
Public Hearing

before

ASSEMBLY ENVIRONMENT, SCIENCE AND TECHNOLOGY COMMITTEE

*“Interstate issues arising from sewage discharges
by New York City into local waterways”*

LOCATION: Council Chambers
Borough Hall
Atlantic Highlands, New Jersey

DATE: March 6, 1997
10:00 a.m.

MEMBERS OF COMMITTEE PRESENT:

Assemblyman Steve Corodemus, Chairman
Assemblyman John E. Rooney, Vice-Chairman
Assemblyman David W. Wolfe
Assemblyman Reed Gusciora
Assemblyman Tom Smith



ALSO PRESENT:

Jeffrey T. Climpson
Lucinda Tiajloff
*Office of Legislative Services
Committee Aides*

Thea M. Sheridan
*Assembly Majority
Committee Aide*

Mary D'Arcy
*Assembly Democratic
Committee Aide*

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ASSEMBLYMAN STEVE CORODEMUS (Chairman): I'd like to welcome everybody to the Assembly Environment, Science and Technology Committee hearing. I'd like to welcome you to my hometown, the Borough of Atlantic Highlands. It's a pleasure to be here after many years. I used to sit at this council table as a Councilman very early in my career. It's nice to see new and some familiar faces here in the chambers.

The purpose of today's hearing is to investigate and review the circumstances that almost befell this entire region not less than two week ago, and that was the issue of the anticipated release of about 500 million gallons of sewage from the City of New York. The question that arose was why were they doing it. Other questions arose, why didn't we know about it earlier? And lastly, what can we do to avert this type of crisis in the future?

We have several invited guests and other guests here that would like to testify on this issue, but the circumstances that arose regarding this proposed discharge was not anything planned or sinister by the City of New York, only in that it was attempting to effectuate repairs to its sewage treatment plant, and that it had applied to the New York State Department of Conservation for permission to do that. And in shutting the plant down, it was going to divert this 500 million gallons of sewage into the Hudson River and the prospects of that sewage flowing from the Hudson River down into our bay here, Sandy Hook Bay, perhaps the Navesink River, certainly the coastal Atlantic Ocean waters around Sandy Hook and the effect it would have on us.

Although this is not a summer bathing season, there are still activities that transpire throughout the year, namely, the fishing and harvesting of shellfish in the area. I think some of the witnesses will testify today that the

effect on that shellfish industry would not be helpful. In fact, it would be harmful, and it would reverse what we looked at, years of progressive improvement of water quality here in the region, and that this type of activity would only reverse that.

I'd like to welcome our members who are here with us today: Vice-Chairman Assemblyman John Rooney, who probably came from the furthest distance this day near the New York State border to our north; Assemblyman David Wolfe from the 10th Legislative District representing Ocean and parts of Monmouth County; my colleague, Assemblyman Tom Smith, who resides in the City of Asbury Park; and, of course, we are expecting one or two other members to arrive shortly. We have our staff here with us: Lucinda Tiajoloff and Jeff Climpson, from the Office of Legislative Services, and Thea Sheridan from the Majority staff and--

I'm sorry, you're going to have to introduce yourself.

MS. MOSIER (Assembly Democratic Staff): Christine Mosier, Assemblyman Smith's representative.

ASSEMBLYMAN CORODEMUS: Thank you, Christine, for joining us today.

And, of course, our friends from OLS who are going to be recording this hearing and providing a transcript.

The first witness who I'm going to call is Mr. Howard Golub, who is the Interstate Sanitation Commission Director. He has an overall presentation to make to us to give us a general idea of the region and how this all affects us. And I should have mentioned in my introduction that even though the City of New York was the focal point of this proposed discharge,

they are not the only dischargers into the estuary here. Whoever has outfall lines into the rivers and ocean also contribute to the discharge. Unfortunately, some of our discharges are of the combined sewer outfall type that complicate things, and particularly, when you have very heavy rains, with the increase in volume, this causes additional discharges to the region. It has an impact on a collective basis to the bay.

Mr. Golub, while you're setting up, I think Assemblyman Wolfe would like to say something.

ASSEMBLYMAN WOLFE: Yes. First of all, I'd like to introduce someone coming up with Mr. Golub, John Walsh, who lives in my legislative district. John is a well-respected engineer and also administrator in several shore communities.

I'd just like to thank, first of all, Chairman Corodemus, for calling this hearing. I think it's significant that what he has said is this specific problem did not just happen. It has happened before and there are other areas in the State that may be affected. The towns I represent are shore communities from Belmar south to Toms River. They rely heavily, obviously, on tourism, on commercial and residential interests, but there are also rather significant interests in the industry of commercial fishing in the ports of Manasquan Inlet, Point Pleasant, Manasquan, and also Brielle -- which is in Assemblyman Corodemus' district -- but also in Belmar. And also we have the recreational fisherman to be concerned with as well, as I said before our tourism industry.

So I am here, obviously, to listen, to hear the genesis of the problem and really what can we learn from it and, hopefully, how can we

prevent something such as this not from happening in the future and also perhaps to accommodate those municipalities or those constituencies that may be affected. So I'd like to thank Assemblyman Corodemus and my fellow Committee members. Thank you.

ASSEMBLYMAN CORODEMUS: Any other statements by the Committee members?

Assemblyman Smith. (no response)

Assemblyman Rooney.

ASSEMBLYMAN ROONEY: I'll wait till later.

ASSEMBLYMAN CORODEMUS: Thank you.

I'd like to welcome Assemblyman Reed Gusciora from the Mercer County area. Welcome to Atlantic Highlands.

ASSEMBLYMAN GUSCIORA: Thank you.

ASSEMBLYMAN CORODEMUS: Howard.

H O W A R D G O L U B: Mr. Chairman, Committee members, good morning. I am Howard Golub, the Acting Director and Acting Chief Engineer of the ISC, the Interstate Sanitation Commission. With me today is John Walsh, who is a recent appointee to our Commission from the State of New Jersey. Within this metropolitan area, we are the environmental agency that holds both regulatory and enforcement powers with the responsibility to protect interstate waters from pollution. All of our actions, all of our programs -- sampling, testing, litigation -- are directed at this one goal: preserving the integrity of the waterways throughout our district.

I might add that a great percentage of our efforts revolve around protecting New Jersey waters and shorelines from out-of-state pollutants such

as debris from the Freshkills Landfill in Staten Island and from sources of pollution emanating from New York City, particularly from the management and operation of its wastewater treatment plants and the associated sewer system. In point of fact, our actions in this area, including litigation that directly benefits New Jersey as well as the entire region, are among the ISC's highest priorities.

Details of ISC's background, activities, and spheres of responsibility are outlined in a packet before you. In particular, I wanted to point out that the seminal work in pollution control in this tristate region has come about as a result of Commission orders originating in the '50s and '60s. In this connection, a major concern and priority of the ISC has been the purity of our waters for swimming, boating, fishing, and shell fishing. To that end, the ISC fought for and passed a universal disinfection requirement in 1984 which took effect in 1986. As a direct result, seasonal shell fishing restrictions could be safely lifted in certain areas. Today, for example, approximately 13,000 acres in Raritan Bay are now open for year-round shell fishing. Our Commission points with pride to this as a prime example of sound environmental practice that has translated into a tangible boost for New Jersey's economy. Incidentally, thousands of acres of New York waters in the Atlantic Ocean off the Rockaways are now also open year-round as a result of this ISC action.

On a personal note, as Acting Director of the ISC, it has been most gratifying to me that the ISC has always enjoyed a cooperative working relationship with the New Jersey DEP. We have accomplished much together. However, as an interstate agency, I wanted to point out that the ISC's

jurisdiction reaches far beyond New Jersey's borders and into the entire tristate region. Thus, in the areas of regulation and enforcement, we can often do for New Jersey what New Jersey cannot do for itself.

While it may not be obvious in our daily lives, the recent proposed dumping by New York City of 560 million gallons of untreated sewage into the East and Hudson Rivers dramatically underlines the fact that pollution recognizes no political boundaries and respects no borders. The health of New Jersey's environmentally sensitive waters and shorelines are continually in peril.

To get to the matter at hand, we at the Commission were, frankly, shocked at the New York City DEP's attempt to sneak one past us. We consider this bypass that was to occur a significant discharge in every sense of the word. Certainly it would have adversely affected the immediate harbor areas and beyond. In my conversations with the New Jersey DEP, they were in total agreement. Their assessment of the situation was that the proposed bypass would most definitely affect the shellfish waters of the Raritan and Sandy Hook Bays, as well as those in the Navesink River. Just yesterday, I learned that the U.S. Food and Drug Administration reached the same conclusions.

Conversely, at a presentation before the New York City Council last Friday, the New York City DEP had their contractor present the results of its water quality modeling run to simulate the effect of the proposed discharge into the harbor area. While their discharges dwelled on showing the minimal incremental effect of the discharge on shellfish waters in New Jersey, they failed to present information on the cumulative effect of this bypass when combined with all the other discharges that normally occur. In addition, they

had also conducted their analysis in terms of 30-day average conditions, which are not part of the criteria for shellfish-harvesting areas. The stringent criteria for shellfish-harvesting waters not only have requirements for average values under worst-case conditions, that is, on an outgoing tide after a significant rainfall, but additionally, there are maximum values that cannot be exceeded a certain percentage of the time. To the best of our knowledge, New York City DEP's present analysis fails to include all of these items that I've just mentioned. I might also point out that this analysis was performed for the New York City DEP in an *Alice-in-Wonderland* sort of way on February 18, three days after the February 15 proposed discharge.

While there presently may or may not be a legal requirement for notification to the ISC or New Jersey in this particular situation, to receive a telephone notification approximately 12 hours before a bypass of this magnitude is unconscionable. Keep in mind, this is a four-day, 96-hour bypass totaling more than half a billion gallons of untreated sewage -- sewage containing human feces with high bacterial counts and a variety of other contaminants.

Our receptionist first received a phone call from New York State DEC at 12:35 p.m. on Friday, about 12 hours prior to the scheduled bypass. The message simply stated that a 96-hour bypass from the 13th Street pumping station was going to begin at 12:01 a.m. on February 15. It was not until about 3:15 that my staff and I, who were out in the field when the initial call came in, were made aware of the message. At that time, I had the staff follow up by calling New York State DEC to determine the details and magnitude of the discharge. Fortunately, although we were still trying to get

to the bottom of matters, within half an hour of a call for information from the New Jersey DEP, we were able to get back to them with some key data. We were able to fax needed copies of a map of New York City's combined sewer overflow locations and information detailing the location of the 13th Street pumping station.

At this point, I think it would be appropriate for me to show some maps of the areas that we're talking about.

ASSEMBLYMAN CORODEMUS: Go right ahead.

MR. GOLUB: (referring to maps) The discharge we're talking about would come from lower Manhattan. The areas that we're-- It would come out of lower bay, and the areas that we're talking about that would be affected in New Jersey are in Raritan and Sandy Hook Bay and up into the Navesink River. To the best of our knowledge, at this point in time, the flow would not go out into the Atlantic Ocean and affect the shellfish areas off the Rockaways that are used by New York State. The FDA in New Jersey analysis says that the areas most affected would be the southern shore of Staten Island, as well as Raritan Bay, Sandy Hook Bay, and the Navesink River.

Each dot on this map represents sewage treatment plants throughout our district. Our district does cover parts of New York, New Jersey, and Connecticut, but most importantly in this instance, we're talking about 14 sewage treatment plants in New York City alone that discharge an average of 1.4 billion to 1.5 billion gallons of sewage a day.

ASSEMBLYMAN CORODEMUS: But they're all treated, right, Howard?

MR. GOLUB: Yes. Yes, sir.

The Newtown Creek Sewage Treatment Plant, which is right here on the Brooklyn-Queens border, treats sewage from Brooklyn, Queens, and from lower Manhattan. Just to illustrate briefly-- Assemblyman Corodemus did mention combined sewers. This doesn't locate them individually, but the areas that are blackened in shows where combined sewers are throughout this region. In the tristate area -- New York, New Jersey, and Connecticut -- there are approximately 700 outfalls from combined sewer locations. New York City alone has approximately 450 to 500 of these, and there are several hundred in New Jersey.

The point at hand that we're talking about is the Newtown Creek drainage area, and I will show this on two different illustrations. The treatment plant, as I pointed out, is right over here. Everyone of these are locations on the East River side. Everything below that dotted line there is where the discharge would have occurred had this bypass occurred. It was not going to occur from one single discharge point. It was going to occur from all the combined sewers that are fed to Newtown Creek from Manhattan. What happens is that the 13th Street pumping station from there-- There is a tunnel under the East River that pumps that 140 million gallons of sewage to the Newtown Creek Treatment Plant for treatment. So that is the East River portion, and likewise, there is a portion on the Hudson River up to Bank Street where there are additional outfalls. So these are all the outfall points that we are talking about that would have discharged during the period in question.

ASSEMBLYMAN CORODEMUS: I think I and the Committee have some questions for you so we can get some more information. You may be pleased to learn that discussions with Senator Owen Johnson's office --

New York State Senator Owen Johnson's office -- and my office have culminated in the recommendation of introduction of legislation in both states to provide immediate notification to the respective states and also to the Interstate Sanitation Commission, hopefully, to avert this type of near crisis in the future.

Let me ask you one question now just regarding this proposed shutdown. It was my understanding that what was going to happen was the temporary shutdown of that sewage treatment facility so that they could change some type of apparatus there, and this was going to result in the diversion of the raw sewage into the Hudson and the East Rivers.

MR. GOLUB: Correct.

ASSEMBLYMAN CORODEMUS: Now, you also mention, in your presentation there, that there are all these different outfall lines. What would it have taken to accomplish those types of repairs without that type of discharge? Is this a commonplace type of situation? Certainly all these different sewage facility plants must undergo maintenance. I don't know if it's of this magnitude.

MR. GOLUB: This particular pump station that we're talking about-- The sewage that is pumped through there on a daily basis is more than the sewage that is pumped through all the other pump stations in toto in New York City. This is their largest plant -- 310 million gallons -- and, yes, there are repairs that go on and work that goes on throughout the whole region, not only in New York, but in New Jersey; but I cannot remember anything of this magnitude that took place or was about to take place in all my years of experience.

ASSEMBLYMAN CORODEMUS: When that pumping station is on-line and operating all those different outfall lines, is the sewage diverted from those outfall lines into this main pumping station on a regular operating daily basis?

MR. GOLUB: Yes, sir. This is a combined sewer system. A combined sewer system during dry weather-- There are regulators within the sewer system. During dry weather, those regulators are shut down and all the sewage is diverted to the sewage treatment plant for treatment. When we get a rainstorm and after the sewage arriving at the plant reaches a certain amount, in order not to wash out the plant and to hydraulically overload it, these bypass -- these regulators open up and bypass some of the sewage, which is both raw sewage and storm water combined. This is essentially how a combined sewer system works. During wet weather, they are meant to discharge. During dry weather, it is forbidden that they discharge.

ASSEMBLYMAN CORODEMUS: During the wet weather when there is heavy rains and there is going to be a potential to max out the pumping station and there is diversion into the rivers, what is falling into the rivers in the overflow? Is it raw sewage or just storm water or both?

MR. GOLUB: Both. It's a combination of raw sewage and storm water. As a combined system, this is different than what is called a separate sewer system where you can envision two pipes in the ground, one that only carries sanitary sewage and that always goes to a treatment plant, and the other that only carries storm water. In a combined system, you can envision only one pipe in the ground, and during dry weather it only carries the domestic

sewage, and during wet weather it is a combination of the storm water plus the sewage.

ASSEMBLYMAN CORODEMUS: Mr. Golub, do you have any idea on an average annual basis how much combined sewer overflow is discharged either on a daily basis or a gallonage basis?

MR. GOLUB: It's probably in the hundreds of millions of gallons a day. When we have significant rainfalls, it is really probably at least 100 million gallons, maybe even more. It depends on the type and the size of the storm. To the best of my knowledge, New York City is having their contractors work up some numbers on this.

ASSEMBLYMAN CORODEMUS: That being the case and knowing the capacity of the whole estuary, does the estuary have the ability to absorb this type of sewage flow without posing health hazards, either to humans bathing or to the shellfish industry?

MR. GOLUB: The estuary has the ability to absorb some of this. The coliform bacteria that would affect the shellfish and bathing waters do die off. There is a die-off rate, so the effects would not be long lasting. However, there are many areas that would have to be closed down during and immediately after significant storms.

ASSEMBLYMAN CORODEMUS: Maybe the \$64 question is, had this 560 million gallon discharge occurred from New York City, can you estimate what the damage could have been, if any, to this region?

MR. GOLUB: There would have been an immediate damage to the harbor area and to the shellfish waters. They would have had to been closed down, to the best of my knowledge, with discussions with the shellfish

people and Jersey DEP, for possibly two weeks or so immediately. That's as much as we do know at this point in time. So there would have been a shutdown of the waters. While the resource has a very good ability to cleanse itself of the bacteria after a period of time, the inability of the baymen to go and use that resource and for the depuration plants to be able to put out the product during that period of time would have been lost economically.

ASSEMBLYMAN CORODEMUS: Okay. I'd like to now open the--

MR. GOLUB: Excuse me. Sir, I do have more prepared testimony if you would like me to finish that now?

ASSEMBLYMAN CORODEMUS: Let me just give the Committee members an opportunity to ask questions, if they have any at this juncture, otherwise, we'll permit you to testify.

Assemblyman Wolfe.

ASSEMBLYMAN WOLFE: Yes. Mr. Golub, thank you very much. I'm very very enlightened by the sewage issue. It certainly has gone beyond, I think, the scope of initial shutdown.

Assemblyman Corodemus asked a question and I'm quite intrigued by what you said. We have all these pumping facilities in the tristate area. When they routinely have to shut down for maintenance, what is the standard operating procedure for the volume of sewage that will be coming in at that time? Does it just typically go into the waterway or would it be in some type of holding capacity somehow?

MR. GOLUB: Usually, it's not held. Usually, you are talking about much smaller volumes--

ASSEMBLYMAN WOLFE: Right.

MR. GOLUB: --and there are bypasses. It could be 5000, it could be 10,000, it could be a half a million gallons depending on where and what they have to do. So it usually does go out. It is bypassed. Some places, depending on where it is and how accessible it is, they may do some disinfection of the bypass before it's released into the waterways. But for the most part, it's not.

ASSEMBLYMAN WOLFE: So short of, let's say, New York City notifying your office they were going to do this, you probably would have found out after the fact as would other people. Had they notified us that way and there had not been the public outcry, what alternative would they have?

MR. GOLUB: That's the \$64,000 question. There are many unanswered questions at this point in time where we and others would like to see exactly the plans for the pump station, etc., to see if-- There is much expertise in this area, and maybe there might be a way to do it that would either lessen the discharge or obviate the need for the bypass at all. But we don't know at this point in time, and that's one of the things that we'd like to get to the bottom of.

ASSEMBLYMAN WOLFE: Okay. Thank you.

MR. GOLUB: And it might be, sir, that there is a possibility that this may be the only way to do it, but we don't know that.

ASSEMBLYMAN WOLFE: Right.

MR. GOLUB: We can't answer with any confidence.

ASSEMBLYMAN WOLFE: Thank you.

ASSEMBLYMAN CORODEMUS: Assemblyman Rooney.

ASSEMBLYMAN ROONEY: Yes. Just for the novices among us, P-O-T-W, can you give us what that abbreviation means on your charts?

MR. GOLUB: Publicly owned treatment works.

ASSEMBLYMAN ROONEY: Okay. Just wanted to make sure everybody--

MR. GOLUB: It's all the municipal sewage treatment plants.

ASSEMBLYMAN ROONEY: Okay. The other thing just to follow up with Assemblyman Wolfe's question is, do you have any clue as to what they're doing? What they're planning to do? Is this a pump outage or is it a-- Does anybody know what they are trying to do when they're bypassing this?

MR. GOLUB: Okay. Yes. This we glean from the presentation that they made last Friday in New York City. There are five pumps at the 13th Street pump station. The water comes in from the different sewer lines into what is called the wet well. It is really a holding tank that they pump out. These five pumps draw from that wet well. Two of the pumps have valves that are stuck and have been stuck in the open position for several years. So there is no way to shut down the flow coming to those pumps to effectuate the necessary repairs that they have to make. They said at this point in time the only way to make the necessary repairs is to completely shut down and bypass the pump station. And this is what we want to further investigate to see if this, in fact, is the only way to effectuate the necessary repairs.

ASSEMBLYMAN ROONEY: You know, I deal in a little bit with these pump stations. I know a little bit about the technology that goes on there. I can't visualize the fact that you have five pumps, that all five of them

are required for operation at any given time, and that you can't shut off one versus another. I mean, there's no way in hell that these stations are designed so that-- I just don't buy that, to be honest with you, from my own technical background. I'd like to see a little bit more detail. There's got to be a way to stop the flow to those pumps. There's just no way that that could happen. I've seen the safeguards in it. Like I said, I deal in that industry, and I know from where I speak.

The other questions I had just for your group. Is the State of New Jersey currently funding the ISC?

MR. GOLUB: Yes.

ASSEMBLYMAN ROONEY: Are they putting their share in? Because several years ago, they weren't. In fact, I had a bill in several years ago that would have required them to do that. So are they fully funding their share as the State of New Jersey at the present time?

MR. GOLUB: Yes. In fact, this year -- the year that we're currently in -- the budget-- The appropriation from New Jersey was 315,000. The Governor's recommended budget for this year recommends that same amount. Our Commission approved a budget request to the State of New Jersey for \$352,800, which is 37,800 more than we are getting this year. So what's in the budget now is the same as last year, and we hope that the State of New Jersey will come up with the extra 37,800 in our budget for this year.

ASSEMBLYMAN ROONEY: Gave you an opportunity for a commercial. That's no problem. (laughter) As I said, at one time, I know, we weren't even funding it.

ASSEMBLYMAN CORODEMUS: Any other questions from the Committee?

Reed.

ASSEMBLYMAN GUSCIORA: Hi, Mr. Golub.

Before when you said that there was a combined sewer overflow of hundreds of millions of gallons a day, is that both from discharge from both New Jersey and New York?

MR. GOLUB: Yes, throughout the region, I would say.

ASSEMBLYMAN GUSCIORA: And is there a breakdown in percentage of how much the overflow comes from New Jersey and how much the overflow comes from New York?

MR. GOLUB: I don't know volumewise how much comes from New Jersey and New York, but I do know that of the approximately 700 outfalls throughout the tristate district -- and Connecticut has a minimal amount of them -- 450 or so are from New York City and there's probably about 200 to 250 from New Jersey. So just in simple number of outfalls, it probably is almost twice as many coming from New York than there are in New Jersey. Also in my experience, the trunk lines that feed the sewer systems and the combined sewers in New York City are far greater in size than those in most of the Jersey communities.

ASSEMBLYMAN GUSCIORA: I was told by members in DEP that New York had engaged in raw discharges before this planned one. Is that correct? Was there ever a raw discharge before the February 15 proposal?

MR. GOLUB: Absolutely. Throughout the whole region there are necessary repairs that have to go on where raw sewage is discharged, besides

the unplanned combined sewer discharges and the unplanned discharges where a gate valve or a regulator will get stuck open in a part of the combined sewer system and there is a raw discharge during dry weather. Those are unplanned things. But planned, I'm sure they go on throughout the whole tristate region on a regular basis as a necessary way of doing repairs.

ASSEMBLYMAN GUSCIORA: And this is in full knowledge with the administration, these prior discharges? Did the government--

ASSEMBLYMAN CORODEMUS: You better clarify that.

ASSEMBLYMAN GUSCIORA: Did New Jersey know about any prior raw discharges?

MR. GOLUB: I don't think they've gotten-- I think you'd have to ask Jersey DEP, but I don't think that they would get a notification -- a special notification -- for work that's going on any more than they got a notification for the present situation.

ASSEMBLYMAN GUSCIORA: But in any event, we were aware that there were prior raw discharges from New York?

ASSEMBLYMAN CORODEMUS: Let me just interject here--

MR. GOLUB: Those of us in the business know that they go on, on a regular basis.

ASSEMBLYMAN CORODEMUS: Let me just interject here that Mr. Golub, I assume, can only testify from an Interstate Sanitation Commission standpoint. We do have a representative from the DEP. Maybe you can ask those particular questions about New York State and New Jersey State's knowledge to him.

ASSEMBLYMAN GUSCIORA: And there was a proposal to place screens to stop the overflow or at least the substantive parts of the raw sewage to prevent that from going into the waterways. Is there an estimate cost of placing screens at these source points?

MR. GOLUB: You're talking about -- what was it? -- 39 outfalls?

COMMISSIONER JOHN WALSH: There's about 39 outfall locations where you're going to have--

MR. GOLUB: Thirty-nine outfalls. The feasibility of doing that and getting everything in place for a 96-hour job is probably-- First of all, I don't know what the cost is, and I don't know how feasible it would be.

ASSEMBLYMAN GUSCIORA: And before, you testified there were no alternatives for New York?

MR. GOLUB: We don't know.

ASSEMBLYMAN GUSCIORA: Oh, you don't know. Okay.

MR. GOLUB: Absolutely, don't know.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Chair.

ASSEMBLYMAN CORODEMUS: Any other questions? (no response)

Would you like to conclude, Mr. Golub?

MR. GOLUB: Sure.

Even now, as I speak, there are many unanswered questions regarding the necessity of doing pump repairs in the proposed manner. And the fact that this Commission includes five Commissioners from New Jersey would seem to make it all the more logical and imperative that the ISC be

informed well in advance about an environmental action that would have such a clear cut and negative effect on interstate waters.

If this bypass was, indeed, an emergency, there is a sin of omission for permitting matters to reach such a state. As it now appears, this is not an emergency and repairs have been put off for another year, so why arbitrarily and with virtually no notice suddenly dump? There must be a better way.

Certainly we're pleased that the City recognizes the need to upgrade its infrastructure, and I don't mean this sarcastically, but if there is no emergency, surely other means can be explored to obviate the need to dump 560 million gallons of untreated sewage within a four-day period into our waterways. One does not have to be an engineer to recognize that this is a significant discharge.

To put this figure in perspective, 560 million gallons over a four-day period, that's more than half a billion gallons. Each day that the 140 million gallon bypass was to occur represents fully 10 percent of the City's total daily sewage load. Just last Friday, New York City said that their 1996 annual dry-weather discharges totaled 400 million gallons, and here they proposed to bypass 560 million gallons in just four days.

While we don't want to minimize the importance of mitigating the effects of combined sewer overflows, the addition of untreated discharges, which we know contain human waste with high bacterial counts, can act as nothing less than a body blow to the environment. So you can well understand why, at the very least, proper notification and an opportunity for the ISC and other agencies to offer input into the problem, as is now being planned, would surely have avoided last week's incident.

As an interstate agency, the ISC feels strongly that the Commission and other groups should participate in initial discussions concerning planned bypass operations. It makes good sense for any entity planning a significant environmental action to take advantage of the cross section of expertise that agencies within this region offer including the Commission's more than 60 years of experience in water pollution control.

To that end, just yesterday, at our quarterly meeting, our Chairman, Frank A. Pecci, also a lifelong New Jersey resident, asked that the Commission hold hearings that will lead to the ISC adopting a regulation requiring notification of scheduled bypasses well in advance of the event. This would apply not just to New York City, but to all entities within our region, thus, offering all your constituents within our district another line of defense against pollution.

Such a regulation would represent another step forward on behalf of the ISC to expedite and further the goals of this Commission whose sole mission is to prevent water pollution and promote interstate cooperation so that the integrity of New Jersey's and the entire region's waterways and shorelines can be strengthened and preserved.

I thank you for your attention, and I would welcome any additional questions.

ASSEMBLYMAN CORODEMUS: I would like to thank you and Commissioner Walsh for coming here today. We hope that you can stay with us a little longer. As Senator Johnson and I are preparing our legislation for introduction, perhaps we can call upon you to help us in its drafting so that we can anticipate all the proper situations so that there's adequate notification.

MR. GOLUB: We would appreciate that, sir.

ASSEMBLYMAN ROONEY: Just two questions to follow up. I just, quick-- As far as the CSO, is anything being done in New York City to separate the sewage from the water?

MR. GOLUB: In some areas, there is separation not only in New York City, but in New Jersey.

ASSEMBLYMAN ROONEY: Well, I know that because I've been involved in that.

MR. GOLUB: Sewer separation isn't always, depending on the area and the problem-- Sewer separation will not always be the answer that will get you the best environmental effect.

ASSEMBLYMAN ROONEY: I know. And on the 13th Avenue pump station, is the City doing this on their own, or do they have an outside consultant that's recommending the procedure for the repairs of that pump station?

MR. GOLUB: Oh, I'm sure that, you know, it's a combination of both the City's own engineering and technical people and outsiders.

ASSEMBLYMAN ROONEY: Well, I certainly question the competency of any consultant that would do this. I would like to know who it is.

ASSEMBLYMAN CORODEMUS: Thank you very much.

At this point, I would like to ask Jack Vroom from the Baymen's Protective Association to testify.

And Mark Smith from the Department of the Environmental Protection, you're on deck.

I'd like to -- while everybody's coming to the front, I'd like to acknowledge the presence of our host Mayor today, Mayor Robert Schoeffling.

Mayor, thank you for having us here in your backyard. We appreciate your making these facilities available to us. Mayor, thank you.

MAYOR ROBERT A. SCHOEFFLING: (speaking from audience) Assemblyman, we're happy to have you here today, and I think we are all concerned about the environment. The Governor and yourself and all the Committee work very hard to provide clean water for the people of the State of New Jersey and for the commercial fishermen and recreational fishermen. It seems like the State of New York and the City of New York seems to take a I-don't-give-a-damn attitude, and that's why you're here today. We welcome you. Thank you.

ASSEMBLYMAN CORODEMUS: Thank you very much, Mayor. Jack, welcome.

JACK VROOM: Welcome, Mr. Chairman, Committee members.

I'm a commercial clammer here. I belong to the Baymen's Protective Association with-- There's over 200 men, members in there. There's a lot of concerns on this issue. These communities were founded off of fisheries. It's a historical thing, and it's actually coming back. After two and a half decades of efforts to clean up the water, for the first time we've got some new areas opened up for direct harvest. Everything is on a steady improvement basis, and we know this takes time. Just the thought of somebody dumping that much sewage is just-- I can't tell you what it does to me. It tears me up inside.

ASSEMBLYMAN CORODEMUS: I wish you would tell us exactly how it affects you, because you're really on the front line here with regard to the effect of your industry. You were here hearing Mr. Golub's testimony. Had that sewage been discharged, what, in your opinion, would have been the outcome to you and the Baymen's Protective Association members?

MR. VROOM: Well, I know the very first thing that would happen is they would shut the bay down and shut the area down. And for how long, we don't know. It could be a few weeks. It could months, I don't know. But it certainly would not give Jersey shellfish a good name.

ASSEMBLYMAN CORODEMUS: Now, when it's shut down, you folks don't get paid?

MR. VROOM: We don't get paid. There's no work. There's no sick days. There's no holidays. You get paid for what you bring in. If you can't bring anything in, you don't get paid.

ASSEMBLYMAN CORODEMUS: Now, your product, I assume, would also be disrupted. You wouldn't be supplying the restaurants and other facilities that--

MR. VROOM: Absolutely. The plant, the plant workers, and truck drivers-- I'll give you an example. Last year there was over 28 million clams caught for the clam plants that are here.

ASSEMBLYMAN CORODEMUS: Just here in the immediate area?

MR. VROOM: Just here in the Highlands and in Sea Bright. There's also another 6 million clams relayed, that are picked up, here in these

waters and brought down to South Jersey to purify themselves where waters are cleaner. That's not even counting the over 5000 bushels of soft clams. Figuring just a price, if you want to look at money, an average price of 15 cents a clam brings that figure up to over \$5 million. That's just on the Jersey side. Now, if you look on the New York side, on Staten Island relay, they bring in over 3 million clams. I mean over \$3 million, excuse me.

The accepted Federal government factor of five -- economic factor -- puts us up to about \$42 million of revenue generated in this area. This is not a tiny business. This affects a lot of people. It's a major thing, not for tourism, for an industry that has long been pushed out of existence through pollution. It's now coming back. It's fighting its way back. We're doing well. We're doing very well.

ASSEMBLYMAN CORODEMUS: Now, the folks that are in this industry, they're not long distance commuters? These are local residents?

MR. VROOM: These are all local people. Almost everybody lives within a mile of the water, half mile to the water. Many of the clammers here, the fishermen, they're second-, third-, fourth-generation fishermen. It's just not the economic value and that we want clean water, this is a way of life. We have a right to this way of life. It's like living in your heritage. It's something that we all want to do very much. I don't want to work in an office. I don't want to work on a construction site. This is what I do, and this is what I want to do. It's incredibly wrong for people to think that you can trample on that, even if there is only a few hundred of us. That's going to filter down to more and more people and just a clean, nice refreshing look. New Jersey needs this. We do. All along here you see the Atlantic Highlands, how they are sprucing

up their looks. Every place is looking better and better. I'd like to see that trend continue.

ASSEMBLYMAN CORODEMUS: Do you think it's an accurate depiction that the waters are cleaning up and that the shellfish industry's expanding here?

MR. VROOM: Oh, yes. Not just shellfish, just fish in general. I saw more weakfish last year than I had seen in 20 years. That's all a sign of improvement. Fluke catches were good. Striped bass catches are great. We didn't have that for a long time. It's the way it used to be, and I'd like to see it that way again. It can only, only be done by being vigilant. You've got to be vigilant on this.

ASSEMBLYMAN CORODEMUS: We're trying to prevent this thing from happening again because we-- It appears we don't have a good notice mechanism from one state to the other. We're trying to put one in place so that we won't have this type of a problem or fear of a problem.

MR. VROOM: I think there needs to be a little attitude adjustment there, too, because you can't look at Raritan Bay as a personal dump for anything for anybody. That's not what it's there for.

I would like to thank Governor Whitman, who came to us in our hour of need. I just hope that this support does continue.

ASSEMBLYMAN CORODEMUS: Are there any other questions?
Assemblyman Wolfe.

ASSEMBLYMAN WOLFE: I don't really have a question. I just want to thank you, first of all, for what you said, because I think -- on behalf your membership and also, I think, for the residents of the State who may not

be familiar with all the work that you do and also for the generations that have done this type of work. I know in the community where I live, in Brick Township, before the relay system began most of the baymen from my district went to North Carolina. A lot of them left. I heard a speech last week by a State representative claiming that a third of the clams in the world are produced and harvested in New Jersey. Is that true?

MR. VROOM: I don't know if that's accurate, but it's probably not far from it.

ASSEMBLYMAN WOLFE: Right. So you represent a significant heritage and also a significant economic--

MR. VROOM: Oh, yes.

ASSEMBLYMAN WOLFE: --contribution to the State. I think your testimony will certainly be helpful to our deliberations.

MR. VROOM: Okay, thank you.

ASSEMBLYMAN CORODEMUS: Today is not a good clamming day, is it?

MR. VROOM: No, not when it's blowing 50 miles an hour.

ASSEMBLYMAN ROONEY: Just so people don't mistake where I come from, I happen to live right there up along the Hudson. My district is probably about seven, eight miles of shoreline. That shoreline was probably the first original Jersey shore where people actually used it for bathing purposes and everything else. We can't do it anymore. We've got some beautiful beaches along there along the Alpine Trail, and we can't use it because the Hudson has been polluted and it just started to clean up. I mean, we've been polluted from top to bottom. We've got New York City dumping right across

the river from us. We've had GE put PCBs in the river that will be there forever, and they got away with murder. So I'm a little tired of being dumped on. And there's an old expression and I'll clean it up. It says, "Don't defecate where you eat." This is exactly what we're doing here. This is what we would allow to happen if we didn't get in this real quick.

I want to compliment the Governor, also, and the authority and the people who found this out. Because I live right next to it, and we've got enough problems with the ports being polluted. This just adds to that pollution. We started seeing shad for the first time in the river just a few years ago. They don't come in there unless it's cleaning itself up. We can't eat the striped bass out of there. We can't eat the blues out of there. Like I said, I live three miles from the Hudson River. I would love to have a boat along it. I won't buy one, because I know damn well I can't use the Hudson for recreation purposes, can't swim there, can't fish there. So I just want to let you know where I'm coming from, too. The Jersey shore goes all the way up to the New York State border on that Hudson River. So I am a shore legislator, also.

ASSEMBLYMAN CORODEMUS: Good. Glad to hear that.
Mark.

Thank you very much, Jack.

MR. VROOM: Thank you.

ASSEMBLYMAN CORODEMUS: You had a question. I'm sorry.

Assemblyman Gusciora.

ASSEMBLYMAN GUSCIORA: Mr. Chairman, I wanted to thank you for holding these hearings.

Mr. Vroom, before you said that when you're notified of a discharge, you shut down your operations. How often are operations shut down because of sewage dumping?

MR. VROOM: Well, we don't shut ourselves down. The DEP takes care of that.

ASSEMBLYMAN GUSCIORA: Have you every been shut down before?

MR. VROOM: We've had areas shut down due to, I guess, sewage spills or high runoff.

ASSEMBLYMAN CORODEMUS: How about '96? How often were you shut down in '96?

MR. VROOM: In '96? There were a few times we were shut down. We had this area of the bay -- the other side of the Ammunition Pier -- west of the Ammunition Pier, which is one of our favorite spots, that was shut down quite often. I don't remember how many days, but it was a lot of days.

ASSEMBLYMAN CORODEMUS: And is there a regulation or any kind of monitoring of contaminated clams?

MR. VROOM: Well, the clams come in and they go to a depuration plant. They spend 48 hours in there. When they come out, they get tested by the State. If they pass, and they almost always do, then they're released to the general public, because it's really important that the public has faith in our product. So if it means that we make less money-- You have to spend more money making sure you've got a good quality, safe product. That's fine by us.

ASSEMBLYMAN GUSCIORA: Do you have a problem-- Is there a reputation for Jersey clams? I mean, or--

MR. VROOM: Oh, yes. Ask anyone. Jersey clams are the best. The ones up here in particular.

ASSEMBLYMAN CORODEMUS: Absolutely.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Vroom.

ASSEMBLYMAN CORODEMUS: Thank you, Jack.

MR. VROOM: Thank you.

ASSEMBLYMAN CORODEMUS: Mark Smith is the Chief of Staff at the New Jersey Department of Environmental Protection. He came out of a sick bed to be here with us. I appreciate it.

MARK O. SMITH: This is in case. (referring to glass of water) I'm sorry. I've been battling some bronchitis. Hopefully, I'll get through this without ruining your day.

As you said, I am Chief of Staff for Commissioner Shinn at the Department of Environmental Protection, and I want to thank you for extending the invitation to talk to you today about the incident that occurred a couple of weeks ago and what we're planning on doing in the future. I've got a short statement, and I can just read it and can answers any questions if you like.

ASSEMBLYMAN CORODEMUS: We have several questions for you.

MR. SMITH: Okay. You're already aware of the history of this issue. As you know, DEP learned late on Friday, February 14, that New York City intended to begin the next day diverting raw sewage from a lower

Manhattan pumping station into the East River in order to make repairs. The diversion would have dumped more than a half a billion gallons of raw and treated sewage into the river over the four days the pumping station would have remained closed.

Our first two actions were to immediately notify the Governor of what we had learned and to close all of the harvesting of some 25,000 acres of shellfish beds in the Raritan and Sandy Hook Bays and the Navesink and Shrewsbury Rivers. Governor Whitman's immediate and vigorous protest to Governor Pataki of New York resulted in New York City postponing their plans until discussions could get underway the following Monday. Thanks to the Governor's unbending demands, New York City agreed to cancel its plans, conduct a thorough environmental impact study, and formally consult with New Jersey before taking any further action.

I might add, Mr. Chairman, that the accusations that New Jersey was lax or inattentive in allowing this problem to advance so far have been proven completely untrue. Indeed the New York City Department of Environmental Conservation has stated publicly that they failed to notify New Jersey or our representative on the Interstate Sanitation Commission of the planned diversion and acknowledge that their notification procedures require improvement.

The most important point right now is that we are working with New York City and New York State to build a cooperative relationship that allows us to fully protect New Jersey's interests as New York studies ways to address its repair problems.

As I mentioned before, one of our first actions was to order a ban on shellfish harvesting on some 25,000 acres along the northern coast. That order was issued at about 6:00 p.m. on Friday the 14th and fortunately was lifted about an hour later, when we learned that New York City had agreed to postpone its plans until the following week. The proposed dumping of so much raw sewage poses a number of problems for New Jersey shellfish industry. A recent analysis of the New York City plan, by the Federal Food and Drug Administration, concluded that there would be “a drastic impact on Raritan Bay and Sandy Hook Bay.” That assessment was based on FDA’s review of a sophisticated computer model done by New York State. It found that the result of that impact would be to halt shellfish harvesting for raw consumption in the Navesink River and very likely to halt in relay and depuration clamming activity in the rest of the northern Monmouth County including Sandy Hook and Raritan Bays.

The relay and depuration programs centered in Monmouth County represent about \$4.7 million a year in commercial dockside value and as much as \$15 million a year in retail value to the New Jersey economy. I think it’s clear that the loss of these programs, even for a limited time, would have a serious financial impact on the area. Even more important is the impact such a catastrophe would have on New Jersey shellfish industry as a whole. Although precise numbers are difficult to come by, we estimate that relay and depuration programs represent as much as half the total commercial hard clam harvest.

Our concern is that the consumer cannot be expected to differentiate between clams harvested under strict supervision for depuration

and relay and clams harvested in other areas of the State where clamming is not restricted by water quality. To the consumer, a clam is a clam. The result of New York's action would have been to erase public confidence in the safety of clams harvested anywhere in New Jersey. This would place in jeopardy a \$30 million industry. Consequently, the Governor and DEP are maintaining close contact with our counterparts in New York. We intend to monitor closely the environmental studies they conduct and to explore with them on their methods of achieving the work they need to do.

Finally, it is the Governor's stated intention not to allow the discharge of raw sewage as originally contemplated by New York City.

Thank you, Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Thank you for coming.

I think we all have a lot of questions about this whole area of notification. The most immediate question is about this particular incidence that occurred two weeks ago, but in general having heard the testimony from Mr. Golub and the shutdowns by Mr. Vroom, this apparently is an ongoing problem. This isn't something that happens on an isolated basis. The purpose of this meeting is not to be accusatorial to any administration, but what we can do to improve things in the future so that we can avert these types of disasters that have a very imminent effect on the livelihoods of people here and the beneficial enjoyment of the whole shore region.

One of the questions we'd like to know is, what existing law is there to protect residents of the State of New Jersey from these types of incidences? Perhaps if you can ask your staff to research -- if you can't answer me presently -- under the Federal Coastal Zone Management Act, does the

Governor have a voice in anticipated action like New York had proposed two weeks ago? We have certain rights in other areas that we frequently exercise. This perhaps might be another application of that.

MR. SMITH: Well, we-- That night, we're looking at every legal angle that we could possibly find that we might be able to use to stop the discharge. One of them was the CZMA, the Coastal Zone Management Act. It wasn't possible to get-- I mean, I was in contact with the Attorney General's Office as well as Region Two. The reading at that time -- and there hasn't been a full-blown legal opinion on this -- was that the finding of consistency that a Governor must do under the Coastal Zone Management Act goes to the Governor of the State that's been delegated in authority. In this case, the authority had been delegated. The pollution discharge elimination system permit that was issued was issued by New York State who had been delegated the authority by the EPA. So it would have been Governor Pataki's responsibility to make it a Coastal Zone Management Act consistency determination, not Governor Whitman's.

We suggested that there had to be something in the Clean Water Act to at least provide some sort of notification or consultation process before something like this occurred given the fact that the discharge was going to fairly significantly impact, according to our scientists, interstate waters. In subsequent discussions with EPA at the time, they've reiterated that because these waters are of regional interest and are interstate -- and the impact would have been interstate in nature -- that in order for New York City to go forward, they would have to enter into what they're calling a full consultative process, which would mean that we would have to be at the table as they apply

scientific assumptions about what the discharged impact was going to be, also with respect to not only what the impact was going to be, but what the alternatives were and what the potential alternatives might be, how costly they may be, and so on.

We were arguing at the time that we believed that the Clean Water Act provided us that authority. I think the Federal government has indicated that that is also the case -- that probably is the case. We'll follow that avenue in this current situation. There's another law-- There's a state law -- New York State law -- which John Cahill, who is the Acting Commissioner of the Department of Environmental Conservation in New York, indicated that they would submit or subject this application to what they call their State Environmental Quality Review Act, which requires that impacted agencies would have full notification and be part of the process of the discussion.

ASSEMBLYMAN CORODEMUS: But that's only within the New York loop.

MR. SMITH: Well, we asked that question, and the answer back was that we would be considered -- the State would be considered a relevant agency because the impact would be interstate in nature.

ASSEMBLYMAN CORODEMUS: I assume that didn't transpire?

MR. SMITH: It hasn't yet. I mean -- and it didn't in this case--

ASSEMBLYMAN CORODEMUS: Right.

MR. SMITH: --yet, but what he committed to the Tuesday following the Friday was that this permit would be subjected to a formal modification process which would engage the State Environmental Quality Review Act and the EPA. We reiterated that it would need to be consistent

with the review process under the Federal Water Pollution Control Act, or the Clean Water Act, which requires this consultative process.

ASSEMBLYMAN CORODEMUS: Is there a simple answer to the question, was the State of New Jersey specifically notified about this anticipated repair at this plant?

MR. SMITH: The answer is, yes, we were notified. We were notified approximately 12 hours before it was to occur.

ASSEMBLYMAN CORODEMUS: But not prior to that?

MR. SMITH: But not prior to that. We were--

ASSEMBLYMAN CORODEMUS: The reason I ask--

MR. SMITH: --notified, I believe, by the ISC who had recently had just before gotten a call from New York City.

ASSEMBLYMAN CORODEMUS: But that was all within that 12-hour framework?

MR. SMITH: Yes. Oh, yes. Our group went to work trying to assess impacts with relatively little information.

ASSEMBLYMAN CORODEMUS: The reason I ask because there was some statement made a few weeks ago that there was a copy of correspondence from the New York State Department of Conservation with apparent copies to DEP on it. And looking at the names next to that DEP designation, it seemed to be New York City DEP, not New Jersey DEP.

MR. SMITH: Oh, that's correct. The individuals that were copied on that memorandum were New York City DEP employees, not State DEP employees.

ASSEMBLYMAN CORODEMUS: Okay. I'm going to throw this open for questions. Any questions here from the Committee members?

Assemblyman Gusciora, do you have questions?

ASSEMBLYMAN GUSCIORA: Yes.

Good afternoon, Mr. Smith.

MR. SMITH: Good afternoon.

ASSEMBLYMAN GUSCIORA: I understand that the New Jersey, the POTWs, the Publicly Owned Treatment Works, operate in accordance with the NJPDES permit.

MR. SMITH: Yes. That's correct.

ASSEMBLYMAN GUSCIORA: And if a discharge occurs, either at a combined sewer overflow or dry discharge, is that a NJPDES permit violation?

MR. SMITH: Uh-huh.

ASSEMBLYMAN GUSCIORA: How many violations have occurred on an annual basis of violation of NJPDES permit?

MR. SMITH: I don't know. I don't have that information. I can get it to you though.

ASSEMBLYMAN GUSCIORA: I would appreciate finding that out.

MR. SMITH: Sure

ASSEMBLYMAN GUSCIORA: Do you know if New Jersey or New York-- Would they be the New Jersey POTWs that would get the violation?

MR. SMITH: Yes. We don't have the authority to fine New York. We can take them to court, but we-- The permits we issue are to New Jersey facilities, and under that jurisdiction we can fine them when they violate the law.

ASSEMBLYMAN GUSCIORA: Now, has New Jersey been aware of previous raw discharges from New York?

MR. SMITH: Yes. Not-- There hasn't been anything of the scope and size of this in over, I think my staff told me, 10 years or so.

ASSEMBLYMAN GUSCIORA: But have there been recent raw sewage discharges?

MR. SMITH: There are-- It depends on what you mean by raw sewage. If you mean during storm events, yes, there have been. But that's a little bit different than this case because it's somewhat diluted by the fact that there is a rain event, and while it's not treated and while there is a discharge of raw sewage, it's combined with the rainwater and the storm water. It's not pretty stuff, but it's not quite the same as shutting off the valve and then the flow just occurs without the rainwater.

ASSEMBLYMAN GUSCIORA: In other words, a deliberate--

MR. SMITH: Right.

ASSEMBLYMAN GUSCIORA: --raw sewage discharge.

MR. SMITH: Right.

ASSEMBLYMAN GUSCIORA: Have there been previous deliberate raw sewage discharges from New York?

MR. SMITH: As I said, I think the answer is yes, and I think the answer is the last one that we're aware of is about 10 years old.

ASSEMBLYMAN GUSCIORA: And what about dry discharges?

MR. SMITH: In-- I'm not quite sure, when you say dry discharges, what--

ASSEMBLYMAN GUSCIORA: Well, I guess, from the repair of shutdowns. So you said that would be about 10 years.

MR. SMITH: Yes. Yes.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Chair.

ASSEMBLYMAN SMITH: I'd like to ask one question.

ASSEMBLYMAN CORODEMUS: Sure. Go right ahead, Assemblyman.

ASSEMBLYMAN SMITH: What does New York do with this sludge?

MR. SMITH: Well, since they can't take it to the ocean dumping site anymore, they have facilities that process it. They ship it out of state. They ship it to other states for processing. I'm not that familiar with exactly what they do, but that's pretty much what they've been--

ASSEMBLYMAN SMITH: Would they use some of this sludge for fertilizer?

MR. SMITH: Well, it depends. If it's processed-- There are states that do actually market sewage sludge that's been treated and have the contaminants taken out of it. They market it as a fertilizer, yes, for nonfood crops.

ASSEMBLYMAN SMITH: Thank you.

ASSEMBLYMAN CORODEMUS: Mark, perhaps you can, if it is possible, in a minute or two just to give us a big picture of where we're going

with outfall lines and CSOs in general in the State of New Jersey. I look here on the water and I recall seeing our municipal engineer walking down the beach and I asked him what he was doing. He said he was mapping the outfall lines in the town. I assume this is happening up and down the coast, and I believe that phase is done. Can you tell us where we're going to go from there on that?

MR. SMITH: Well, the next step is the planning and design and then construction of facilities that will attempt to untangle the combined sewer problem. And this is being done under a number of different efforts. It's one of the things that we will be undertaking, because this is not only a shore issue, it is also a-- We've got some problems in Camden and Trenton as well. So it is being considered in the context of the watershed management approach to water quality management, where we're starting to focus not only on the end of pipe point sources, but we're starting to focus on nonpoint sources, the storm water runoff, the other things that contribute to overall water quality.

In this particular area, the harbor estuary plan which is a joint plan -- and, frankly, was one of the reasons why we were somewhat surprised that we didn't get notified because New York City and New York State is a partner in this -- for addressing the quality of the environment in the harbor estuary in an attempt to improve water quality. We've identified a number of strategies for cleaning up the water for both on our side of the Hudson and on the New York side of the Hudson. We've made commitments, they've made commitments. We've identified a fairly substantial number of things that we're going to have to do over the next 10 years and are committing to do those things.

ASSEMBLYMAN CORODEMUS: Thank you very much.

ASSEMBLYMAN GUSCIORA: Mr. Chairman, could I just have one follow up?

ASSEMBLYMAN CORODEMUS: Sure, quickly.

ASSEMBLYMAN GUSCIORA: Regarding the mapping, is the mapping done throughout New Jersey or just in this district or just in this region?

MR. SMITH: To tell you the truth, I don't know exactly how complete the mapping is. I was told that the mapping for the entire State was done. I'm not sure that that's the case though.

ASSEMBLYMAN CORODEMUS: It was a statewide project.

MR. SMITH: Yes.

ASSEMBLYMAN GUSCIORA: But is there outstanding grants for any more requests for mapping?

MR. SMITH: I--

ASSEMBLYMAN GUSCIORA: Mapping grants?

MR. SMITH: --believe so. I believe there is still money that's available for that. And that raises the question, have we completed it and can that money be diverted to the planning and design part, or has it not been completed and do we still need to do some of the mapping?

ASSEMBLYMAN GUSCIORA: Could I find that out as well?

MR. SMITH: Sure.

ASSEMBLYMAN CORODEMUS: Thank you very much.

ASSEMBLYMAN GUSCIORA: Thank you, Mr. Chair.

ASSEMBLYMAN CORODEMUS: Next to testify will be Cindy Zipf, Dery Bennett. Can you testify jointly?

CINDY A. ZIPF: Sure

ASSEMBLYMAN CORODEMUS: And on deck is Mike Beson, from Congressman Pallone's office.

MS. ZIPF: Hi.

ASSEMBLYMAN CORODEMUS: Welcome.

MS. ZIPF: Hi. Thanks, Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Welcome.

MS. ZIPF: Thank you. Thank you. My name is Cindy Zipf. I'm the Executive Director of Clean Ocean Action, which is a coalition of groups working on ocean pollution issues. I have submitted some detailed comments. I'll try to summarize in order to save some time.

I think it's important to look at this by thinking that every dark cloud has a silver lining and that, if there is a silver lining to the horrible proposal by New York City to send concentrated raw sewage out into our waterways, it is the focus of this Committee and others to the need to improve our wastewater treatment systems and our crumbling infrastructure. The East River discharge not only outraged the citizens, but I think it is so important that it has drawn the kind of attention like from this Committee. This will hopefully be, in our mind, from Clean Ocean Action's mind, a first step as this Committee really starts to get into what are the problems in the inner harbor area in terms of the antiquated systems and what can we do to help solve the problems, fix the problems, and ensure that our shell fishing acreage only grows for harvesting and not shrinks.

The comments for today's testimony from Clean Ocean Action are focused on this Committee's request for information on the issues arising from the interstate discharge of wastewater. Developing and implementing a system of accountability is especially important in light of the fact that, according to the 1996 Annual Report that Mr. Golub talked about from the Interstate Sanitation Commission, there are a lot of upgrading projects that are going to be taking place in the coming year. So we can look alarmingly at the fact that there may be some future proposals like this one.

So it is important to take this opportunity to learn as much as we can about alternatives and about ways to fix this proposal. Because we can't depend, of course, on Governor Whitman to stand up and try and stop each one of these, we have to develop a system of our own so that the public understands -- the public is notified and can comment on these proposals.

I think it's clear from other previous testimony that raw sewage in the water is a bad thing. It affects shellfisheries. Another bad thing from raw sewage is the visible floatables that we get out on our beaches. We all know what are called New Jersey's seashells, the plastic tampon applicators that wash up on our beaches. We had horrible incidences of those in the past. Soap cake, which washes up on the beaches, that looks like white cake, and it breaks, it's brittle -- these are sometimes big pieces of fat and soap that build up in the sewage treatment plants, and then when there is a raw sewage discharge, you find them up on the beaches. Hypodermic needles are another indicator of raw sewage and combined sewer overflow problems. So these are the visible, tangible signs of raw sewage. In fact, in the late '80s, Clean Ocean Action adopted what we called the tampon index, which was: You'd walk along the

beach and you'd count the number of tampon applicators that you found along the shorelines, and you could kind of derive from that the amount of raw sewage that flowed by our beaches. The numbers were staggering, thousands and thousands in the region. In fact, two people collected over 200 in just an hour along the shoreline. Those numbers have been drastically declining as the Legislature kicked in, after the '80s, and passed a number of laws. Those numbers of visible signs of raw sewage have been declining, meaning that we have been doing better, but there's a long way to go.

Regulatory issues that we identified certainly and that the Committee has already talked about are issues under the Clean Water Act and, also, the Federal Coastal Zone Management Act. There was a question raised about that piece of legislation. It is a beautiful piece of legislation that the State can use to protect itself from these kinds of discharges.

Our understanding of the Coastal Zone Management is that a state-- Well, let me read from the testimony, Section 307 in particular. "Each federal agency conducting or supporting activities within or outside a coastal zone that affects any land or water use of a coastal zone shall have those activities be consistent with the other state's Coastal Zone Management Plan." So it is our belief that New Jersey could use that piece of legislation to target the State of New York in requiring that anything that it does has to be in compliance with New Jersey's Coastal Zone Management Program.

So in other words-- And the Governor used this tool to address the issue of ocean dumping of contaminated sediments. So the issue of New York City discharging into New Jersey waterways, New York would have to certify that it, in fact, is in consistency with New Jersey's Coastal Zone

Management Plan. That would be a tough test to support that a half a billion gallons of raw sewage is consistent with New Jersey's Coastal Zone Management Act. So that's a tool we believe that can be used. Another tool, of course, is New Jersey's own coastal zone rules. In particular, this can be used for notification purposes, and there, again, are details in the testimony.

Thanks to the leadership of Governor Whitman in stepping up and halting this proposal, we do have a window of opportunity now to review what New York's proposal would do in total, not just shut down the shellfish beds, which is an outrage in and of itself, but also other issues -- other environmental issues -- and a very thorough investigation of what are the alternatives. There's obviously alternatives. As Assemblyman Rooney said, there are-- Experts in the field can come up with alternatives. There is no reason to just shut down the entire system.

This environmental assessment should address the characterization of all the waste, a detailed description of what's requested. I mean, what is so unconscionable is that even to this day we still don't know what New York was proposing and why it needed to do it and where it needed to do it and what was involved. I mean, that bit of information is absolutely critical, and the fact that it's not forthcoming quickly needs also to be required.

I think, too, and you can look through the testimony for additional pieces of information, that needs to be addressed, but one other thing that New York ought to consider is the cost to the commercial fishermen and recreational fishermen and tourism industry in the State of New Jersey. Sure maybe if there are alternatives, there are going to cost a little bit more to the City of New York, but the cost to the commercial fishermen and to the

recreational fishing industry was going to be incredible. And perhaps if New York had to pay each one of these fishermen for each day they were out of work and the State of New Jersey for the money that it would have lost, as to the revenues of these clams, those alternatives up in New York City might have become a little bit more reasonable. When something is proposed, it's usually looked at in a very shallow way. Just opening up the floodgates and letting the raw sewage pour out might have been a very cheap and easy thing to do, but if they actually had to pay the true cost of that discharge, they might think twice.

Finally, it is imperative that agencies, such as New Jersey Department of Environmental Protection and the Interstate Sanitation Commission, be fully funded in order to ensure that all the provisions of the Clean Water Act and the Coastal Zone Management Act and the Interstate Sanitation Commission regulations to protect our water quality and aquatic resources and economic potentialities-- They have to be fully funded.

Over the years since the horrors of summer of '87 and '88, we have seen funding for environmental protection agencies decline and in some cases dramatically. If we are serious about protecting waterways -- and, of course, we are -- public health, aquatic resources, fishing industry, coastal tourism, the quality of life at the coastal zone, then our elected officials must realize that the reduced funding results in curtailed oversight and enforcement of pollution control laws and programs. This Committee must carefully review the proposed budget to ensure that all the funds that are needed are there. After all, as we all know, we get what we pay for. And I think it's-- Clearly, we need

to ensure that these agencies that are really entrusted with the protection of our most precious natural resources are fully funded.

ASSEMBLYMAN CORODEMUS: Cindy, thank you for coming. I was going to ask you questions about your opinion of how the water quality is improving or deteriorating, but I think you testified that, luckily, there's an improving number of floatables is decreasing. I guess that's by virtue of your beach sweep.

MS. ZIPF: The data that we collected. Right.

ASSEMBLYMAN CORODEMUS: The data you collect.

MS. ZIPF: I think, though, if I can add-- I think that we have done a tremendous amount in terms of improving our water quality, but it's the antiquated and crumbling infrastructure of this inner city that's like a ticking time bomb. We've really got to address those issues from a regional standpoint, which is why the Interstate Sanitation Commission is such an important tool that we can use, but also from the State level. Although, I guess, the comprehensive -- whatever -- the national estuary program has put together this huge monolith of a plan. There's been so much written and written and written about it, but we really need to get out and target those sources of pollution.

Assemblyman, you and I had talked about the Sewage Infrastructure Improvement Act and how good of a tool that can be, but we've got to find a funding mechanism for it. And we've got to be creative. We know that there's not that much money around. We've just got to sit down and, hopefully, this Committee as a follow-up can hold future hearings on creative ways or ways in which we can find funding in order to pay for the

fixing of these systems because, otherwise, we're going to just-- The floodgates are going to open.

ASSEMBLYMAN CORODEMUS: Aside from relying on the government and large industry to solve the problem, are there things that the individual citizen can do to improve water quality? I know you're constantly working on nonpoint source pollution, but what are some typical things that the average person or schoolchild can do?

MS. ZIPF: Well, along the shoreline-- Along our coastal counties, what we normally call the beaches-- Although the river systems have beaches, too, there are a variety of things that citizens can do ranging from being very careful about litter and not throwing things on the street-- Cigarette butts flicked out the window wind up on our beaches through the storm water systems. Same thing with pet waste and with fertilizers. There's lots of ways that we, as individuals, can help. I mean, it's a problem that we all love the coast and we pack in so much to the coast, because each one of us contributes a little bit and that does add up to a lot.

There are ways also in the cities-- Clearly citizens can have a dramatic affect working on reducing litter and in being careful about dumping things down the drains. I know a lot of people think that those storm drains -- those little grates along the sides of the roads -- are places where things get treated, but it's not. It is a direct flow to our waterways. So using them as a garbage can or as an oil-recycling facility is not a good idea. And those are certainly important. The pipelines -- maybe the Interstate Sanitation Commission can point out-- But we've heard rumors that some of the infrastructure -- the underground pipelines in the inner cities -- are so old that

some of them are still made out of wood and some of them are-- It's a problem that's-- It's an historic problem that is going to kind of come up and is hurting us now. Maybe it's creative ways of getting a partnership between citizens and local municipalities and not just expecting the government to bow us out of this one. It's going to have to be creative. It's going to have to be a total partnership. That's why I'm hopeful--

And again, this is the silver lining, that this Committee is drawing attention to those issues and will be able to really start delving into what needs to be done in these city systems. Because when a rainstorm comes, there's no other choice but to let the floodgates open. And as we continue to put pressure on these systems, those CSO instances are going to happen again and again and again.

ASSEMBLYMAN CORODEMUS: Thank you.

We're going to hear from Mr. Bennett, and then we'll ask you both to take questions.

D E R Y W. B E N N E T T: When I first heard about -- I'm with the American Littoral Society, our offices are in Sandy Hook -- what was happening, a couple of my reactions were the question of could they store it, could they chlorinate it. And the other one was what Cindy just mentioned was, if this is going to happen and the shell fishermen are closed down for 15 days, I hope New York City is ready to pay them what they were bringing in the day before the closure. You heard the numbers. It's in the millions. This is a better bay and these are better rivers because we see shell fishermen out there working.

ASSEMBLYMAN CORODEMUS: I see you're participating, too, now.

MR. BENNETT: Yes. We didn't used to. I'm not only an owner of an -- or work for an organization, I'm also taking off my hat as shell fisherman -- Men's Clams Now. I have a recreational license, and I dig soft clams in the Navesink River. It's been closed since I moved here in 1968. It was closed, I think, in '66. It's just opened.

ASSEMBLYMAN CORODEMUS: We'd like to keep it that way.

MR. BENNETT: Here I was-- I get my six or seven a day. It works out to about an hour and a half per clam. I'll never make it as a commercial clammer.

ASSEMBLYMAN CORODEMUS: Jack, maybe you could help Dery out and show him where the hot spots are.

MR. BENNETT: These guys are very good.

And then to think that that would be turned around and be closed down -- it's an impact. It's a terrific psychological impact that this would have had.

We have a baykeeper office in the Littoral Society and they have a program called-- They are one of eleven groups that were under the general tent of Restore America's Estuaries. These groups are working from the Gulf of Maine, down the coast, and over and around the Puget Sound. We're-- Eleven estuaries have been chosen as -- to try to restore habitat, and one of them is New York Harbor. One of the things that we are trying to do is get some wetlands back, get some fish running up some of the streams that are now dammed, get some beaches, some accesses, more accesses, get

Assemblyman Rooney's constituents able to swim in the upper Hudson -- all those things, and to have this happen in the middle of that is-- You kind of almost get this why-do-we-bother kind of approach.

I think it is very important that the work of the Interstate Sanitation Commission and the work of this Committee and the work of everybody stresses that the bay is very much alive. There are hundreds of species of fish there. We dragged a net in Braves End Bay right near the Belt Parkway five or six years ago, five-minute haul, got 200 lobsters. These were little, small lobsters. The harbor is used as a nursery area for lobsters. There are-- The shad fishing business is a big industry; the shellfish industry is huge, the recreational and tourism industry -- all these things will be affected by it.

I was going to ask Assemblyman Rooney to put on his hard hat and go down and look at these pumps. I think you've got to ask a lot more questions about how this 13th Street station is designed. My understanding is that there are five pumps down there, and that they're all in one wet chamber. The only way they can work on them is to get the whole chamber dry. So they've designed a plan, apparently, where 100 percent of the pumps have to be worked on at the same time or-- They're all not even separated, which sounds to me like a silly way in this age where--

ASSEMBLYMAN CORODEMUS: I hope you can stay, because we have a witness that will be up here in a few minutes that actually has a technology that could avert this type of problem in the future. It might be a very cost-effective way for cities like New York to take advantage of so that they don't have to rely on perhaps the cheapest and easiest way out, just dumping in the river.

MR. BENNETT: Good. One number I wanted to mention and that is-- There had been some discussion about how much of this is New York's problem and New Jersey's problem and the city's problem, whatever. Way back when the dumping of sewer sludge was stopped offshore, we had numbers back then that showed that about 55 percent of the sludge that was going out to this 12-mile site was from New York and Long Island and about 45 percent was from New Jersey. So that's another way of recognizing that this is a bistate problem. Whether it's 20 percent or 40 percent, it's a bistate problem. And as you know, we do a lot better when we understand that right off the bat and understand that what happens in one state impacts on another.

ASSEMBLYMAN CORODEMUS: Any questions from the Committee?

Assemblyman Gusciora.

ASSEMBLYMAN GUSCIORA: In 1988 when I was in Seton Hall, I took an environmental introductory law course, and they said that the number one pollution for New Jersey's waterway was the overflow from the storm drains and just the discharge. Has anything changed since then? Is it still the number one problem? Are you satisfied with what New Jersey -- our State government -- is doing in these last few years to reduce this drain overflow?

MR. BENNETT: No. And again the two states have discussed this. There is recognition that CSOs are a serious problem in the metropolitan region. Milwaukee has this problem. The way Milwaukee did it was to dig a multimillion dollar hole under the city, and they store all the CSO and then recirculate back through. The problem is, I'm sure you'd understand, money.

In part it's huge sums of money for complicated devices. I think New York will say we're further along than New Jersey because, at least, we've started to spend some planning money. And then New Jersey comes back and says, "Yes, but--" I think the answer in both states, and I'm sending my comment on this in more detail, is that no, they're not doing enough. It's a huge problem, but you start solving the problem with one step.

MS. ZIPF: Right. I would just agree with that. Again focusing on the fact that the antiquated system up in northern New Jersey not only puts the nonpoint source pollution runoff issue on the table as being a very key issue, but also just sewage treatment. If those infrastructure systems start breaking down -- which they are, in many cases they are either broken, they're not working properly or whatever -- raw sewage is going to seep out like a sieve. And then depending on how many-- If we don't start fixing the system, we're going to have the dam burst, and it's going to be a huge, huge problem. We've been given a wake-up call again. But I will say that on the issue of nonpoint source pollution, which is what you're talking about, these little bits that are the chronic problem along the entire shoreline, the Sewage Infrastructure Improvement Act was meant to be a tool to fix those problems. And as has been talked about, the mapping in many instances has been done. Now we know where all the pipelines are. The monitoring is supposed to be done to determine how much sewage is getting out in these areas, and then we're supposed to abate them. And all those things are going to cost money.

As I said, nothing should be getting down those storm drains except clean rainwater. That's not the case, and to the extent that we can have citizens helping that's important, but to the extent that we can have the DEP

funded to get after these sources and get after the municipalities to do better at best management practices, is what they're called, in using storm drains to limit the floatables. I know the Chairman has had individuals that have technology that can be inserted into these storm drains that collect the floatables to limit the amount of floatables coming out of it. There are ways to deal with these things, and education is a part of it, but also vigilance on the part of the State agencies has to be improved.

MR. BENNETT: Can I just interrupt for one second? I want to mention one other kind of budget finance issue, and that is, New Jersey is one of, I believe, 23 states that are in something called the National Shellfish Sanitation Program. This is set up so that all the states know that the shellfish-producing states are monitoring their product well and the ones that are receiving shellfish for consumption know, and this is certified by the FDA.

As long as we're plugging things for budgets, we want to make sure that New Jersey can continue to support water quality monitoring classification so that they can stay a part of that program. Because it would be devastating if it began to look as if New Jersey was falling back on those quality controls.

ASSEMBLYMAN CORODEMUS: We should also add that, Cindy, you and I are going to be judging a competition among students. We're having a prize-winning program here to produce an educational commercial to make students aware and also the public aware of how their acts participate into nonpoint source pollution. I'm hoping to spread this at least countrywide and raise the whole awareness, and perhaps it can be duplicated around the State.

Thank you very much.

MS. ZIPF: Thank you.

ASSEMBLYMAN SMITH: May I ask just one question?

ASSEMBLYMAN CORODEMUS: Sure. Go right ahead, Assemblyman.

ASSEMBLYMAN SMITH: Would you suggest that actually with a nonpoint solution that comes down our sewers, and instead of dumping it into our lakes and our other estuaries, that it go someplace else?

MS. ZIPF: Well, the only thing that should be going down those storm drains is rainwater. If it were rainwater, then it would not be a problem to the waterway.

ASSEMBLYMAN SMITH: But we know this doesn't happen.

MS. ZIPF: We know that doesn't happen. So what we have to focus on is getting people more aware about nonpoint source pollution. We call it pointless pollution. Specially in Barnegat Bay area, it's a chronic problem. Now, there have been some regulations that require now that catch basins be developed on land for rainwater. So what you see in new developments are these little areas where the rainwater is supposed to go into these on-land sort of little lakes--

ASSEMBLYMAN CORODEMUS: Retention ponds.

MS. ZIPF: --retention ponds, thank you, I couldn't think of the word -- so that the water filtrates back into the groundwater system and you don't have those slugs coming in. And almost all the litter and things are going to be in those areas. They can be collected. It's not the final answer, but it's at least a way to start allowing the recharge of our groundwater systems and certainly help citizens in the area get an opportunity to clean up the litter

before it goes out into the waterways. It's not a final answer, but it's part of the answer. And as we begin to-- There's all kinds of things to think about. Every time a new development goes in with a parking lot, that's a source of nonpoint source pollution. That has to be-- We can think about ways of requiring recharging systems that can allow the water to percolate through.

ASSEMBLYMAN SMITH: As you know, most cities are now mapping their infrastructure to find out the condition of their sewers.

MS. ZIPF: Right.

ASSEMBLYMAN SMITH: A great number of our towns are so old that our infrastructure has broken down. It's just one of those points where we just can't do it with the tax money. We have to get some assistance from somewhere in order to repair the infrastructure.

MS. ZIPF: Yes.

ASSEMBLYMAN SMITH: Do you have any suggestions on how we do that?

MS. ZIPF: Well, I think--

ASSEMBLYMAN CORODEMUS: You're going to get us in trouble, Tom.

ASSEMBLYMAN SMITH: Yes, I know. I just opened Pandora's box.

ASSEMBLYMAN CORODEMUS: Right.

MS. ZIPF: That's the big question, and I think it is deserving of a full committee hearing to think of new ways-- I mean there are ways to think about it. If you going to blacktop an area, maybe you ought to chip in some money for each square foot of blacktop you're going to put in that goes into

a fund that can help fix some of these infrastructure problems because you are going to be putting more pressure on the infrastructure. It's not going to be very popular, perhaps, in the development community, but it's a way to start having everybody chip in a little bit so that we can begin to develop funding mechanisms for these critical, chronic problems that are just a matter of time before they affect our tourism industry, our shellfish industry, and all the rest.

ASSEMBLYMAN CORODEMUS: Go ahead.

ASSEMBLYMAN WOLFE: Yes. Cindy or Dery, either of you perhaps can answer this. I know in North Carolina I think they -- along the coast -- require a product that's called Echo-Block. It's like a concrete block with kind of like that window pattern over there (indicating) in the parking area so that the ground actually is there. Maybe not now-- Maybe you could send it to the Chairman or else to me, are there products perhaps the Legislature might want to consider that would promote, let's say, environmental sensitivity among future development? Specifically, are there fertilizer products, let's say, that are "safe"? You don't have to answer now because that's not the focus of this hearing, but I think it's something that we may wish, through the Chair, to look into.

MS. ZIPF: I think that would be very exciting, very exciting.

ASSEMBLYMAN CORODEMUS: One of the things we looked at that Cindy mentioned was -- we called it the Buzzelli catch basin because it was invented by a municipal employee in the City of Belleville. It was a very simple two-chamber catch basin that had baffles in it. Actually, it cost -- I forget how much it was at that point -- about \$25,000, I think, for one basin. It actually saved the city time and money in the long run because these catch

basins clog up. They have to be cleaned out. This was a very simple way to clean out this basin and to have the immediate consequence of moving substantial amount of floatables from the system. There's a lot of good products.

MS. ZIPF: There's a lot of good ways.

ASSEMBLYMAN CORODEMUS: I think we should experiment more. I think Jersey City has put in at least four of them and maybe we could benefit by their experience and popularize it and maybe find some funding. I'd like to see this other one about the pattern, too.

MS. ZIPF: Yes, that sounds very interesting.

ASSEMBLYMAN CORODEMUS: Thank you very much.

MS. ZIPF: Thank you.

ASSEMBLYMAN CORODEMUS: Now, Mr. Turner is going to be making a presentation from Fresh Creek Technologies. Mr. Beson, Mayor Branin, Councilman Keeler are all here. We'd like to take your brief statements because I know you're all concerned about this.

Mayor, you can come up at the same time. Come right up front, Mr. Keeler, you're going to testify right after them and you're going to be setting up in a second. Okay.

MAYOR JOSEPH BRANIN: Welcome, Mr. Chairman and members of the panel.

My name is Joseph Branin. I'm presently the Mayor of the neighboring town of Atlantic Highlands here, Highlands. I've got some 38 years experience, either directly or indirectly, with the fishing business. I've been an active commercial fisherman for the past 30 years, and before that I

started my early years, at 12 years old, with Cottrell, who's probably got 80 years in the commercial lobster business in this area in the seashore. Everyone knows Highlands was a small community that was born and bred on clamming. They've been through the best of it. They've experienced the worst of it, and now they're back in the good times again. This is all through the efforts of the State of New Jersey to clean up the waterways.

The intervention of what the Governor did last week for us when New York was going to dump all that sludge into the East River, and the efforts of organizations like Clean Ocean Action that Cindy heads up -- these are all things that have made water quality better in the State of New Jersey, also, in the State of New York. I've experienced barge loads of raw sewage for years on end being dumped at the 12-mile dump site. Also, barge loads of dredge material dumped at the 9-mile dump site off of Long Branch.

Years ago, my early years of fishing, there was 120 to 130 feet of water out there. Today, to drive over the mud dump site, you will only find 50 to 60 feet of water where that pile of mud was being dumped for the last 50 years. These are reasons this kind of action has to stop. The ocean can no longer take the pollution. The rivers, the bays, the town communities can no longer take the pollution. The 5 million gallons that was going to be dumped of raw sewage is no different than the containment island they're talking about now in Raritan Bay. This will totally cripple the bay-shore area. I don't think property values will be worth anything to any of the neighboring towns. Anybody that would want to support anything like that should be taken out of office.

This is the '90s. We're coming up to the year 2000 here, and there's no reason we don't have better solutions for coming up with the sewage, for the dredge oils. For all the years that we've dumped in the ocean, they should have been able to come up with better technology to take care of this stuff. We can no longer handle it.

As Jack spoke before about the clamming, the clammers have no protection. The only protection they have is to go to work every day. They have nobody paying their medical benefits, nobody giving them vacation time, nobody giving them sick leave. The days they work are the days they get paid for.

We have one very important gentleman missing from this chain today. He was killed in an automobile accident a few short years ago, and that's Mayor Jimmy White from the Highlands. He was a pioneer with these depuration plants. I want everyone to understand that depuration plants do not purify the clam. The clams are not polluted. It's the water that's polluted. In ultraviolet lights that the water passes through, it purifies this water and cleanses the clam. Rather than being in polluted waters, they're in clean waters now, but there is no bacteria in the clam itself. I believe you can get testimony from State officials on that. It's not the clam, it's the water. I prefer eating the clams before the depuration plant, because they taste a little better.

This is a resource that we cannot afford to lose. Our clammers were devastated for 20 years. We might only be talking about 200 men, but in there we're talking 200 families, we're talking 200 people on medical benefits, 200 more families going to the food stores, to the marine outlets, to the -- all the consumers that have to do with their business. This is a very big

business and 90 percent of their dollars go back into the economy. This is being harvested from out here. They don't want anything from anybody. They just want a clean environment to work in. I believe we're getting along those lines with what the State's doing. We just need better means of getting rid of this.

I'm very thankful, as the Mayor in a bay-shore town, to have people like yourselves on these panels to keep an eye on what's going on, but I have one question. I was told at Governor Whitman's press conference that we had up at the Twin Lakes that this permit the sewer plant has there in New York has a four-day window with no penalty. For four days, they are allowed to open their valves and dump for four days with no penalty clause in there. Is there any truth to that? Can anybody answer that question?

ASSEMBLYMAN CORODEMUS: I don't know, but I think our friends from the Interstate Sanitation Commission are going to be getting all the details on that and perhaps can get that information back to you.

MAYOR BRANIN: I would think that would be something to work on to get that no penalty clause out of that permit if, in fact, it exists.

ASSEMBLYMAN CORODEMUS: Okay.

MAYOR BRANIN: I think that is horrendous that something like that could happen with nobody to pay a penalty for it.

ASSEMBLYMAN CORODEMUS: I thank you for coming, and for those members who haven't been to a clam depuration plant, we have at least three here in the immediate area. It's a very interesting technology providing a good product to the area.

Thank you, Mayor.

MAYOR BRANIN: Thank you.

ASSEMBLYMAN CORODEMUS: Mr. Beson.

M I C H A E L B E S O N: Yes. My name is Mike Beson. I work for Congressman Pallone here in New Jersey. I just wanted to be very quick and thank you for coming and having this hearing today. I think it's a good idea. Just to say that I don't think this is a partisan issue -- obviously it's a bipartisan issue. We're all against this idea. It's a silly idea.

Congressman Pallone has written to the President and more recently written to EPA Administrator Brauner to say to her that we don't think New York is responsible to continue their permitting, that EPA should step in even on a temporary basis to look at their permits. They, number one, didn't tell us this was going to happen, and they approved it internally without really EPA Region Two's -- any kind of information given to EPA Region Two. So we don't think that New York has acted responsibly. We think that their permitting should be taken away on either a temporary basis or on a permanent basis. They've shown over the years with the Freshkills Landfill on that consent order to stop overflow there-- They never did it. They didn't respond to it. So we don't think New York has acted fairly. This is just another example and we need to step in and Congressman Pallone is going to do that.

I applaud you, Assemblymen, for working with the New York State Legislature to stop this, to make sure they do go through a permitting requirement on both sides of the river.

ASSEMBLYMAN CORODEMUS: Thank you.

MR. BESON: So I just wanted to thank you.

ASSEMBLYMAN CORODEMUS: Perhaps you can share with us the response when you get it, so we can get some Federal guidance.

MR. BESON: Yes. I have the correspondence as well.

ASSEMBLYMAN CORODEMUS: Good. Thank you.

MR. BESON: Thank you.

ASSEMBLYMAN CORODEMUS: Any questions from the Committee? (no response)

Thank you, gentlemen.

Committeeman Keeler, Sea Bright. Welcome. Sea Bright is also an adjoining town, also has their commitment to clam depuration, and also a neighbor, too, to the Navesink and Shrewsbury Rivers.

COMMITTEEMAN WILLIAM J. KEELER: That's correct.

ASSEMBLYMAN CORODEMUS: Welcome.

COMMITTEEMAN KEELER: Thank you, Chairman Corodemus, for this opportunity to represent Sea Bright. Usually Mayor Rooney -- no relation, I'm sure -- but--

ASSEMBLYMAN CORODEMUS: He was also a mayor.

COMMITTEEMAN KEELER: He is on a business trip to Baltimore. He was not able to attend.

Just for those not familiar with Sea Bright, it's a three and a half mile long, very narrow peninsula. When I say narrow, it's a 150 yards -- maybe 500 yards at its width. It's the Atlantic Ocean on the one side and the Shrewsbury River and Shrewsbury/Navesink right on the U.S. side. There is no other town in New Jersey that is more directly affected by tidal flows than

Sea Bright. We are right there. Most of the attention that we get is with storms and flooding, but the second consideration right behind that for us is the quality of the water. Sometimes it's too much water, but the quality is a factor for us in our daily lives.

We are directly south of Sandy Hook, so we are directly impacted by the water coming out of the Raritan Bay, New York Bay, and all those rivers up north. As the Chairman mentioned earlier, it's not just the Hudson River. It's the rivers in New Jersey, the Hackensack and the Passaic -- all of those coming down. So the problem is not just New Jersey versus New York, in my view, it's an area problem. But all that water comes down into the bays, then goes right into the Shrewsbury River, and that's where the impact is on us and along the coast.

Because of this geography that we're in, we have basically three impacts that we receive in Sea Bright. The first would be economic. The second would be the quality of life. The third would be basically our tax base in our real estate values. Economically speaking, tourism is the basic industry, or business, in Sea Bright. We have a number of beach clubs, marinas, and restaurants. Some are rentals. And the borough itself runs its own municipal beach.

ASSEMBLYMAN CORODEMUS: Don't forget the beautiful beaches, too.

COMMITTEEMAN KEELER: I was going to add that right in there.

ASSEMBLYMAN CORODEMUS: You have to tell these folks that we have to get them to appropriate the money every year.

COMMITTEEMAN KEELER: That's right. We've been the beneficiary of a major beach-nourishing project that has had a major impact on us in improving the quality of life because it reduced the storm damages.

The point I want to emphasize is that there are only 1700 people in Sea Bright, and all of this activity that goes on there could not possible be supported by our residents. We depend on literally tens of thousands of people living outside of Sea Bright -- eastern Monmouth County, northern New Jersey -- coming to Sea Bright on a daily basis in the summer. That's the basis for the beach clubs, it's the basis for the marinas, the restaurants. They could not survive without that. They struggle to get through the winter. And it's just those two to three months in the summer that's key to their very economic survival and, in turn, Sea Bright's survival.

The quality of life-- Basically, I look at Sea Bright as a town of two cities or a tale of two cities. There's the Sea Bright in the summer, and Sea Bright in the winter. The winter would be late fall to early spring. It's not all that pleasant there many of those days. It's almost always windy, and you get the raw damp air and the storms with the flooding. And you'd say, "Why would anybody stay?" The salt air corrosion of your cars, the whole bit. Why stay? And the reason they stay -- the reason I stay -- is the summers. They are absolutely beautiful. I would tell you flat out that I don't think there's a better place to live than Sea Bright in the summertime. It's a fantastic place.

But the key to that is being able to make use of the facilities. The facilities are all water related. So for us, the quality of the water is number one. If because of this geography and these other factors-- If that quality deteriorates, then we have people taking a second look at Sea Bright. And as

a result of that, you have your problem with your real estate and your tax base, and you know how that cycle goes.

This isn't a hypothetical either. As Assemblyman Corodemus' release mentioned, the summer of '87 and '88, where we had some very bad publicity by the Jersey shore and the water conditions, the beaches in Sea Bright never closed, but we were adversely impacted despite that fact. So it's not-- You can't isolate one town. It's an area. If the message goes out that the quality of the water is suspect, everyone along the coast is going to be affected.

It seems to be a natural thing dealing with health. I remember back a few years the cranberry scare, that business took a nosedive. And over in England right now, they're having this thing with the mad cow disease. It could very well have an impact on the national elections. That's the kind of reaction -- cause and effect reaction -- that these kinds of health problems have.

ASSEMBLYMAN CORODEMUS: Absolutely.

COMMITTEEMAN KEELER: I know it's expensive to address these issues, but if you broaden the envelope, so to speak, and look at the full cost or the potential cost, that's hard to do. How do you put a dollar on risk? If you do, then I think you get a better perspective on what you have to do and where you have to put the money.

ASSEMBLYMAN CORODEMUS: Thank you very much.

Any questions?

ASSEMBLYMAN ROONEY: Give my regards to Mayor Rooney.

COMMITTEEMAN KEELER: I certainly will. I certainly will do that.

ASSEMBLYMAN CORODEMUS: I'd like to add that Sea Bright's a nice place in the winter, too. We all enjoy it.

COMMITTEEMAN KEELER: One point on the dollar expenses. There are about 1000 families in Sea Bright, and we pay about \$500 a family for sewage treatment. We're a member of the Northeast Sewer Authority. Compared to North Jersey or New York, that's nothing, but if you work on a per capita basis -- if it's \$500 per capita-- I don't know how many families are in New York City. There's probably 3/3.5 million--

ASSEMBLYMAN CORODEMUS: Compared to Atlantic Highlands, it's a bargain.

COMMITTEEMAN KEELER: Well, that-- On that basis, you get an idea of how much we have already spent in these smaller towns. We spent a lot. That's been over 20 years we've spent that kind of money.

ASSEMBLYMAN CORODEMUS: That's a lot of money.

Thank you very much.

COMMITTEEMAN KEELER: Thank you.

ASSEMBLYMAN CORODEMUS: Mr. Turner, you can make your presentation now.

Is anybody here that came in that has not signed up to speak and would like to speak before the Committee? (no response)

A while ago, I had a presentation made by Mr. Turner's group, Fresh Creek Technologies, and I invited him specifically here. A question that arose during this whole scare from New York was, well, what options did New York have. It did have to shut its plant down. It did have to do repairs. It did have to do something with the sewage overflow, but did it have to discharge

into the rivers. Perhaps Mr. Turner will tell us that, yes, there are alternatives, and they are affordable alternatives that have a much more negligible impact on the environment.

Thank you for coming.

RICHARD R. TURNER: Thank you very much. It's a pleasure to be here.

Fresh Creek Technologies is a new company formed five years ago. Dennis Moran is our Chairman. I'm the President. Here with me today also is Jim Dugan from Dugan Environmental. They're our sales representatives here in New Jersey.

We're very much a local company. We're located in Fairfield. We were initially funded by what are called angels in the start-up company industry, people who believe in doing good for the environment with the prospect of doing well financially based on our success. We're also funded locally through First Fidelity Private Capital, the SBIIC arm of what is now First Union. So we're very much a local company, even though we now market our product all over the United States. In fact, we recently had inquiries from as far away as New Zealand and Manila Bay in the Phillipines.

I want to start with this map over here, which is the same map that Howard Golub showed earlier, except that on this map you can see every one of those red arrows is a combined sewer overflow throughout the metropolitan area. That's the 700-and-some-odd that were referred to.

ASSEMBLYMAN CORODEMUS: Let me get my bearings here. Where-- Could you just point out where we are right now, so I can get an idea?

MR. TURNER: (indicating) We're down here.

ASSEMBLYMAN CORODEMUS: That's why I can't see it.

MR. TURNER: It's the whole New York area, metropolitan harbor area.

We have been working on both sides of the Hudson with good customers, New York City, and virtually all of the 30 CSO communities in New Jersey.

ASSEMBLYMAN CORODEMUS: Can everybody hear back there? Can you hear? (no response)

MR. TURNER: Am I close enough to the mike? Is that better?

ASSEMBLYMAN CORODEMUS: That's better.

MR. TURNER: We've been working both with New York City and with virtually all of the 30 CSO communities in New Jersey on problems associated with combined sewer overflow and storm water runoff. That's what our products at Technologies address. Our company is named for Fresh Creek in Brooklyn -- Dennis, can you just point to the sign there -- which is one of the tributaries to Jamaica Bay where a demonstration facility was put in under a U.S. EPA grant back in 1987-88. We're pleased to say that that facility, or what we call the EquiFlow, the flow-balancing method system, won for New York City the 1992 EPA first-place award as the best municipal CSO project in the United States.

We have since that time implemented both our EquiFlow and our Netting TrashTrap system for floatables. I'm going to talk about those briefly here, both at locations at Owls Head, which is on the harbor side of Brooklyn there, within sight of the Statue of Liberty. There's one up at Bushwick Inlet

on the East River, right across from Manhattan. There's one up by the Whitestone Bridge at Clason Point, and one over at Flushing Bay.

New York City's also in discussion with us about additional demonstrations of a new version of that technology for use in Manhattan, what we call the In-Line TrashTrap. I'll show a brief picture of that later, and I'll describe that technology in a second.

We have two systems in Newark, New Jersey, again, put in under a U.S. EPA demonstration grant. There's one on the Passaic River right where the Performing Arts Center is being built at the foot of Saper Place, and the other one is by the airport on the peripheral ditch that surrounds it. That particular project was done under the innovative technology grant program that EPA has, and following the implementation of those systems, we went through a four-month monitoring program to measure their effectiveness and to determine how much floatables materials we were capturing.

This is a map of beautiful downtown Newark -- maybe take that picture off the top, Denny, for a second -- showing their 28 CSO outfalls. It's representative of many, many of the communities up and down the harbor. On the left-hand side you can come up-- Look at the pictures of the magnitude of the floatables problem along the Passaic River. There are times when it's an exaggeration, but you could walk across the river on the floatables, it's so bad. During four months of monitoring, we captured 24,000 pounds of floatables from just 2 outfalls. If you extrapolate that number across the 230-some/250-some outfalls in New Jersey--

ASSEMBLYMAN CORODEMUS: That was four months? How long was that?

MR. TURNER: In four months, we captured 24,000 pounds of floatables. There are a couple of pictures we can circulate around for you to look at. If you extrapolate that number, which I will readily admit is probably not fair because those are pretty bad outfalls--

ASSEMBLYMAN CORODEMUS: It's a lot.

MR. TURNER: It's a lot. That would annualize to almost 9 million pounds a year being discharged from the 230 to 250 outfalls in New Jersey, another 17 million pounds from New York City. This stuff weighs in at about 25 pounds to 30 pounds per cubic foot. And so if you took it and stacked it on a football field, you'd have a stack of trash 66 feet high, just to help you visualize the magnitude of the problem. And those of us who work at the ends of these pipes and see this stuff day in and day out-- Pogo was right, "People is pigs." That's the magnitude of the problem and all of that is now--

We get 42 inches of rain in this area, roughly, every three days. There are somewhere between 40 and 70 CSO events per outfall per year throughout this metropolitan area. So this is not a one-time event like we were talking about specifically that kicked off this meeting. This is going on two times a week, on average, year in and year out, that these CSOs are discharging and bringing pollution, sewage, and floatables, most of which by the way is street litter, not from the sanitary side. So for every CSO outfall there are storm drains, and they are where the bulk of the litter that you see on the beaches comes from. Not all of it, most of it.

ASSEMBLYMAN CORODEMUS: Maybe you can tell us a little more -- get a little more directly to the type of technology--

MR. TURNER: Right, okay. Let's go on.

ASSEMBLYMAN CORODEMUS: --that you employ to capture this problem.

MR. TURNER: Right. The first system I want to talk about is called our Netting TrashTrap. Dennis, the bag is in the thing, there, at your side. It's a mesh, nylon bag. This is one of those really simple ideas that-- We try to keep it simple. This bag is held with its mouth facing the direction of flow from the outfall. As the CSO goes through the bag, it strains out all the trash and debris. It also, in fact, collects some of the grease and oils and fecal matter, but the real purpose is the Styrofoam and the cans and the bottles and so on. The bag with everything in it is then removed periodically, maybe once or twice a month, and hauled to the landfill for disposal, and a new bag is put in place.

The original versions which you see in this picture, which is at Fresh Creek, were at the end of the pipe floating in a pontoon-like structure. This is another picture of the one that's over at Owls Head, like the four recently installed. This one has two bags in it, and those side booms that you see direct the flow through a funnel into the bag.

A new version, which I referenced there, is the In-Line version where the bag is down inside of a chamber, or a concrete vault, between the overflow point and the discharge point, and it's serviced through some doors on the top. So it is out of sight, below street level. One version or another of these two have been included in plans developed and approved in New Jersey in Perth Amboy, Bayonne, and Jersey City -- all up and down the Hudson. We were very pleased with the acceptance of that technology.

We are at a critical stage now -- we, the State -- in that those communities are now-- They've been through the planning phase. They're into the design phase, but now they have to, if you will, face up to the reality of the cost to implement. Even though these are one-quarter/one-half the cost of alternative technologies both to build and operate, there still is money involved.

We are also pleased to say we now have an exclusive arrangement with Chase Manhattan Bank. You talk about public-private partnerships where we can come to these communities and offer them on a long-term design, build, operate contracts to provide this service so that they have no bonding requirements. They simply pay by the drink on a monthly basis for doing that. We're very excited about exploring that as well.

ASSEMBLYMAN WOLFE: Excuse me, they pay by the month? By the drain?

MR. TURNER: Well, there would be a fee charged per month, like a maintenance fee to-- We would incur the capital cost, build them, and operate under, say, a 10-year contract, so that the city would only incur an operating expense, as opposed to having to raise some money and go for bonding issues or borrow the money -- the capital money -- through the State revolving-loan program or some other way.

ASSEMBLYMAN CORODEMUS: Let me ask you this. With what little we know and you know about this crisis that was averted a few weeks ago in New York City, with the type of technology that your company offers, could that have been applied to that pumping station and minimized the environmental impact had there been a discharge of 560 million gallons?

MR. TURNER: In a literal sense, to put something in for that one four-day event, I would have to say that I'm not aware of anything that would have been practical to do for that short time. These outfalls, though, do need attention, and there are things you can do, like floatables capture from those or the other technology I'm going to discuss, the EquiFlow, that would be part of a permanent solution, so when you do have combined sewer overflow events, you are capturing and storing it.

The problem with the treatment, the collection system, the pipes and the sewage treatment plants, is not average. The problem is peak flow and the treatment during the storm events. One of the solutions is level that average by capturing that instantaneous two- or three-hour flow, wait till the plant is back to dry-weather flow when it has the capacity, and then feed that polluted water into it for treatment. And that is, in fact, what the EquiFlow system does. It's a very simple--

ASSEMBLYMAN WOLFE: What are you actually building?

MR. TURNER: We build and sell the many trash trap systems that you see there and provide service.

ASSEMBLYMAN WOLFE: Now, what do you do with the trap when it's filled?

MR. TURNER: I'm sorry.

ASSEMBLYMAN WOLFE: What do you do with these bags when they're filled?

MR. TURNER: They are hauled to the landfill for disposal, just like they are from a sewage treatment plant where they have other technology for removing floatables.

ASSEMBLYMAN WOLFE: Okay.

MR. TURNER: The other system is what we call the EquiFlow. It's basically an in-the-water, end-of-the-pipe storage tank for capturing storm water or combined sewer overflow during that period when it discharges and then pumping it back into the sewer system after the storm event is over and we're back to dry-weather flow conditions. So it can be treated as normal sewage flow and treated through the normal sewage treatment process plant, and that's the plant that was involved.

Now, we've got two other projects I want to just briefly touch on. This is one up in Canada where they are building an EquiFlow system, and instead of treating it using conventional POTW chemical treatments, they are going to circulate it through a constructed -- reconstructed wetlands and let nature and the plants that are there remove the pollutants from the water before it's discharged into the lake.

There is another project funded through a program called ISTEA, the Intermodal Surface Transportation Efficiency Act, up on the Harlem River at the Spiten Dival Metro Station there right underneath the Henry Hudson Parkway that is a similar concept. The ISTEA grant has been approved, and it will take combined sewer overflow, remove the floatables, and feed that through a reconstructed wetlands there. In this case, it's being integrated with pedestrian access to the waterfront, so the pontoon structure that forms the containment tank will allow people to go over and walk through this wetlands and along the structure and provide access to the Harlem River, which is virtually now impossible to do because it's been so industrialized.

These are exciting, innovative, alternative technologies that are much lower cost that could help cut the nut in terms of what we are facing -- in terms of how we go about cleaning up our waterways and provide secondary benefits at the same time.

ASSEMBLYMAN CORODEMUS: What motivating factors currently exist to encourage municipalities to implement this type of technology as opposed to continuing the practice of old and just continuing to discharge into the--

You can chime in, too, Howard, if you could, on this. This is just as much a governmental -- more of a governmental question.

What would push a municipality? Why is Newark, why is--

MR. TURNER: Frankly, there aren't many. There are a lot of reasons not to do that, and I'm not pointing fingers at fault, but for a professional engineer to risk his license and reputation on what is "an innovative and unproven technology" is not necessarily in their best interest. For a municipality to reach out, to try to do these things, unless you find people who are really innovative in their thinking and are willing to take some risk, it's safer to go with the tried and true solutions, which do work but are horrifically expensive.

ASSEMBLYMAN CORODEMUS: Maybe I missed -- didn't appropriately phrase my question. Take this town, take any town up and down the river and estuary.

MR. TURNER: Right.

ASSEMBLYMAN CORODEMUS: Is there any time limits that these towns are operating under that would cause us to look into these types of technologies?

MR. TURNER: Yes. It wasn't mentioned, but I think it should be. The EPA came out with a CSO policy in 1989. It was revised and reissued in 1994. New Jersey has a CSO policy issued now two years ago, and every municipality with a combined sewer overflow system has what's called a general CSO permit. It requires them with specified dates to put forward a plan, get it approved, and then implement that plan. I know that the State DEP is in the process of issuing follow-up letters to move them along toward compliance. We're right at the point where many of them are now facing the implementation of those and will be going either to the revolving-loan programs or other methods of financing.

So the mechanisms are in place to address the short term, what are called the nine minimum controls, one of which is floatables abatement, a very interesting subject here in New Jersey, particularly, but also throughout the country, and then a longer term plan beyond that. So there are mechanisms in place. The issue frankly is how serious are we collectively through our elected officials in implementing those policies.

As a businessman, I must tell you it is very frustrating, because the only thing that drives people to buy our solutions, as good and as cost-effective as they are and other people's, is regulatory pressure to say we are, in fact, committed to cleaning up the environment and making progress.

ASSEMBLYMAN CORODEMUS: Maybe we can get-- Thea, maybe we can-- I'm sure Assemblyman Gusciora would like to know this, too.

Maybe we can get a report from DEP where we are in that whole process as far as-- Maybe they can make a presentation to us in the near future about what that Act is about, one; the initial letters were sent out, what the responses have been, what the follow-up has been; what the cost is; where their anticipated funding will come from; what the time schedule is so that we know that with some confidence we're going down this path deliberately so that we know we are going to solve this problem.

ASSEMBLYMAN ROONEY: Mr. Chairman.

ASSEMBLYMAN CORODEMUS: Yes.

ASSEMBLYMAN ROONEY: One thing that we've got to understand and have the municipalities understand, there's two types of CSOs. There's the legal type which was existing in the older cities where you had old systems that they actually took the rainwater and whatever, and they put it in with the sanitary sewer lines. Those were just as a matter of convenience way back when, when you just flushed everything out to wherever you were going. Then there is the illegal connections. The illegal connections basically are in those towns that have more recent sewer systems where they put them in the ground, but then people have attached sump pumps and other things, drainage items, into that. What we really have to do is have that understanding by the municipalities to stop the illegal connections, and we can eliminate a lot of our CSO problems or INI, inflow and infiltration, problems that we have.

Clare Farragher and I sponsored a bill to make that illegal and put some penalties on it. I'm not sure of the progress of the bill. I apologize for not tracking it. That's the kind of thing we have to do. With the CSOs, we're going to have to work with the big cities like Jersey City, Newark, and the

others to physically separate their two lines. They've got to separate the sanitary line from their runoff line, their water line. That's part of the problem is not understanding it.

ASSEMBLYMAN CORODEMUS: Any questions from the Committee to Mr. Turner? (no response)

MR. TURNER: Thank you very much.

ASSEMBLYMAN ROONEY: One question before you go?

You're talking about floatables. Basically, that doesn't address the clammers issue of the polluted water that's coming down here.

MR. TURNER: No. The systems like the EquiFlow system could address that, yes.

ASSEMBLYMAN ROONEY: All right. You do have a system for that. I'd like to get some information on it and--

MR. TURNER: Yes, we have some literature packages we can leave with you.

Just one final comment on illustrative cost. The current New York City plan for Jamaica Bay is to build three subsurface concrete tanks to capture the CSO that goes into Jamaica Bay alone. That program is estimated to cost close to a billion dollars to construct, some two million-plus dollars a year to operate. As an alternative approach, we are in discussion with the City of using our EquiFlow system, and we said we would design, build, and operate functionally equivalent EquiFlow systems in terms of pollution abatement results for less than half of the interest cost alone per year that they're going to pay on that billion dollar borrowing.

ASSEMBLYMAN ROONEY: Have I got a deal for you.

MR. TURNER: As Bunky Hunt said, a billion dollars here and there is real money.

ASSEMBLYMAN CORODEMUS: Yes. I don't know if your stock is public, but I think it's going to be going up.

ASSEMBLYMAN ROONEY: Let us know when it goes public.

ASSEMBLYMAN CORODEMUS: I'd like to thank you, Mr. Turner--

MR. TURNER: Thank you.

ASSEMBLYMAN CORODEMUS: --and thank all the witnesses for coming here today. I thank the Committee members and staff who came from a distance to be here and talk about this very important topic. This will not be the end of this hearing. I think we raised just as many more questions today than we got answers. I intend to personally pursue this and to lead the Committee, I think, cooperatively to try and help resolve these problems.

Some of the other things we will be looking at is the Wastewater Treatment Trust Fund that's funded by the Federal government, and we constantly hear that money is being returned every year because it's not adequately being taken advantage of by participating municipalities. One of the main reasons is because they don't have the local match. If they can't afford the match, why aren't they changing the leverage so that more towns can get into that system?

Again, thank you. The Committee stands adjourned.

(HEARING CONCLUDED)