
20 marsh loss in Jamaica Bay between 1974 and '94. Much
21 of this loss I think can be attributed to
22 significant operations that have occurred over the
23 past century in the bay's watershed, its topography,
24 it's hydrography and its circulation.

25 The historic mean depth of Jamaica

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2 Bay was about three feet, today it's about 16 feet.

3 The navigational channels today is as deep as 40

4 feet along some portions of the bay.

5 The shoreline has been hardened and

6 steepened, manmade features, such as the Belt

7 Parkway, Floyd Bennett Field, JFK Airport have

8 replaced the natural wetland perimeter of the bay.

9 In addition to that there are three

10 landfills that also line the bay.

11 There is no longer any significant

12 natural runoff to the bay. Also there is no longer

13 any significant source of natural sedimentary

14 materials to the bay, and I believe that's one of

15 the primary issues that's confronting the wetland

16 losses of the bay.

17 There's an anthropogenic watershed of

18 about 3,700 acres that drains the area. For the most

19 part that runoff is now channeled through storm

20 sewers and combined sewers, and it goes to

21 tributaries where much of that sediment filters out

22 very quickly, and helps to contribute to some

23 hypoxic conditions in those tributaries.

24 Also, I think it's important to note

25 that circulation has changed in part because of the

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2 addition of water pollution control plants, and in
3 fact the effluent from the plants today is about
4 double that of the natural surplus runoff.

5 Physical alterations to the bay have
6 had pronounced impacts on the circulation, and as a
7 consequence the availability, transport and
8 distribution of sediment.

9 Among the most important changes are
10 those associated with the tides, tidal currents and
11 flushing time. These changes in many locations are
12 directly associated with reduced frictional drag, as
13 water ebbs and floods throughout the dredged harbor.

14 I've tabulated some of the changes
15 that have been reported by the National Oceanic and
16 Atmospheric Administration concerning tides and the
17 table that's attached.

18 One can easily see the influence of
19 the physical changes in the bay by looking at the
20 tidal changes that have taken place.

21 The mean range of tide, the
22 difference between the mean high water and low water
23 at Rockaway inlet has increased from four feet to
24 4.9 feet over the last century. At Canarsie the mean
25 range has increased a foot, at Norton Point the

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2 range has increased 1.6 feet from 3.8 feet in 1899,
3 to 5.4 feet today.

4 Changes in the vertical reference
5 data of mean water, which haven't been accounting
6 for sea level rise, suggests that the bay as a
7 whole, the increased tidal ranges are resulted in a
8 lowering of low waters and a raising of the high
9 waters. Thus, independent of sea-level rises, the
10 marshes are now flooded more at high tide, and
11 exposed more at low tide compared to early in the
12 20th century.

13 The affect of channel dredging is
14 also realized by a change in current velocity. The
15 1904 US Coast Pilot, which is essentially the
16 sailing directions for the United States, states
17 that the currents in Rockaway Inlet were about 0.9
18 knots on flood and 1.7 knots on ebb. Today the means
19 of the maximum speeds are predicted to be 1.8 knots
20 on flood and 2.7 knots on ebb. The maximum currents
21 at full and new moon could be as much as 20 percent
22 greater.

23 Thus, there is roughly 100 percent
24 increase in the maximum flood, and a 59 percent
25 increase in the maximum ebb relative to 1904.

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2 The increase in speed on ebb is
3 particularly significant, because larger particles
4 and a greater number of particles may be removed
5 from the bay, compared to what had been going on in
6 the past. The high velocity currents also tend to
7 erode the marsh edges.

8 The relatively deep eastern basin of
9 the bay is now a sediment trap. In this case,
10 reduced circulation in Grassy Bay caused by dredging
11 and construction of Cross Bay Boulevard and the JFK
12 International Airport runway extension creates an
13 environment where sediments tend to settle in the
14 deeps rather than being distributed over the marsh
15 surfaces.

16 In conclusion, in hindsight, I think
17 it's not surprising that we're seeing the marshes
18 from Jamaica Bay disappearing. Of course, being the
19 Monday Morning Quarterback is always a luxury. But
20 virtually all the manmade alternations to the bay
21 contribute to the loss. The natural sediment supply
22 that is essential to maintain the marshes has nearly
23 ceased to exist because of the hardening of the
24 watershed and the design of the storm sewers and the
25 combined sewer overflows that drain into the fringes

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2 of the bay.

3 In other parts of the bay, deep
4 dredged basins serve as sediment traps that further
5 deprive the marshes of a source of material by which
6 they are maintained.

7 The dredging of navigational channels
8 has reduced friction so that the tidal flows are
9 less impeded than in the past. Tidal ranges have
10 increased. Marsh surfaces are flooded more on high
11 waters and exposed more on low. Current speeds are
12 greater than in the past, thus more effectively
13 removing sediments that are in the bay to the ocean.
14 According to NOAA, the ebb is stronger than the
15 flood in the main channel so that there is a net
16 loss of sediment to the bay.

17 Large and high speed vessels can now
18 maneuver in the bay because the navigational
19 channels that have been dredged, vessel wakes may
20 also be a very effective way to destabilize marsh
21 surfaces and edges eventually leading to slumping,
22 that though we saw pictures of previously along the
23 fringes of the marsh.

24 And then, of course, on top of all of
25 this is the long-term problem of sea-level rise.

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2 As far as recommendations, I offer
3 the following:

4 I think that the control of vessel
5 wakes in the bay or essentially the speed of vessels
6 in the bay have to be more closely watched and
7 controlled.

8 I think you need to consider filling
9 in some of the deep basins that have been dredged in
10 the eastern bay.

11 Certainly I think there is the
12 opportunity of using dredged material, or other
13 sedimentary material creatively to explore
14 alternative sources of sediments to the marshes.

15 I think you need to explore
16 environmentally acceptable ways of stabilizing marsh
17 edges, and more importantly perhaps -- well, not
18 more importantly, but certainly you need to
19 understand the hydronamics of the bay and the
20 sediment dynamics of the bay better than we know
21 them today. And that concludes my comments, sir.

22 CHAIRPERSON GENNARO: Thank you. Thank
23 you very much, Dr. Swanson, I appreciate your great
24 contribution and your comprehensive testimony. Thank
25 you.

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2 Dr. Franz, thank you for being here.

3 I appreciate all the work that you've done. I've
4 heard so much about you, and I look forward to the
5 wisdom that you bring to the table.

6 You've got to push that button.

7 DR. FRANZ: David Franz, Professor of
8 Biology, Brooklyn College. I'm a member of the Blue
9 Ribbon Committee. I've been working on salt marshes
10 in Jamaica Bay since about 1990. And so many of the
11 comments that have been made today, especially in
12 the last few minutes, I agree with whole-heartedly,
13 so I can reduce the size of this testimony quite a
14 bit.

15 I would like to say that it's clearly
16 been recognized now that there is increasing
17 submergence of salt marshes, including significant
18 loss of marshes throughout the southern New England
19 area, and this is generally correlated with rising
20 sea level.

21 As regards to marshes in New York, I
22 would say also that the consequence of the work done
23 by the State DEC, it's now clear that rates of
24 erosion and marsh loss are much greater than we
25 originally thought.

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2 If you look at their data for the
3 losses of salt marsh in the estuaries on the south
4 shore, I calculated some numbers from their data,
5 and I get an average for all of those estuaries of
6 about 2.8 percent per year, that's a relative marsh
7 loss. If you compare that to Jamaica Bay at 2.4, you
8 can see that we're basically in the same ball park
9 as some of the estuaries on the south shore.

10 And the one feature that all of these
11 areas have in common is sea level rise, so I think
12 that I would agree with Ellen and others who have
13 commented on the importance of sea level rise.

14 Most marsh ecologists, however, that
15 are familiar with Jamaica Bay suspect that there are
16 other factors in play here.

17 Larry Swanson just mentioned about
18 ten possible factors. If you add all the others that
19 we have heard about today, including the ones that
20 were suggested by the Blue Ribbon Committee and
21 those just mentioned by Ellen a few minutes ago,
22 there's quite a bit of overlap, but basically we're
23 talking about ten or 12 possible factors influencing
24 marsh loss in addition to sea level rise. Scientists
25 have a problem with this kind of an issue. If we

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2 have in effect here marsh loss, we have seven or
3 eight or ten possible causes, it's going to take a
4 number of years to sort these out, and it's going to
5 take additional research, and in the meantime I know
6 that things, we need to get started and try to solve
7 some of these problems.

8 So, what I would suggest to your
9 Committee and to all of the agencies that are
10 engaged here, I have two suggestions: First, as has
11 been mentioned by Dr. Swanson and others, sediment
12 supply has been mentioned a number of times as a
13 possible major factor, it's possible that our
14 marshes that are starving because of various
15 modifications, physical changes in the bay and so
16 forth.

17 It's interesting, however, that most
18 of the marsh losses have occurred since 1974, and
19 I'm not aware that there have been major physical
20 changes in Jamaica Bay since that time. However, I
21 think that the first thing that I would recommend to
22 all of the agencies involved here is to generate or
23 create a model, a sediment model for Jamaica Bay.
24 It's a model that has to be tied in with the water
25 quality models that are now finished, and it has to

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2 be good enough to predict the sources and the sinks
3 of sediments and what the possible effects of
4 modifications of the existing physical structure of
5 the bay might have on shifts in sedimentation rates
6 and so forth.

7 Secondly, something that's not been
8 mentioned too much today is the fact that Jamaica
9 Bay suffers from enormous nitrogen loading. It's a
10 highly atrophic system. There may be indirect
11 effects of nitrogen loading on salt marshes, and
12 this is one of those areas where there are a number
13 of possibilities but very little evidence.

14 Ellen mentioned the effects of sea
15 lettuce, wrack, and what I would suggest also is the
16 possibility that the enormous populations of ribbed
17 mussels in Jamaica Bay are also promoted and
18 sustained by the enormous plankton production in
19 Jamaica Bay which is an indirect result of nitrogen
20 loading.

21 So, another thing that I would like
22 to see done as soon as possible is to have some of
23 the agencies work together to make a complete study
24 of the distribution's abundance of ribbed mussel
25 populations in Jamaica Bay.

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2 Finally, I would say that I notice
3 that there are a number of major studies and
4 activities on the drawing board for marsh
5 construction in Jamaica, sediment deposition, marsh
6 construction and so forth. What we've learned about
7 artificial marshes in the last 20 to 30 years, is
8 that it takes at least ten to 20 years after a marsh
9 has been constructed to determine whether or not
10 that new marsh is actually achieving original
11 ecosystem functions. So, one of the important things
12 is that we don't forget about keeping track of these
13 studies, finding the funding to monitor these
14 projects so that we get, actually get the
15 appropriate bang for the buck that goes into to
16 paying for these.

17 I think that's all I have to say.
18 Thank you.

19 CHAIRPERSON GENNARO: Thank you. Thank
20 you, Dr. Franz. I appreciate that.

21 And Dr. Paul Mankiewicz. Dr.
22 Mankiewicz, another long-time friend of Jim. So,
23 thanks for being here today, I appreciate it. Okay,
24 I've got this.

25 DR. MANKIEWICZ: There's pictures in

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2 this one, if you want to look at here. Again, the
3 critical and fundamental issue is sediment budget.

4 CHAIRPERSON GENNARO: State your name
5 for the record.

6 DR. MANKIEWICZ: I'm Dr. Paul
7 Mankiewicz, I'm the Executive Director of the Gaia
8 Institute, an ecological engineering not-for-profit
9 corporation, and also on the New York City Salt and
10 Water Conservation District Jamaica Bay Task Force,
11 Penn and Fountain Avenue Landfill Technical Budget
12 Committee and other roles.

13 The critical issue in Jamaica Bay is
14 what we don't know about sediment budget. There are
15 historic losses, as you can see in the pictures
16 here. There are enormous, a thousand or so feet
17 inland, and more linear miles along the bay's edge.
18 The marshes have been filled. There are marsh
19 islands which have been lost and well documented at
20 this point by folks at the table here, as well as
21 DEC.

22 The historic losses are an issue
23 because the capacity of the bay to work
24 biogeochemically depends upon the area of marshes
25 and that's substantially diminished. So, what we

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2 would like to look at besides the loss of marshes
3 themselves, is also the loss of sediments, also the
4 lack of creek inputs again mentioned here, which
5 probably were hydrological regulators of some of the
6 shoreline behavior, noted before Kennedy Airport and
7 at Floyd Bennett Field and were built from sediments
8 in the bay, leaving deep holes and changing the
9 hydrology, which is an enormous problem still
10 probably but hasn't been characterized. We don't
11 have real time measures of the dissolved oxygen
12 content within these borrow pits, and we should have
13 that, the Army Corps should supply those.

14 So, let me just jump to the
15 conclusion -- actually, one other point. The 50,000
16 pounds, or thereabouts, of nitrogen put into Jamaica
17 Bay each day, somewhat less but in that range from
18 DEP, if you look at that in context, a salt marsh
19 from work of Teal (phonetic) and also White and
20 Howell (phonetic) and others, salt marsh can remove
21 by denitrification something like 50 pounds of
22 nitrogen per acre per year, so you can see the
23 thousand acres we lost in the last 70 years is
24 really one day's nitrogen load, and if it doesn't go
25 into marshes and isn't denitrofied, it goes into

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2 algae and the plankton has secondary impacts, which
3 we may not want to be able to deal with, we may not
4 be able to deal with. It would take marshes of about
5 500 square miles to remove the total loads, we're
6 not going to have that in Jamaica Bay ever, we never
7 have, so the issue is that Dan Mundy brought up
8 earlier, substantially lowering nitrate, nitrogen
9 loading all together to the bay.

10 We can't wait, on the other hand, but
11 what has been suggested by this panel, and I think
12 has not been on the table in any basic way from
13 National Park, we need hypothesis-driven large scale
14 restoration throughout the bay that matches the
15 losses.

16 Right now the DEP is looking at
17 closing Penn and Fountain Avenue landfills. They
18 might be building 30 acres of marsh on the shoreward
19 side. We actually have to start to construct marshes
20 and investigate the different scenarios of marsh
21 accretion and marsh loss from a restoration
22 environment where we don't end up after five years
23 of research or ten years or research with an
24 enormous net loss that has no marsh islands to
25 study.

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2 And the scale of the attempt so far
3 has been too little and too late. We need much, much
4 larger approaches, we need DEC to recognize that
5 building a marsh is not merely habitat displacement,
6 it's a way of actually increasing habitat
7 interaction, that should be clearly studied, set out
8 as a hypothesis for the construction of the marshes,
9 and created as a state regional and national mode
10 for understanding the interaction between the
11 sediment budget, the nitrogen budget and the
12 hydrolics and marsh growth and development, which
13 has not been done anywhere but needs to be done here
14 if we're going to have a resource to protect.

15 Thank you.

16 CHAIRPERSON GENNARO: Thank you.

17 Is there anybody here from National
18 Parks? Anyone here from National Parks? Okay.

19 Yes, just a couple of questions.

20 So, we have all this interesting
21 science. We have the effective sea-level change, and
22 the sediment budget and the dredging and all that
23 and the loss of the marshes and the need to create a
24 sediment model and look at the mussel populations
25 and all that. Are you folks, and perhaps I have a

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2 little bit of an ignorance of the process that's
3 taking place to date, but with regard to this
4 production of this Jamaica Bay report which is due
5 to be released in the spring, some sort of action
6 plan or whatever, are you all part of that whole
7 effort and to what extent has the -- you know,
8 certainly anything we do in this endeavor should be
9 science driven to the extent possible, and to the
10 extent that we have time to sort of wait for the
11 science. Sometimes we know we just should be doing
12 things and we should get out there and we should
13 restore wetlands while we can and DEP should do its
14 efforts to do the underground CSO tanks and to try
15 to cap the landfill, and Parks should try to do what
16 they do. But to what extent is this sort of pure
17 science making its way into the discussions of
18 action plans for what's going on? Because I know the
19 state is doing some projects, they're doing some,
20 the state has their projects the Corps of Engineers
21 has their project, to what extent is there a linkage
22 or is there like a nexus between the science that
23 you all are doing and to what is actually going on
24 in the bay, and is there a framework for
25 incorporating your areas of scientific expertise and

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2 into plans for the bay, and is this part of what
3 this Jamaica Bay report is going to be all about?
4 And I just throw that out to anybody who has a
5 knowledge of the process.

6 Sorry for the long and
7 incomprehensible question, but I'm not as smart as
8 you all, so I did my best.

9 DR. HARTIG: It was news to me today
10 that there will be this report in the spring. I have
11 not been part of that.

12 CHAIRPERSON GENNARO: See, we're
13 making progress already. Okay? You know what I mean?
14 We're bringing the stakeholders in.

15 DR. SWANSON: I was not aware of it
16 either.

17 CHAIRPERSON GENNARO: Okay.

18 DR. GORNITZ: Neither was I.

19 CHAIRPERSON GENNARO: All right. Okay.

20 DR. MANKIEWICZ: I had no idea.

21 CHAIRPERSON GENNARO: You had no idea?
22 Well, you see, we're going to make something happen
23 here.

24 So, Dan, you know what you're doing
25 right?

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2 MR. MUNDY: Right.

3 CHAIRPERSON GENNARO: You're taking
4 this back home?

5 We think it's a good idea, though,
6 right? So, maybe if there is some way to sort of
7 carve out. And here I am stepping on Billy's turf
8 again. What's Billy's last name again?

9 MR. LYNN: Is it Garrett.

10 CHAIRPERSON GENNARO: Superintendent
11 Garrett I should call him on the record, I guess.
12 It's nice of me to invite people to his party, but I
13 guess something that sounds like it might make some
14 sense, and why don't I just sort of forge policy
15 right here. I'm going to direct the Counsel to the
16 Committee to come up with a list of recommendations
17 that come out of this hearing, and perhaps it might
18 make a whole lot of good sense to have some of the
19 scientific folks to be involved in this Jamaica Bay
20 report, because that report, I guess at some point
21 it's ultimately going to be tied to some sort of
22 action plan.

23 Oh, are any of you involved in and
24 have close relationships with entities that are
25 actually doing projects on the bay, like the Corps

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2 of Engineers, they're like doing the projects, and
3 Parks Department and DEP. I know Paul is connected
4 to DEP, right?

5 DR. MANKIEWICZ: The Habitat
6 Committees and the like, I hear about those works,
7 that's right. That's the main mechanism that they
8 come across, and really this is a different kind of
9 function. We haven't really worked out the
10 relationships between the structural improvements
11 you might make in an ecosystem and how they
12 function, and that's what's at hand, that's the
13 problem at hand in Jamaica Bay, and those issues
14 haven't really been discussed in the broad sweep of
15 aims for Jamaica Bay at this point.

16 CHAIRPERSON GENNARO: I'm just trying
17 to see to what extent there is a connection between
18 sort of the, you know, action doers and the
19 scientists here. It would be nice to create some
20 sort of connection there.

21 And, so, all of you that have
22 endeavored to look at this issue, it really it's on
23 your own and not really in connection with the Corps
24 of Engineers or DEP or Parks?

25 DR. FRANZ: The National Park Service

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2 has a science committee that has advised them I
3 believe on these activities, so they're not totally
4 without scientific --

5 CHAIRPERSON GENNARO: Right. Science
6 committee made up of academics and --

7 DR. FRANZ: It's like the Blue Ribbon
8 Committee extended into the future. It's a different
9 committee, but there is a committee of outside
10 scientists that are helping the park service, I
11 couldn't tell you anymore about that.

12 CHAIRPERSON GENNARO: Now, the Blue
13 Ribbon Committee, on which you serve, right, Dr.
14 Franz?

15 DR. FRANZ: Yes, that's right.

16 CHAIRPERSON GENNARO: And their
17 mission was to look at the wetlands loss or
18 whatever?

19 DR. FRANZ: Their mission was to
20 review the available information that existed at the
21 time which included Ellen's report, the State DEC
22 report --

23 CHAIRPERSON GENNARO: I see. I see.

24 DR. FRANZ: And to come up with
25 possible explanations to account for this and to

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2 make some suggestions for initial mitigation
3 actions.

4 CHAIRPERSON GENNARO: Larry, was your
5 work looked at by the Blue Ribbon Panel?

6 DR. SWANSON: I have no idea. Most of
7 my work has been really dealing with City water
8 quality issues, rather than wetlands, marsh loss per
9 se, I just don't know.

10 CHAIRPERSON GENNARO: Oh, I see.

11 DR. HARTIG: I believe that the Blue
12 Ribbon Panel was convened in part because of the
13 community outcry, but also because the National Park
14 Service at the time doubted the validity of the
15 photography that I was bringing, and also DEC.

16 CHAIRPERSON GENNARO: Oh, I see.

17 DR. HARTIG: So it was very much to
18 see if they agreed, and I believe their findings
19 said yes, and if anything, these people have been
20 quite conservative.

21 CHAIRPERSON GENNARO: Sure.

22 So, the Blue Ribbon Panel had the
23 benefit of your work, right?

24 DR. HARTIG: Not to my knowledge. I
25 was not --

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2 DR. FRANZ: They did. They had the
3 benefit of your work.

4 DR. HARTIG: Okay.

5 DR. FRANZ: You had an unpublished
6 paper at the time, now it's subsequently been
7 published, but that was available, as well as the
8 State DEC survey.

9 CHAIRPERSON GENNARO: How about your
10 stuff, Paul? Did the Blue Ribbon Panel have your
11 stuff?

12 DR. MANKIEWICZ: I don't believe so.
13 Most of that was in the hands of agencies and the
14 like, so it was not in the literature they would
15 have gotten their hands on.

16 CHAIRPERSON GENNARO: Now the Blue
17 Ribbon Panel has completed its mandate, and it's no
18 longer in existence now, right?

19 DR. FRANZ: As I understand it now
20 there's a brand new committee. There may be some
21 overlap in membership, but those of us who were
22 actually engaged in research in Jamaica Bay were
23 asked not to be a part of the Blue Ribbon Committee.
24 So, I can't tell you much more about that.

25 CHAIRPERSON GENNARO: Oh, I see.

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2 DR. FRANZ: Billy Garrett would have
3 to explain.

4 CHAIRPERSON GENNARO: Right. And there
5 is a scientific committee, and this is what you're
6 referring to, the new scientific committee?

7 DR. FRANZ: That's right, yes.

8 CHAIRPERSON GENNARO: And that's under
9 Superintendent Garrett, right?

10 DR. FRANZ: Yes. And that's ongoing,
11 as far as I know. I don't know who the members of
12 that Committee are, but there is a committee.

13 CHAIRPERSON GENNARO: I see. Well, I
14 think certainly we should endeavor to bring to the
15 attention of this new scientific committee some of
16 the good work which is going on by our panelists
17 here, and we will endeavor to do that.

18 Is there anything that, you know,
19 you're all here and have your testimony and in
20 listening to other people is there anything that you
21 heard from any of the other witnesses on the panel
22 that like surprised you? Do you want to question
23 each other? I don't want to turn this into a whole
24 big scientific conference or whatever, but I'm
25 curious as to whether or not anything that was said

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2 was like a surprise to anybody that was here or
3 whatever?

4 Don't be shy.

5 DR. GORNITZ: I just wanted to say
6 that I was very interested in the work that Dr.
7 Swanson did in mentioning the expansion of the tidal
8 range and the erosive action that that has caused.

9 CHAIRPERSON GENNARO: Okay. His number
10 is 631 -- it's area code 631. That's all I know.

11 DR. MANKIEWICZ: I can say the same
12 thing, actually that was very good to hear. We had
13 put in a proposal with John Tenicredi (phonetic) and
14 some of the folks from Poly Technic years ago, and
15 all of that information wasn't in the fore at the
16 time, and it's been a very substantial contribution
17 to our understanding of the dynamics in the Jamaica
18 Bay, and it's better to work with real information
19 as opposed to misinformation.

20 CHAIRPERSON GENNARO: Right. What do
21 we think might be some kind of intelligent way, if I
22 was to make some recommendations for how science
23 could best be employed in the future decisions and
24 for the bay I guess it would be under the aegis of
25 the scientific committee? I guess the scientific

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2 committee would be the one. Dr. Franz, I guess
3 having no one else here from the Parks Department
4 can speak to it? I mean, you at least have some
5 sense of how this is.

6 DR. FRANZ: Well, I don't know exactly
7 how to answer that, but I do believe that it would
8 be useful to have scientists from outside, as well
9 as from in the various agencies communicating with
10 each other, at least fighting with each other, if
11 necessary, over what the proper sequence of steps
12 would be. We all have our different opinions about
13 this.

14 CHAIRPERSON GENNARO: And if anything,
15 if people were at least brought in the loop on this
16 Jamaica Bay report on this process, would that be
17 helpful?

18 DR. FRANZ: I think that would be,
19 yes.

20 CHAIRPERSON GENNARO: Paul.

21 DR. MANKIEWICZ: Obviously from the
22 controversy or the iteration of the numbers of
23 mechanisms and regulators involved, there's a huge
24 complexity that surrounds this. But I think we
25 shouldn't confuse ourselves by the fact that we need

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2 to research those, but we also address the scale of
3 the loss. The hypotheses have to be set at proper
4 scale. We don't want to give the resource up because
5 we're looking at these mechanisms that operate at
6 various scales. We actually have to see what we can
7 do about something like 40 acres, 50 acres a year,
8 1,000 acres over 70 years, as opposed to simply
9 documenting. It's like looking at a kidney patient
10 and watching exactly how the kidney decays in
11 function, and we'd like to also see what transplants
12 might mean in this kind of circumstance.

13 CHAIRPERSON GENNARO: Sure. Sure. Yes.
14 I mean, whatever value added that science applied
15 could sort of bring to the process, yes, I think
16 we've got to do that.

17 DR. FRANZ: What's important, though,
18 is we have these western islands in the bay which
19 are near sea level, they're very vulnerable to
20 rising sea level, and then we have fringing marsh
21 systems around the bay also that are maybe not quite
22 as vulnerable to rising sea level right now but do
23 have other problems.

24 CHAIRPERSON GENNARO: Right.

25 DR. FRANZ: And, so, it's a real issue

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2 here as to where the resources should be put. I
3 mean, it may not be possible to save all these
4 islands.

5 CHAIRPERSON GENNARO: So, if we've got
6 to do triage we'll do it, but the science should
7 speak to that.

8 DR. HARTIG: I think one issue may be
9 that National Park Service, it's not in their
10 mandate to do research. They don't directly support
11 scientific research, and that may get in some ways
12 in the way of them pursuing this, and this is sort
13 of new territory from them.

14 They do have access to USGS, which in
15 some ways is acting as their research branch.

16 CHAIRPERSON GENNARO: Right.

17 DR. HARTIG: And in fact USGS has come
18 in and put in what's now called surface elevation
19 tables, it used to be called sediment erosion
20 tables, and they have now been placed in the bay.
21 There are a number of them, including in the area
22 where they'll do the pilot study for the sediment
23 spraying. And I was out there in the marsh as a
24 wetland scientist and assisting with USGS, and also
25 as a volunteer, assisting to place them in the

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2 marsh, and I think that they will be very helpful in
3 determining which marshes really -- it's too late to
4 do anything in, the peat is so soupy that adding
5 sediment, it will just sort of sink under the
6 surface as well on the weight of the sediment that's
7 placed there. It may not be able to help in allowing
8 the marsh to elevate through its own plant material.

9 CHAIRPERSON GENNARO: Sure.

10 DR. HARTIG: But, so, this issue of
11 can Parks Service do the research and lead, to be a
12 leader in research, and the restoration is still an
13 issue.

14 CHAIRPERSON GENNARO: So what's the
15 answer, should this be like a national science
16 foundation thing, or the university should get
17 research grants to do this or something? I don't
18 know.

19 DR. HARTIG: There could be a Request
20 for Proposals by perhaps a combination of USGS and
21 National Park Service, where many scientists to ask
22 to propose on what research they would like, and at
23 the same time, also seek consulting firms that can
24 do the actual restoration.

25 So, I think it will take a

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2 combination, but to date I don't know that there was
3 any real Request for Proposals. The scientists that
4 could come in are those who are able to have grants
5 through their universities on the research.

6 CHAIRPERSON GENNARO: Okay. Larry, go
7 ahead.

8 DR. SWANSON: I just would like to
9 comment a little bit about modeling the system.

10 I don't maintain that I've seen any
11 or all the models that have been developed for the
12 bay, but one of the things that concerns me, the
13 ones that I have been basically done using mean
14 values, and, so, it really doesn't characterize the
15 bay, the dynamics of the bay adequately,
16 particularly when you're looking at differentials
17 between what is being exported and what is being
18 imported. And I think we could show based on
19 modeling work that has been done on other Long
20 Island bays that you can very easily demonstrate
21 what ifs, if you dredge to certain depths, or if you
22 remove so much material, how you're going to alter
23 the hydrodynamics and the sediment flow, and I would
24 encourage anybody that's building models to look
25 very carefully at what they're actually proposing to

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2 do.

3 CHAIRPERSON GENNARO: Okay.

4 Paul?

5 DR. MANKIEWICZ: Along exactly the
6 same front, when you've got complicated
7 environments, like the interaction of hydrostatic
8 head and the organization of a mussel edge with a
9 high nutrient load and plankton load, that same kind
10 of environment could actually trap water and hold
11 sediment -- I'm sorry, could actually maintain
12 sediment from being lost, as opposed to holding
13 water and keeping the water from being low. So, the
14 hydrostatic head on the islands that are being lost,
15 that are low, was 30 centimeters, 60 centimeters
16 higher, it might favor marsh development because the
17 mussels are there and that should be tested, and
18 that would be a way of looking at these small
19 islands which otherwise are a loss. So, these kinds
20 of things could be done if we had a large enough
21 framework for RFP so that the interested parties
22 could actually get something out there.

23 CHAIRPERSON GENNARO: Okay. Here's
24 what we're going to do: One of the recommendations
25 that we'll put forward and we'll talk about with

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2 Superintendent Garret will be this whole sort of
3 like this science piece, and perhaps the need for
4 some sort of scientific research RFP that has
5 various components that might be worth some, more
6 thorough investigation, and synthesis with what the
7 action part of the Jamaica Bay report is going to be
8 all about.

9 And, so, it could be like an RFP that
10 has different elements to it? We've got to look at
11 this, we've got to look at this, we've got to look
12 at this? Like that?

13 DR. MANKIEWICZ: A wood toll with a
14 purpose (sic).

15 CHAIRPERSON GENNARO: What's that?

16 DR. MANKIEWICZ: A wood toll with a
17 purpose.

18 CHAIRPERSON GENNARO: Okay. Yes, write
19 that down. That was catchy. Make that my quote, not
20 his. I'm going to steal that from Paul.

21 Donna didn't hear me say it the first
22 time. It's wood toll with a purpose. That's my new
23 phrase.

24 Okay, all right, I'm going here.
25 Okay, thank you all very much. I appreciate your

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2 testimony and your good work. And thanks for waiting
3 so long, and being willing to spend so much time
4 with us here at the table.

5 Thank you, also, to the witnesses to
6 follow. Certainly we all learned a lot from that
7 last panel. As a matter of fact, and staying in the
8 room for the whole thing. I, teacher at Queens
9 College, will give you course credit for staying in
10 the room.

11 And, so, we have I guess the last
12 panel that we're going to hear from today, Nellie
13 Tsipoura from NRDC; and Rose Harvey, Trust of Public
14 Land; John Pearson from the Sierra Club; Ron Bourque
15 of Audubon. Just stay for one second, I'll be right
16 back.

17 Thank you all very much for coming.
18 This is the last panel. You get the patience awards,
19 but you're also going to be the smartest, right?
20 You'll have all the testimony, you'll have all the
21 benefit of all the views that came before you, and I
22 thank you very much for your patience and for your
23 willingness to really spend the whole day here and
24 as I said before, a great testament to your
25 commitment to the issue, and we're grateful for

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2 that.

3 You know what, out of special
4 deference to people who are testifying, I've got to
5 give you something, right? You know what? We're not
6 going to swear these witnesses. We're not going to
7 swear these witnesses, so that will be the bonus I
8 guess. I'm just trying to thank you in my own small
9 way for being so patient.

10 So, if you would, I guess the same
11 protocol will start this way and work that way, if
12 you could state your name for the record and proceed
13 with your testimony and identify the organization
14 that you represent, and please proceed.

15 MS. TSIPOURA: My name is Nellie
16 Tsipoura. I'm a Research Associate at Natural
17 Resources Defense Council. I'm working on the New
18 York Harbour Bight Project.

19 This project emphasizes the need to
20 preserve and protect wildlife habitat throughout the
21 New York New Jersey coastal region.

22 Jamaica Bay is part of the Gateway
23 National Recreation Area, it's the first such urban
24 park that was created in the US 30 years ago, and
25 the purpose of the park is to provide present and

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2 future generations outstanding natural and
3 recreational opportunities within the urban New York
4 City metropolitan area.

5 Located within an hour's drive of 10
6 million people, this expanse of marshy islands
7 interspersed with mudflats, coastal shoals and
8 shallow open water is one of the two largest
9 estuaries within the New York/New Jersey Harbor
10 ecosystem, the other one being the Hackensack
11 Meadowlands.

12 This vital wetland system provides
13 significant nursery habitat for commercially and
14 recreationally important fish and shellfish. Jamaica
15 Bay is also very important for migratory, breeding
16 and wintering birds. More than 325 species of birds
17 have been observed in the Jamaica Bay complex,
18 including breeding populations of Piping Plovers,
19 Roseate Terns, Least Terns and Common Terns, and
20 migrating Peregrine Falcons, Bald Eagles and
21 Northern Harriers. The Jamaica Bay complex has been
22 designated an Important Bird Area by the National
23 Audubon Society, and it is a site of regional
24 importance in the Western Hemisphere Shorebird
25 Reserve Network.

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2 In addition to the wildlife value,
3 Jamaica Bay marshes improve water quality by
4 removing nutrients, sediments and toxins from the
5 water. They also buffer and protect local
6 communities from the impact of winds and waves.

7 These important wetlands have
8 diminished greatly in the past 30 years. A November
9 2000 study released by the New York State Department
10 of Environmental Conservation shows that between
11 1974 and 1994, a 20-year period, 500 acres of
12 Jamaica Bay wetlands were lost; between 1994 and
13 1999, a five-year period, 300 acres were lost.

14 These recent accelerated marsh losses
15 at Jamaica Bay imply an imbalance in the
16 equilibrium, between sea level rise and the build-up
17 of marsh. Lack of an adequate sediment supply due to
18 human disturbances such as dredging of navigation
19 channels, creation of borrow pits, and urbanization
20 have probably contributed to this imbalance.

21 Excess nutrient loading in the bay
22 from nearby sewage treatment plants have resulted in
23 greater abundances of sea lettuce and in unusually
24 high populations of ribbed mussels that alter the
25 drainage patterns on marsh islands; and both of

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2 these may impact the health of the marsh vegetation
3 and result in marsh loss.

4 Further, salt marshes of Jamaica Bay
5 may be lost because the rises in sea level have
6 outpaced the marsh accretion.

7 Regardless of the causes, at the
8 current rate of attrition, most of the salt marsh
9 islands could disappear --

10 CHAIRPERSON GENNARO: I'm sorry to
11 interrupt. I just have to take an urgent call for a
12 second, someone is on the phone. I'll just be a
13 minute. Ordinarily she knows where I am and would
14 not disturb me unless it was something important, so
15 let me just go. I'll be right back.

16 (Recess taken.)

17 CHAIRPERSON GENNARO: I apologize. I'm
18 also shutting my cellphone off, and I'm not taking
19 any calls from anybody. I apologize. Forgive me.

20 MS. TSIPOURA: Get back to where I
21 was?

22 Regardless of the causes, at the
23 current rate of attrition most of the salt marsh
24 islands could disappear within the next 20 years.
25 This is a critical issue that cannot be adequately

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2 addressed unless all agencies interested in Jamaica
3 Bay work together.

4 We commend the interagency team that
5 includes the Army Corps of Engineers, the New York
6 State Department of Environmental Conservation, New
7 York City Parks, New York City DEP, New York
8 Department of State, and Gateway National Recreation
9 Area for their efforts in identifying a plan of
10 action.

11 We support continued involvement of
12 these federal, state and city agencies in the
13 process of not only further defining but also
14 implementing this plan.

15 We urge the US Fish and Wildlife
16 Service to provide their technical expertise by
17 joining these efforts. In addition, since JFK
18 Airport may have negatively impacted the
19 hydrodynamics of the bay and may still be affecting
20 the health of the wetlands, we strongly urge the
21 Port Authority to participate in this process.

22 We applaud the New York State
23 Department of Environmental Conservation and the
24 Army Corps of Engineers for obtaining the bond act
25 restoration funds and the CAP funds needed for a

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2 pilot study of how the loss of marshes can be
3 reversed.

4 We cannot emphasize enough the
5 urgency and the need for this project to stay on
6 track to start early in 2004.

7 The marsh is shrinking and we need to
8 do something about it now. Simultaneous research on
9 sediment budgets and sea level rise also needs to be
10 supported to determine what factors trigger the loss
11 of marsh.

12 However, while these projects will
13 provide useful scientific and technical insight on
14 how to deal with the problem, they will not in
15 themselves suffice in stopping and reversing the
16 deterioration of this ecosystem. Additional monies
17 need to be obtained to enable us to move beyond a
18 pilot project to a full restoration plan for Jamaica
19 Bay wetlands.

20 We thank Congressman Weiner for his
21 work that has been instrumental in moving this
22 project forward. We urge Senators Clinton and
23 Schumer to also take an active role in preserving
24 these wetlands.

25 I would like to take this opportunity

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2 to thank the City Council for taking an interest in
3 this important issue as demonstrated by holding this
4 hearing, and urge you to continue to support the
5 work of New York City, DEP and Parks in cleaning up
6 and restoring Jamaica Bay.

7 Jamaica Bay is an oasis in the middle
8 of urban New York, a wildlife area that attracts
9 people from throughout the nation, but is also
10 accessible by City bus and subway. It is a great
11 place to enjoy wilderness in the shadow of
12 skyscrapers. Let's make sure that our children and
13 grandchildren continue to enjoy it.

14 CHAIRPERSON GENNARO: Here here. I'm
15 for that.

16 Okay, thank you for your testimony. I
17 will hear all testimony and then we will ask
18 questions. Thank you.

19 Ron.

20 MR. BOURQUE: My name is Ronald
21 Bourque. I'm representing the New York City Audubon
22 Society. I'm the member of the Conservation
23 Committee of that chapter.

24 The New York City Audubon Society is
25 a chapter of the National Audubon Society with a

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2 membership of about 8,000 that includes all five
3 boroughs of the City. New York City Audubon Society
4 is committed to protect and preserve wildlife and
5 wildlife habitats in New York City.

6 The chapter established in 1979 has
7 long recognized the intrinsic value of Jamaica Bay
8 as habitat for marine and avian wildlife. Despite
9 the many assaults of our industrial culture upon
10 this ecosystem, Jamaica Bay continues to host a
11 impressive diversity of migratory, breeding and
12 resident birds and marine life.

13 While much of Jamaica Bay was
14 protected as a wildlife refuge within the Gateway
15 National Recreation Area, the surrounding marshes
16 and adjacent uplands outside the refuge boundaries
17 were heavily caused by dumping and polluting junk
18 yards. The Trust for Public Land and the New York
19 City Audubon Society saw the need to secure these
20 edge areas as a buffer to Jamaica Bay in order to
21 protect its water quality and restore wildlife
22 habitat. TPL and NYCAS compiled a list of
23 undeveloped buffer sites with recommendations for
24 preservation.

25 The first Buffer the Bay report was

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2 issued in 1987 and a second report, Buffer the Bay
3 revisited, came out in 1992. Four of the recommended
4 sites, four of the sites recommended for
5 preservation and remediation in the Buffer the Bay
6 reports have been acquired by the New York City
7 Department of Parks and Recreation. A fifth site has
8 been designated as a New York State Preserve. But
9 some major upland areas adjacent to the bay have
10 been lost to development.

11 At a recent Wetlands conference, the
12 New York State Department of Environmental
13 Conservation, the New York City Environmental
14 Protection Agency and the U.S. Army Corps of
15 Engineers and the National Park Service, all
16 outlined their efforts to study and mitigate the
17 marsh losses on the islands of the bay.

18 According to Fred Mushacke of DEC,
19 studying nine other bays on Long Island where some
20 of the marsh loss is evident, the rate of loss, 44
21 acres a year in Jamaica Bay is significantly
22 greater, more than ten times than all of the other
23 bays.

24 Dr. Norbert Psuty of the Institute
25 for Marine and Coastal Sciences at Rutgers

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2 University, said that the two natural factors
3 affecting the marshes of Jamaica Bay are the
4 sediment budget and sea-level rise. Sea-level rise
5 is relative to the subsidence of the local landmass;
6 there is, in addition, an absolute sea-level rise
7 from the total increase in ocean volume. Local sea
8 level rise at 4 millimeters per year is the fastest
9 in 7,000 years, according to Dr. Psuty.

10 What do we stand to lose if most of
11 these marsh islands become mudflats devoid of the
12 grass - *Spartina alterniflora* - that has been an
13 integral part of the Bay's ecosystem? The detritus
14 from the breakdown of *Spartina* is an important
15 contributor to the productivity of estuarine
16 environment that feeds marine life at the base of
17 the food chain. The distribution of the marsh
18 islands or hassocks throughout the bay provide a
19 baffle to waves, interrupting their course and
20 absorbing their energy, and thereby reducing the
21 wind and water-driven erosion. Those more stable
22 marsh islands - those not presently eroding - may
23 succumb to the full force of waves that can build up
24 over miles of open water. These hassocks provide
25 shelter for wading birds and waterfowl when strong

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2 winds whip the bay.

3 If all those mechanisms that are
4 contributing to the marsh loss go unchecked for the
5 next 25 years, it is estimated that the hassocks in
6 the bay will disappear. While it might be possible
7 to affect some of those mechanisms causing marsh
8 loss, sea level rise obviously is beyond human
9 manipulation. It must be noted that the rate of
10 local sea level rise, or land subsidence, is
11 unpredictable, it can accelerate, stop or reverse.

12 Another factor which may be
13 contributing to marsh loss is the very high level of
14 nutrients in Jamaica Bay contributing to the mussel
15 berms that form at the edges of marshes.

16 These berms can cause pooling of
17 water in the marshes when tides recede, reducing
18 oxygen to rhizomes, leading to a loss of marsh
19 grasses. This excess of nutrients is a result of
20 high nitrogen loading in the effluents of four Water
21 Pollution Control Plants discharging into Jamaica
22 Bay.

23 Fortunately, the DEP is in the
24 process of reducing some nitrogen load entering the
25 bay by diverting sludge de-watering facilities to

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2 outside the bay. But the biological nitrogen
3 reduction systems that can further reduce nitrogen
4 load of Jamaica Bay will have to wait for those
5 systems to be installed in East River first. This
6 priority for East River Water Pollution Control
7 Plants has been set by consent orders.

8 Even before the mechanism
9 contributing to the extraordinarily high rate of
10 marsh loss in the bay are fully understood, an
11 effort to artificially add sediment to restore two
12 of the most severely affected marshes will be
13 attempted.

14 While the loss of marsh islands
15 within the bay would severely affect much of the
16 avian and marine life along with the character of
17 the bay, expansion of fringe marshes inland could
18 mitigate those affects.

19 And it is here where the almost
20 prescient Buffer the Bay recommendations for
21 preserving marshes and adjacent uplands will provide
22 some room for the inland migration of salt marshes
23 with their life-sustaining peat and grasses.
24 Proposals to establish and restore fringe marshes at
25 the base of the Pennsylvania and Fountain Avenue

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2 should be given serious consideration.

3 However, plans to pipe untreated
4 stormwater runoff from the Arverne Renewal
5 development into Jamaica Bay will be inimical to the
6 efforts to improve the water quality of the bay.

7 The fate of Jamaica Bay was almost
8 sealed by jetty and sea wall at Breezy Point, the
9 dredging of shipping channels providing a sink for
10 sediment, the expansion of Barren Island, I mean of
11 Barren Island, now Floyd Bennett Field, on
12 productive marsh hassocks, the sealing off of the
13 bay tributaries which formerly contributed sediment,
14 the construction of the Belt Parkway, burying of the
15 wetlands under three landfills, dredging out Grassy
16 Bay down to 40 feet -- I stand corrected, that was
17 50 feet -- to create an airport on top of a fecund
18 and verdant brackish marsh and the construction of a
19 two-mile long sea wall east of the Marine Parkway
20 Bridge. If these manipulations were not enough, more
21 damage was done by replacing all the fresh water
22 tributaries with the effluent from four sewage
23 treatment plants and replacing all the marsh
24 building sediments with pollutants.

25 But the fate of the bay is in our

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2 hands. With much help from many friends, Jamaica Bay
3 is coming back, as herons, egrets and osprey will
4 affirm. The challenge posed by the eroding marsh
5 islands has brought together disparate government
6 agencies in an unprecedented spirit of cooperation
7 and common purpose. The New York City Audubon
8 Society applauds the work of this committee and all
9 the government agencies committed to the
10 preservation of this natural treasure that is
11 Jamaica Bay.

12 CHAIRPERSON GENNARO: Thank you.

13 Thank you very much. I appreciate
14 your thoughtful testimony and all the good work by
15 Audubon. Thank you.

16 Mr. John Pearson, correct?

17 MR. PEARSON: Yes, correct.

18 CHAIRPERSON GENNARO: Okay, please
19 state your name for the record and proceed with your
20 testimony.

21 MR. PEARSON: My name is John Pearson.
22 I'm attending this meeting as Chair of the New York
23 City Sierra Club, a volunteer organization with
24 700,000 members nationwide, and 414,000 in New York
25 City.

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2 This following brief has been
3 prepared on behalf of the New York City group by
4 Diane Buxbaum, who is our conservation chair, and
5 Jack Hought, a member of our Executive Committee.
6 They were unable to be present today.

7 The mission of the Sierra Club is
8 summed up in a pair of phrases which I believe are
9 relevant. First, explore, enjoy and protect the
10 planet. Second, for our families, for our future.

11 Across the country we work to protect
12 wild places, open spaces and diverse habitats.
13 Jamaica Bay with its shores embodies most of these
14 things.

15 Protecting and restoring Jamaica Bay
16 will be expensive, but as we weigh the benefits and
17 costs of protecting Jamaica Bay, it is essential
18 that we think of the future. We are trying to
19 protect the bay not just for ourselves, but even
20 more for our grandchildren and their grandchildren.
21 If we succeed, pay back to our grandchildren and
22 their descendents will never end. If we fail, the
23 loss will be irreparable. They will never see a
24 wonder such as Jamaica Bay, nor even know what they
25 have lost.

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2 I'm going to abbreviate some of the
3 comments which have been very well covered by
4 preceding speakers, and I'm going to skip to the
5 conclusions.

6 The infrastructure on Jamaica Bay is
7 insufficient to protect the bay and its wetlands.
8 Further commercial, residential or water-dependent
9 activities around the bay should be strictly
10 regulated until full protection is given to the bay.
11 Specifically no more landfills should be created
12 anywhere in the area of the bay. A channel, possibly
13 a tunnel, should be reopened to allow natural water
14 flows between the bay and the ocean as there once
15 were in the area where Arverne and Edgemere meet.
16 And methods of delivering fuel by vessels to Kennedy
17 Airport and related facilities should be devised to
18 avoid stirring up bottom sediments, resuspending
19 toxics in the water, and disturbing the habitat.

20 Thank you for your attention.

21 CHAIRPERSON GENNARO: Thank you, Mr.
22 Pearson. I appreciate your work and the work of the
23 Sierra Club. It's always great to partner with them
24 on critical issues.

25 And speaking of partners in the

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2 environmental movement, certainly environmental
3 defense is a great partner of ours as well, and I
4 believe we have Michelle Bicek, am I saying that
5 right?

6 MS. BICEK: Yes.

7 CHAIRPERSON GENNARO: Okay. So, please
8 state your name for the record and proceed with your
9 testimony.

10 MS. BICEK: My name is Michelle Bicek,
11 and I am --

12 CHAIRPERSON GENNARO: If you could
13 speak right into the microphone, that way it will be
14 sure to come out on the recording.

15 MS. BICEK: My name is Michelle Bicek,
16 and I'm a Program Associate at Environmental
17 Defense, and I'm presenting testimony here today on
18 behalf of Jim Tripp, our General Counsel at
19 Environmental Defense.

20 Environmental Defense is a national
21 non-profit environmental organization headquartered
22 in New York City.

23 Environmental Defense has 3,000
24 members around the country and over 50,000 members
25 and activists in New York, and I just want to say

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2 thanks for letting me testify today.

3 CHAIRPERSON GENNARO: You're welcome.

4 MS. BICEK environmental Defense has
5 long been involved in issues relating to protection
6 and restoration of wetland and adjacent habitat in
7 the lower Hudson River estuary.

8 Environmental Defense, as a founding
9 member of the Waterfront Park Coalition, is also an
10 active proponent of public access to Jamaica Bay and
11 the rest of the City's waterfront.

12 New York has traditionally paid too
13 little attention to the spectacular natural
14 resources of our City's great estuarine ecologies,
15 and the consequence that today, many of these
16 resources are degraded.

17 This estuarine habitat includes not
18 only Jamaica Bay, but also remarkable natural
19 resources from Arlington Marsh to the New York side
20 of the Arthur Kill, the Hudson River shoreline and
21 the city's many estuarine resources that together
22 touch all five boroughs.

23 As citizens rediscover the waterfront
24 for recreation, economic development and ferry
25 transportation, it is fitting that the City also

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2 have a strong strategy for the protection and
3 restoration of these remarkable resources. We are
4 therefore delighted that the Committee on
5 Environmental Protection of the Council is turning
6 its attention to Jamaica Bay.

7 Jamaica Bay faces many ecological
8 threats. For example, Jamaica Bay originally
9 included over 16,000 acres of wetlands, of which
10 only 4,000 remain. The following priorities are
11 critical to the ecological future of the bay,
12 stabilizing salt marshes and restoring lost wetland
13 acreage, restoring water flows, removing fill from
14 wetland sites and restoring wetlands, strengthen
15 ecological buffers, and otherwise restore natural
16 features to the shoreline.

17 In recent years, steps have been
18 taken toward an ecological renaissance for the bay.
19 These efforts have been important first steps, but
20 they have not resolved the key outstanding issues
21 that continue to threaten aquatic habitat.

22 New York City can play a leadership
23 role in funding and identifying restoration
24 priorities and in providing matching funds that
25 support securing federal dollars.

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2 To move these renaissance forward,
3 Environmental Defense urges the City Council to
4 support efforts to provide local matching funds in
5 support of the U.S. Army Corps of Engineers' efforts
6 to protect the bay.

7 Today, New York City DEP, State DEC
8 and the Corps of Engineers and other agencies, with
9 the support of many environmental and community
10 groups are designing a wetland island restoration
11 pilot project.

12 The cost of a full-scale wetland
13 island restoration study and implementation program
14 that we would support will in all likelihood require
15 additional local share funding.

16 The Harbor Estuary Program has
17 identified over 20 priority habitat restoration
18 sites in Jamaica Bay. These are presented in the
19 Harbor Estuary Program's Habitat Workgroup 2001
20 Status Report, published by HEP and the New York
21 City Parks and recreation Natural Resources Group.

22 Environmental Defense supports moving
23 forward with those priorities. We support the Port
24 Authority's decision to commit \$60 million to
25 habitat conservation throughout the estuary and we

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2 urge that these funds be spent in ways that are
3 consistent with HEP's priorities.

4 The New York Waterfront Blueprint
5 book, published by the New York Waterfront Park
6 Coalition, an organization of which we are a
7 founding member, identifies a number of public
8 access opportunities for Jamaica Bay.

9 These include, for example,
10 completing a bike path along the north shore of the
11 Rockaways and linking it to complete a 22-mile loop
12 around the bay.

13 We also urge the City to identify
14 opportunities where federal funds, including, for
15 example, transportation funds, could be used to
16 improve bike paths and other access to the bay.

17 Over time, this should include
18 expanded ferry service to link communities near the
19 bay to other parts of the city. By ferry, Jamaica
20 Bay and the communities around it are just a half
21 hour from Manhattan.

22 Communities in this area would
23 benefit from the increased access to jobs that this
24 ferry linkage would bring, and the ferry would also
25 open up new opportunities for all New Yorkers to

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2 gain access to the bay's remarkable recreational and
3 natural resources.

4 Thank you.

5 CHAIRPERSON GENNARO: Thank you. Thank
6 you very much. Thank you for your testimony and for
7 what I know is going to be a partnership in this
8 process, we can always count on Environmental
9 Defense and all the other great organizations that
10 make my job easy.

11 Just a few comments or questions, we
12 won't keep you too much longer.

13 Nellie, you had indicated in this
14 statement about the need for the U.S. Fish and
15 Wildlife Service to play a more active role in this
16 process; have we heard that? Have you heard that?

17 MS. TSIPOURA: We haven't heard
18 anything. If they are involved, we don't know about
19 it.

20 CHAIRPERSON GENNARO: Okay. So, we'll
21 make a note about the potential involvement of the
22 U.S. Fish and Wildlife Service.

23 MS. TSIPOURA: And they have a lot of
24 experience.

25 CHAIRPERSON GENNARO: Okay. And the

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2 Port Authority as well.

3 You know, just like we talked about,
4 this is kind of an open question for everybody here,
5 the last panel, as you know, we were talking to the
6 scientific panel and we wanted to get their
7 expertise to bear on these issues and have them part
8 of the Jamaica Bay, you know, report process or
9 whatever, and I guess to what extent do the people
10 in the environmental community know about this
11 effort to do this Jamaica Bay report?

12 Well, you heard Superintendent
13 Garrett speak about it, I guess they are going to
14 have some scientific input to that, but to what
15 extent do the sort of like mainstream environmental
16 groups believe that they're sort of like
17 stakeholders in this process and are involved with
18 Park Service; is that going on? Is that the sense
19 that you all have? Or do you feel, you know, part of
20 this process with regard to the Park Service, or
21 perhaps there should be part of an environmental
22 group, sort of like a formalized participation of
23 environmental groups in this process; does anybody
24 have any views on that? Anybody?

25 MR. PEARSON: We're an activist group.

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2 We got our main function as to educate public,
3 mobilize the public. Mobilize our members and bring
4 inference to bear on the decision-makers. And, so,
5 we definitely would like to participate in this, not
6 so much as scientists or analysts, but in order to
7 see how we can best use our influence to --

8 CHAIRPERSON GENNARO: Well, sure.

9 Because all these groups have members, right? All
10 these groups have members, members live nearby, a
11 lot of members in New York City, this goes out in
12 like your little bulletin, you know, that the Sierra
13 Club is participating in this, or Environmental
14 Defense is in this, or NRDC is in this, or Trust of
15 Public Land is involved in this, and, you know, it
16 seems like these groups are uniquely positioned to
17 sort of get information out to the faithful
18 so-to-speak. And, so, Donna, if I could, if I could
19 direct the Committee Counsel, when we have our
20 follow-up discussion on this hearing, to see if we
21 can -- again, it's not my place to invite, it's not
22 my show, it's the national park's, I'm an
23 interloper, I'm just here trying to make trouble,
24 trying to make trouble and earn my pay for today.

25 MR. PEARSON: May I say, we're not

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2 shy. Now that we know about it we'll --

3 CHAIRPERSON GENNARO: No, I'm not too
4 shy myself. And, so, I think that perhaps should be
5 one our -- because the mainstreaming environmental
6 groups and even like the local community
7 environmental groups have the ability to sort of
8 reach their members, get their word out and just
9 sort of -- I mean, I think it's always good to
10 create more stakeholders. You know, you don't want
11 to have too many cooks stirring the pot, but there
12 is some balance between secrecy and anarchy, there's
13 something like in the middle that perhaps we could
14 forge.

15 So, I think that's my thought.

16 Yes?

17 MS. TSIPOURA: NRDC has been involved
18 in Jamaica Bay for a long time. It is an issue we
19 have been pursuing.

20 CHAIRPERSON GENNARO: I wasn't saying
21 you weren't.

22 MS. TSIPOURA: It's much easier to
23 pursue and get information out of the New York City
24 DEP and Parks and the Army Corps --

25 CHAIRPERSON GENNARO: I understand,

1 COMMITTEE ON ENVIRONMENTAL PROTECTION

2 but --

3 MS. TSIPOURA: We invite ourselves to
4 the Parks' meetings.

5 CHAIRPERSON GENNARO: Great. That's
6 great. I'm just trying to see if I can -- because as
7 an environmentalist, as someone who is a member of a
8 lot of environmental groups, as someone who teaches
9 environmental public policy at the university level,
10 someone who chairs an environmental committee, I've
11 got a great fondness for environmental groups and we
12 need their advocacy certainly, but just like we did
13 with the protection of the New York City watershed
14 where there were environmental groups, stakeholders,
15 for part of that process, or part of the memorandum
16 of agreement to protect the upstate watershed, I
17 think that that's a great paradigm and to the extent
18 that the energy of the environmental groups can be
19 brought into this process, I think it's a good
20 thing. I'd like to see it; and I'm directing Donna
21 DeCostanzo to, when we have our follow-up
22 discussion, to include that as one of our, you know,
23 thoughts that we pass along to Superintendent
24 Garrett.

25 So, any last, anybody want the last

1 COMMITTEE ON ENVIRONMENTAL PROTECTION

2 word?

3 MR. BOURQUE: I'm very much interested
4 in this conversion of the national recreation area
5 into a national park.

6 It's been a real bone of contention
7 as to what their stewardship responsibilities have
8 been. They've often emphasized the recreation over
9 their environmental stewardship, at least, and we
10 felt that way. We feel that perhaps national park
11 status might bring more balance.

12 CHAIRPERSON GENNARO: Well, I'm for
13 that. I think it would be a great, not only symbolic
14 but sort of substantive, and I think that would
15 energize things. It would, you know, all the guess
16 what? We now have a national park in New York City,
17 and I mean the newspapers -- it would be awesome. I
18 like that and I'm going to talk that up as well, as
19 you saw when some of the earlier witnesses, it seems
20 like yesterday when we had our first witness here.

21 MR. BOURQUE: One of the things I've
22 questioned, I've always asked the National Park
23 Service, is the protection of wildlife in the
24 Gateway National Recreation Area, are the wildlife
25 any less worthy of protection than the wildlife in

1 COMMITTEE ON ENVIRONMENTAL PROTECTION

2 Yellowstone; I've never gotten an answer to that.

3 CHAIRPERSON GENNARO: And going back
4 to your previous point about the Parks Service being
5 kind of, you know, perhaps more recreational
6 stewards than environmental stewards, you know,
7 they've got a big job to do, they don't have a lot
8 of money to do it, and certainly their, one of their
9 main purposes is to provide opportunity for people
10 to have access and so on. But this is a very, very
11 special place that's worthy of all that good science
12 and scientific investment can bring, and I know that
13 the people from the Park Service have their heart in
14 the right place with regard to the environmental
15 issues which are also near and dear to us, but they
16 need help and they need support and perhaps you know
17 by all this interagency and interjurisdictional and
18 intergovernmental input, along with the help of the
19 environmental community and others who are active,
20 we can forge this symphony as I referred to
21 previously that can get us a really great result.
22 And I thank you for your participation today and for
23 what I know will be a partnership from here out.

24 And I also want to state for the
25 record that Bernard Blum from Friends of Rockaway

1 COMMITTEE ON ENVIRONMENTAL PROTECTION
2 submitted written testimony. We would like to thank
3 for the record those people who are very concerned
4 that have been active but didn't have the ability to
5 come physically, so we'd like to thank him and
6 certainly thank all of you, and I appreciate it and
7 from this we'll go forward and thanks for staying
8 around as long as you did and giving us the benefit
9 of your views, we greatly appreciate it.

10 Thank you all very much.

11 MR. BOURQUE: Thank you.

12 CHAIRPERSON GENNARO: Okay. With no
13 one else wishing to be heard, the meeting is
14 adjourned.

15 (Hearing concluded at 2:56 p.m.)

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CERTIFICATION

STATE OF NEW YORK)
COUNTY OF NEW YORK)

I, CINDY MILLELOT, a Certified
Shorthand Reporter and Notary Public in and for the
State of New York, do hereby certify that the
foregoing is a true and accurate transcript of the
within proceeding.

I further certify that I am not
related to any of the parties to this action by
blood or marriage, and that I am in no way
interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto
set my hand this 8th day of November 2002.

CINDY MILLELOT, CSR.

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C E R T I F I C A T I O N

I, CINDY MILLELOT, a Certified Shorthand Reporter and a Notary Public in and for the State of New York, do hereby certify the aforesaid to be a true and accurate copy of the transcription of the audio tapes of this hearing.

CINDY MILLELOT, CSR.