

# Public Hearing

before

## STATE BEACH EROSION COMMISSION

"The status of beach restoration projects since the December 1992 storm; and, allocation and expenditure of shore protection moneys"

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**LOCATION:** Spring Lake Borough Hall  
Spring Lake, New Jersey

**DATE:** August 25, 1993  
10:00 a.m.

### MEMBERS OF COMMISSION PRESENT:

*New Jersey State Library*

Assemblyman David W. Wolfe, Chairman  
Assemblyman John C. Gibson, Vice Chairman  
Senator Andrew R. Ciesla  
Assemblyman Steve Corodemus



### ALSO PRESENT:

Assemblywoman Virginia E. Haines

George J. LeBlanc  
Office of Legislative Services  
Aide, State Beach Erosion Commission

**Hearing Recorded and Transcribed by**  
The Office of Legislative Services, Public Information Office,  
Hearing Unit, 162 W. State St., CN 068, Trenton, New Jersey 08625-0068

**Senate Members:**

John O. Bennett  
Andrew R. Ciesla  
William L. Gormley  
Joseph M. Kyrillos

**Assembly Members:**

Steve Corodemus  
John C. Gibson  
Robert G. Smith  
David W. Wolfe

**Public Members:**



**State of New Jersey**

State Beach Erosion Commission  
Legislative Office Building, CN-068  
Trenton, New Jersey 08625-0068  
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**NOTICE OF PUBLIC HEARING**

The State Beach Erosion Commission will hold a public hearing on the following topics:

- (1) Status of Beach Restoration Projects since the December Storm
- (2) Allocation and Expenditure of Shore Protection Monies

The hearing will be held on Wednesday, August 25, 1993 at 10:00 AM at the Spring Lake Borough Hall, Spring Lake.

*The public may address comments and questions to George LeBlanc, Aide to the commission, at (609) 292-7676. Anyone wishing to testify should contact Carol Hendryx, secretary, at (609) 292-7676. Those persons presenting written testimony should provide 15 copies to the commission on the day of the hearing.*

Directions to Spring Lake Borough Hall:

Garden State Parkway South

Take Exit 98 to Rt. 34 South. Go three-quarters around the circle to Rt. 524 East (Allaire Road). At the third light, make a right onto Rt. 71. At first light, make a left onto Warren Avenue. Cross the railroad tracks, first intersection after that is Fifth and Warren. Borough Hall is on the right.

I-195

Stay on I-195 East until it becomes local road 138 East. Go through four lights and take exit for Rt. 35 South. At third light, make left onto Warren Avenue. Go through one light and cross railroad tracks. First intersection after railroad crossing is Fifth and Warren. Borough Hall is on the right.

Garden State Parkway North

Exit 98 to Rt. 138 East. Follow directions above for I-195.

NOTE: The telephone number at Spring Lake Borough Hall is (908) 449-0800.

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Kenneth J. Smith

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**ASSEMBLYMAN DAVID W. WOLFE (Chairman):** I would like to call the meeting to order. This is the second official meeting of the New Jersey Beach Erosion Commission. I'd like to thank you all for coming. I have a little statement I'd like to read before we proceed.

I'd like to welcome all of you to our meeting. On behalf of the Commission members, I would like to extend our thanks to Mayor Byrne, and also to all the local officials who are here showing an interest in Spring Lake, and also in the 10th legislative district.

This is the first of a series of meetings to help coordinate beach restoration projects and to protect the State's most valuable coastline. Back before the Commission was created in 1948, little if any thought was given towards the preservation of our beaches, and we took our sand for granted. Today, in the aftermath of our most recent storms in December, it nearly devastated our entire shoreline. We have a better understanding of just how important preparation and shore protection is.

Through all of the hard work of the Legislature and the Governor, we now have \$15 million, which is a stable source of funding for future storms. We also have a number of initiatives, including the sale of a shore protection license plate that will help generate additional revenue. There are also many breakthroughs being handled in the form of technology right here in Spring Lake, and also in Belmar. We have also in Avalon the construction of some artificial reefs, which hopefully will be one source of answers to some of our problems.

In light of this, we thought it was imperative to reconvene the Commission in order to help integrate the programs and ensure that the people of the State are getting the most for their tax dollars. Our mission today and throughout these hearings is to consider the methods of protecting and preserving the beaches, and to report our findings to the Legislature and also to the Governor.

With that, I'd like to thank you for coming here. We'd like to get on our way.

Before we go any further, I would like to add that because this particular Commission has been convened periodically -- I would say sporadically -- throughout the years, it is really our intent to keep it going on an ongoing basis, not just as a disaster may perhaps face us. I would say also that a number of you have already indicated to us concerns over some of the Federal projects that are under way, some Corps of Engineer projects, and several of the local communities along the coast also have individual projects under way.

There are so many things happening right now in addition to the State's recent regulations on development along the shore with the CAFRA legislation. It is basically the intent of this Commission to integrate and coordinate all these efforts to make sure that there is no duplication of effort, and basically to assist the municipalities in those areas that may need additional types of assistance.

One other thing which was not, I think, emphasized too forcefully is the fact that we now have New Jersey, for the first time, in efforts similar to the Cooperative Extension at Rutgers for the agricultural sector; that is, we now have the same thing for our shore communities through the efforts of a consortium run through the Davidson Laboratory and the Stevens Institute involved in the New Jersey Institute of Technology, Rutgers, Princeton University, and Stockton State College. This is a program designed to assist any municipality in the State that has a specific problem with beach erosion or shore protection.

I'd like to, before we begin, ask the members who are here today to introduce themselves, tell a little bit about where they are from and who they represent. So we will call on my friend, Assemblyman Gibson.

ASSEMBLYMAN GIBSON: Thank you, Chairman Wolfe. I'm all the way up, from Cape May County. I am glad to be part of this Committee. We in Cape May County have a big stake in the kinds of things that we are going to discuss here today.

I also want to welcome everybody that is here to our second meeting, which is scheduled in Cape May County, tentatively in the Ocean City Council Chambers on the 15th of September. I hope one of the things that we may touch on today, but cover a lot more thoroughly at the Cape May County meeting is, what is an engineered beach? How do you qualify for an engineered beach?

So our municipalities after a storm, which were threatened with loss of some potential Federal aid on the last several storms, are no longer ineligible for that. Let us find out how we qualify for an engineered beach. I know many of the larger municipalities already do qualify for that, but I'd like to see every one of the State's municipalities do that.

ASSEMBLYWOMAN HAINES: I'm Assemblywoman Ginny Haines. I'm with the 10th legislative district, which covers Belmar to Toms River. I also would like to thank the Mayor for allowing us to come here this morning to have this hearing. I am sitting in. I am not one of the official members of the Commission, but I know it's going to be quite interesting to find out the different problems that we are going to be hearing today and possible ways of what we might be able to do. I would just like to thank the Chairman for asking me to sit in on this.

ASSEMBLYMAN WOLFE: Thank you.

George, do you want to say anything? George LeBlanc.

MR. LEBLANC: George LeBlanc. I'm with the Office of Legislative Services. I am the Aide to the Commission. That is all I have to say.

ASSEMBLYMAN WOLFE: Okay, thank you.  
Senator.

SENATOR CIESLA: As you can see, the Chairman is a professor and requires everyone to introduce themselves, so get ready. I am with David in the 10th legislative district. I represent the Borough of Spring Lake, and I am very pleased to be here. I am particularly excited about this particular Commission because I see it as a way to essentially shore up the shore. That is so important because it has never been done. This Commission will focus on the comprehensive road map that will be necessary to achieve the goal of finally finding a way to formalize a protection program for the New Jersey shore.

I suspect that this Committee will exist in perpetuity because, finally, with the \$15 million beginning of investment by the State on an annual basis, we will begin to put into place the things that are necessary to protect this valuable investment. So, David, I salute your initiative to get this Committee reestablished, and I am very pleased to be a member. I look forward to some of the testimony today that will start the process.

Thank you.

ASSEMBLYMAN WOLFE: Thank you.

Assemblyman.

ASSEMBLYMAN CORODEMUS: I am Assemblyman Steve Corodemus. I represent 22 Monmouth County towns, roughly from Sandy Hook down to Brielle, and I have been very interested in shore issues. I'd like to commend you, Chairman. Although all of us on the Commission and others have worked to put into place the \$15 million stable funding source that Senator Ciesla spoke about, if it weren't for your efforts, that would not have passed in the Assembly. You are to be commended for that.

ASSEMBLYMAN WOLFE: Thank you.

Robbie.

MS. MILLER: I am Robbie Miller, with the Assembly Democratic Office.

ASSEMBLYMAN WOLFE: Thank you. Thank you again for coming. These are very informal proceedings, which kind of-- You know, it's stodgy up here with the microphones and everything, so just get relaxed.

There will be transcripts taken of the hearings. What I would like to do before we begin the actual testimony is to invite the mayors of the host community and also the adjacent municipalities to make a statement if they wish. Then we will have spokesmen from various organizations speak.

If you do have -- someone says something during the course of the morning and you wish to put in your two cents or give us some advice, there's a form up here on the table. Just fill it out and give it over to George. We will certainly hear you in an orderly fashion. Again, this is-- We have no specific ax to grind. We are here to take public testimony, and we will follow Robert's Rules of Order.

So with that as our beginning, I'd like to welcome and call as our first speaker, Mayor Thomas Byrne, Mayor of Spring Lake, who has graciously offered to be your host. We are glad to be here.

**MAYOR THOMAS J. BYRNE:** Mr. Chairman, I certainly would like to welcome each and every one of you and the distinguished members of this Commission back to Spring Lake in better times. I know a lot of you visited us in December and after the March storms. Now, I certainly wish every one of you well with the challenge of this Commission, because I indeed observe it as a challenge.

I know the Assemblyman mentioned about we learned a lot of lessons, I guess, after the last storm about engineered beaches. I know that we have implicated and instructed our Borough Engineer at this point to come up with a Borough and beachfront master plan for the Borough of Spring Lake. But there certainly are critical needs that we have to observe, and

I think we are all much more aware now after the storm than we were before. We certainly expect it to follow some of those patterns.

Just a little bit of what happened in Spring Lake, and to bring you up-to-date as to where we stand with our restoration projects: We do have about two miles of beachfront, and as most of you know, just after the December storm we lost approximately half of our boardwalk and a good portion of our dune areas. So they have all been -- the dune areas themselves -- have been replanted. About 50,000 dune plantings were replanted and now are growing again for us. And thanks to an excellent Public Works staff that we have in the Borough of Spring Lake, they have completed about one mile of boardwalk where we took the initiative and tried a new product called "Timbrex", which is a recycled material.

Again, there was some help from the county in the planning of the dune planting and so forth, but it was a monumental task, and something that I hope we never have to face again. Maybe with the study of this Commission about beach erosion and so forth, it's something that we will not have to face. Hopefully, we will have a safe winter this time, and we won't have to face it again.

Again, as you mentioned, some of the initiatives that we took forth: We had an experiment with what we call a beach erosion chain that the Department of Environmental Protection -- I know Bernie Moore is present today -- is assisting us with the experiment to try and prevent some beach erosion with that initiative. Then, as you mentioned before about the offshore reef from Breakwaters International, and the funding problems that we had with that originally, they have now been cleared up with some of your assistance and so forth.

We look forward to that project being put in now, I believe, the spring, because it would take the Army Corps approximately several months to come up with a program and so

forth. Water conditions being what they are, we will probably have that project in the spring. Hopefully, it will be successful and something that we will look forward to helping municipalities such as ours for a long time to come.

Last night we did have a meeting in town with Congressman Pallone, who offered his assistance with the Commission, as far as Army Corps projects may be concerned. I know, as most people are aware, the Phase I project for beach replenishment is beginning up in the Sea Bright area. The Congressman has volunteered to help with the Commission members, and maybe help in the Army Corps to expedite Phase II projects, because I think it's of a critical nature that we have this. From what the Congressman has said, he believes that the Army Corps is willing to split the projects and maybe expedite Phase II.

So I think it's something that the Commission should maybe-- I understand Dave or, Mr. Chairman, that you made the comment that we could springboard some of those particular programs in the-- Again, that would be most beneficial to Phase II, the Spring Lake municipality, and the adjoining municipalities.

So, again, I just welcome you to Spring Lake, and I thank you for your assistance. Again, I wish you well in this challenge. It's to benefit us all. Thank you for coming to Spring Lake and good luck.

ASSEMBLYMAN WOLFE: Thank you.

Next I'd like to invite Mayor John Winterstella, Mayor of Manasquan, neighboring community to Spring Lake.

Good morning, Mayor.

Thanks for coming.

**MAYOR JOHN L. WINTERSTELLA:** It's a pleasure to be here and it's also, as Mayor Bryne said, we sure-- Mayors certainly appreciate the awareness and the

attention that some of the beach erosion issues are now getting from your Commission. It's nice to know that there are others concerned. I would start out by recognizing Assemblyman Gibson's remarks first, because unlike some of the other municipalities in this county and in this State, Manasquan started out deciding they wanted an engineered beach.

We went to the DEPE about three and a half years ago, met with them, and tried to determine from them what was required. We then went out and hired a consultant who was approved by them, and paid that consultant. He is a very capable gentleman -- Dr. Farrell, from Stockton College. We had him working with our Borough Engineer. We then went and did the necessary test measurements, etc., required of an engineered beach. We have this data -- the background data. From the initial surveys, we developed a beach master plan. We then followed that beach master plan by nourishing certain beaches from the water's edge, etc. The storm of December 11 and 12 then took away most of those beaches.

Manasquan was mentioned in the papers by FEMA as being one of four municipalities, I believe, in the State that were going to receive funding from FEMA to replace -- restore our beaches. The bottom line was the funding never came. We were taken off that list because we had not somewhere along the line purchased sand, as opposed to nourishing -- getting sand from the water's edge and moving it up. This was a little bit of a shock to us because we hadn't been told along the way, at any point in the process, that we needed to actually buy sand. It comes down-- I'm probably putting it too simplistically, but obviously if we had purchased \$20, or \$30, or a truck load of sand and dumped it somewhere on our beach, we probably would have gotten reimbursement for all the work, time, energy, and money that we put into the Manasquan beaches prior to that storm.

So I think the first point is, I would hope Assemblyman Gibson and the Committee will look at modifying that requirement somehow, be it necessary to prompt Federal revision of regulations, etc., that sand not have to be purchased; in other words, sand be transported to the beach and put on the beach. I could certainly understand the reverence of that and the relation to getting refunding, but to actually have a stipulation where you had to buy sand seems to me to be really kind of a meaningless requirement in lieu of all the other requirements that are put in place.

That is point number one. I think that is a very difficult requirement, really. To buy enough sand, you have to go involve yourself in an offshore dredging project; you have to involve yourself with the Corps of Engineers, with the State of New Jersey, etc.

The other way is to try to buy sand from an inland location, which for many municipalities is a very expensive process. I think that was the next step I was going to suggest that Manasquan is looking at very seriously.

We are watching Mayor Bryne and Mayor Pringle's project inbetween their municipalities and the breakwater forms. In addition, I think the State somehow is overlooking a very viable form of sand and beach replenishment; that is, harvesting the sand from the water's edge. Particularly in the summer months and during the spring, when we get these south winds -- south-east winds -- it builds up tremendously on our beaches and offshore.

We in Manasquan now have a permit which is part of that engineered beach process. We have a permit to dredge that sand. I think it's a viable source of sand and shore replenished -- sand replenishment that is probably being overlooked. Obviously, we are looking for other alternatives and so forth, but I certainly think bulldozing sand has worked very well in Manasquan as a method.

I know there is some argument against by the environmentalists about whether you should be doing that or not, but it seems to me that that sand is right offshore in the form of shoals and sandbars. The minute we move it out with a bulldozer from the water's edge, it comes back that night and it's replenished. We are able to move that up to the upland portion, which is particularly helpful to us in the fall storms, the spring storms, and winter storms. That's another area I think maybe we could -- your Commission could do and could pursue.

I know Bernie Moore. I've been to a number of these hearings in the last 10 to 12 years. He's the Mayor, and I know they're working delingently in that direction. But I think the dredging of inlets, the Corps projects -- that sand could be certainly placed on the local beaches. There was probably a smile behind me because I was the one that fought the dumping of sand from the inlet on one occasion. But we cannot do that kind of work on July 4th weekend, we have swimmers and people paying to go on the water. Dumping sand on our beach July 4th weekend is not a good time to do it.

I do think there's a great source of sand in these inlets and inland waterways that we could be using. It would make those waterways more viable, and by the same token, it has to be done off-season. It's not the best idea in the world to do that in the middle of the summer for the shore community.

Again, I thank you very much. I think the key bottom line, as Mayor Bryne mentioned, is we have to keep some money in place for the Corps of Engineer Project, because that is going to be our homerun in the long term.

ASSEMBLYMAN WOLFE: Thank you very much, Mayor.

I just might add, before the next speaker comes up, the points raised by Mayor Winterstella are very important because they raise issues of sand for the shore. Some of you may not be aware that the State is considering banning mining in the Pinelands, which is basically the source of sand for New

Jersey. Hopefully, we are not going to be in the business of buying sand from outside of New Jersey to put on our beaches. Hopefully this is something we could look into.

Our next speaker is Mayor Robert Roman, from the Borough of Mantoloking.

**MAYOR ROBERT A. ROMAN:** I would like to thank the Committee for inviting the Borough to participate this morning. I would like to say that our Borough has had in place a dune committee, which has operated for the past 12 years. It has been recognized nationally for the program and the dune system that the Borough of Mantoloking had in place until our winter storms appeared. The storms decimated our dune system.

Since that time and before that time, the Borough has had experts in from as close as New Jersey, and as far away as Massachusetts and Florida. These experts don't agree on all forms of protection for the beach, such as, groins, bags, and hard structures on the beach. What they all agree on is that there is no substitute for beach renourishment and a dune system.

Basically, it seems that a 100-foot-wide beach, and if you could have a base of a 100-foot-wide dune, that is the best protection that a seashore town could have. At this time, we don't have anywhere in town a 100-foot-wide dune or a 100-foot-wide beach. I don't believe a lot of our neighboring towns have these conditions at this time, and I feel strongly that there should be a concentrated effort of the towns to work together on trying to get this beach renourishment. Now, there are indications that there may be plans for the State and the Federal people to be coming down into our area between 1997 and the year 2000. The only problem is whether or not we can hold out to 1997 and the year 2000 without getting a beach renourishment.

We are looking into trucking sand in and the possibility of the Borough going on its own to try to get the permits to renourish. All of these things take time and an awful lot of money. I do think it will be important, hopefully, for this Committee to try to assemble a program that would be good for the area of the State that you are working on so that we could have a program that all the towns could participate in together. We would certainly do everything we could to help the Committee in this work.

Thank you very much.

ASSEMBLYMAN WOLFE: Thank you, Mayor.

I now would like to call on two people who are representing the Commissioner of the Department of Environmental Protection, Jeanne Fox, who sent a very kind letter to me, and also the Committee, indicating her interest in the Committee and also her disappointment that she was unable to attend today. Joining us today are two people: Assistant Commissioner James Hall and Bernard Moore. They will be coming forward to present their testimony.

**J A M E S H A L L:** Thank you, thank you. It is good to be here today. As one of the other mayors had said and you had mentioned earlier on, there are a lot of things going on. I know from Bernie's perspective, he keeps hopping. We have a lot of balls up in the air that we are trying to juggle to keep things in good stead. Between innovative projects going on, new technologies dealing with what FEMA damage had -- restoration projects that we are looking at, and the \$15 million stable funding, there is a lot going on.

I thought what we'd do today is, Bernie has some charts of some of the projects that we'll just sort of walk through: What's going on now with the Army Corps, where that is taking us down the road in terms of financial resources, and what we are doing on the non-Federal side. We will keep it pretty informal, so just jump in whenever you have questions or whatever.

**B E R N A R D J. M O O R E:** Over the years, the State of New Jersey and the Army Corps of Engineers have had a strong bond in the relationship to keep projects moving. In fact, the State of New Jersey is one of the first states that ever got involved in shore protection with the Army Corps of Engineers. It was the basis of starting the major research station in Vicburg that is known worldwide today as an expert in shore protection.

Over the years, although we haven't had stable funding and funding has been sparse, we have moved forward with the Army Corps of Engineers in various studies and programs. I'd like to go over with you this morning just some of the projects that we have moving in the system right at this particular time.

Up on the Raritan Bay area, we have two major studies that are going on. One is called "934" which is the Congressional reauthorization to go back in and look at existing Federal projects that have been approved. We are talking like Keansburg, Middletown, Allbridge Township, in which the State of New Jersey had to provide 100 percent of the funding for the maintenance. Congress has authorized to go back to look at those and see if they -- Congress and the Army Corps of Engineers -- can pick up 50 percent of the beach fill maintenance portion of that. So we are involved with them on that.

The second one is a general study involving all of the Raritan Bay from Perth Amboy right around to the Atlantic Highlands. This area was looked at back in the '50s, and only three projects were authorized by Congress and eventually funded. Now we are looking at all of them again because of the increased development flooding that has taken place over the years. Can we go in and get some Federal projects authorized in this area?

The next area down is, of course, the Sea Bright/Monmouth Beach. This project-- We have just finalized the last real estate acquisition there, and we should be

advertising this project with the Army Corps of Engineers sometime in September, with the construction award in October, and construction to begin thereafter. That project would, of course, only take care of Sea Bright/Monmouth Beach. The following year -- next year -- we are looking at moving down into Long Branch, and the year after that, down into Deal through Asbury Park.

The next study that we have ongoing is between Asbury Park and Manasquan. This project is what we call a general design memorandum. It is now being reviewed at the headquarters in New York for the Army Corps of Engineers. Its next step is to go to Washington. It's anticipated that this project will come on-line with the necessary agreement in real estate somewhere in Fiscal '96. The cost of that project is somewhere in the neighborhood of about \$46 million, \$47 million.

SENATOR CIESLA: Bernie, I'm going to take Jim's advice. The Mayor had mentioned before that-- Isn't the flow -- the natural littoral flow of the ocean from at least Spring Lake and north, northward of sand?

MR. MOORE: Yes, the net drift is from Barnegat -- is to the north, and from Barnegat it is to the south.

SENATOR CIESLA: What stikes me -- I know this question has been asked before, but I am not sure that I know the answer -- is that if these beaches in this area are jeopardized as well as the ones that are to our north, and if the flow of sand is naturally from south to north, doesn't it make more sense on a Federal level to start with a feeder beach somewhere to the south so that, as the projects progress over the years, they are also being complemented with the sand that was already deposited in the southern section of the State?

MR. MOORE: You're correct. However, how do you get into Sea Bright and Monmouth Beach? I'll go back to 1979, 1980, when the State of New Jersey came out with its shore protection master plan at that time, and the consensus was that

the only thing that we could do in this area was to just maintain the seawall, do nothing else. In 1980, we entered into an agreement with the Army Corps of Engineers of New York. We paid them \$100,000 to relook at the authorized study which was done back in the '50s, reauthorized in the '70s but no money. We paid them to go back and look at that project and see if, with our regulations and our thinking, and their regulations and their modifications to that, could we come up with a project?

After a year of study, we came up and said, "Yes, there is a chance." Through the Congressional side of the house each year for six years, Congress got money into the system so that the Army Corps of engineers could undertake this project. Now, that was a major step, and that area was at one point almost given up for lost. Back in the mid-'80s, the Department made a decision that we would maintain that area. We would not let it go, because there were too many things up there that were in jeopardy. So we made a major commitment up there and this project was snowballing right along.

In 1986, under the Water Resource Development Act, that project was approved. It also had funds to it, so that is why that project is maybe a few steps ahead of the others. The Water Resource Development Act bill was a major move forward on the side of the Federal government to reauthorize and provide funding to all of these studies. Now we have studies going back until the '40s and '50s that were authorized by Congress, but were never approved for funding.

MR. HALL: I think in addition, one of the things is timing perspective, in that moving forward on the Sea Bright/Monmouth Beach Project is critical to maintaining the investments that were made in the seawall in the past.

MR. MOORE: The other part of that is that when we study the seawall itself, engineer studies show that the wall is getting ready to fail. So we had to make a move, and we did

that in '88. We began to make the improvements to the wall. That wall and the improvements that we made to it in repairs gave us a credit towards the sand replenishment project that is now ongoing, or about ready to go. Yes, if we were doing it in a different fashion, it would be nice if you started here, and went north here and went south, but that is not the way things work out.

So we are down now to Barnegat with the project that was done in 1984 -- or I'm sorry, in '86 -- right after the water resource package was approved. That was the first project in the State of New Jersey that was entered into with the Army Corps of Engineers as a result of the water resource package. That was the extension of the south jetty at Barnegat. That has been completed, and it has been very stable since we put it in.

In this current fiscal year -- Fiscal '94 -- with the Army Corps of Engineers, we are looking to begin what we call a reconnaissance study for all of Long Beach Island. The reconnaissance study goes in and takes an initial quick look at the area, and it determines whether or not a project can be undertaken and will be cost-beneficial. It's quick and dirty. After that, we enter into what we call a feasibility side, in which we share with the Army Corps of Engineers funds, and we go into the more detailed environmental, engineering, economic, and social impacts of the projects. That should start in Fiscal '94. We are already under way in Brigantine and Absecon with the Corps, with the feasibility studies we have down in that area.

Down in Ocean City is another project that we started in '92 and has been completed. If you want to hear some testimony from people about the effectiveness of a beach fill project, when we meet down there again in September, I'm sure the Mayor and the Business Administrator will more than entertain you with good stories of what a beach fill will do.

In Sea Isle -- I'm sorry, in Townsends Inlet -- we have a project ongoing right now that covers from Townsends Inlet down to Cold Spring Inlet. That is in a feasibility study there. We have -- will begin in Fiscal '94, a study that will take care of the Cape May Meadows and Cape May Point. We have ongoing a new study that goes from Cape May Point up to Salem River. That is a joint project between the State of New Jersey, the State of Maryland, and the Army Corps to look at the effects of the Delaware Bay area to see what we have.

These studies -- I know they take a long time, but they are the first step in getting Corps jobs through Congress. If we don't do it this way, then the only way is that Congress then reauthorizes a project. Then it has to go through the whole system and has to go back to Congress for approval. In the Water Resource bill, Congress gave the authority to the Secretary of the Army to make the approvals on these projects, so it eliminated a major problem.

So that is what we have for the Army Corps of Engineers.

MR. HALL: I think, as you know, one of the things -- one of the trends that we get to see with the Army Corps' projects is that we are making investments in the studies and so forth that will reap good benefits down the road, as well as the larger beach fill project that we have with Ocean City and starting now with Sea Bright. But as you'll see over time, the financial commitments needed for the State to keep up with those projects will grow.

Right now we are using some of past credits and so forth for some of the projects for the Sea Bright/Monmouth Beach Project. The annual cash flow from the State for that one is somewhere around \$5 million a year to keep that going for the next several years. So as we start to get multiple projects on line, those cash flows will increase significantly.

ASSEMBLYMAN WOLFE: Excuse me.

Bernie, what's the time line on one of those projects from the initial concept--

MR. MOORE: Probably about seven years.

ASSEMBLYMAN GIBSON: Mr. Chairman, I would ask through your office if perhaps -- and through OLS -- that we get interim preliminary reports of these projects. I would be very much interested in their progress, what they have to say as they develop.

ASSEMBLYMAN WOLFE: Okay.

MR. MOORE: One of the important things here, Mr. Chairman, is that for instance, when the project gets started, it is funded. The State of New Jersey signs an agreement with the Army Corps that says for the life of the project, which is normally 50 years, we will come back periodically and renourish the project. If we fail to meet our financial obligation on it, the Army Corps of Engineers has the power and the authority to come in and renourish the beach fills. We have made a commitment, and in turn when we sign on with these projects, we sign an agreement with the municipality that they also are together with us.

So it is a major improvement in making sure that the beaches, once established, are going to be maintained for a definite period of time. Along with that, of course, is public access to the entire beachfront.

With the \$15 million that we now have for shore protection, I'd like to go through some of the projects that we are going to be undertaking -- at least we have scheduled to move forward on them.

SENATOR CIESLA: Bernie, before you do that, can I ask a question relative to that? How is the determination made? What's the procedure for selecting the projects that you're about to describe?

MR. MOORE: Well, we haven't had any funding since Fiscal '88.

SENATOR CIESLA: Right.

MR. MOORE: So we've had several years where we've had damage to the shoreline, and we are in a position where these jobs that we are about to undertake are somewhat critical. The highest one that we have on our priority list is a bulkhead down in Atlantic City.

SENATOR CIESLA: I wondered why Gibson came up here a lot. (laughter)

MR. MOORE: That project-- If that bulkhead fails -- and it is on the verge of failure, it's been that way for the last three or four years -- if it fails, the material behind the bulkhead will slide into Clam Creek. It will shove up all the commercial fishing into behind Atlantic City, the Atlantic City Marina, and the Coast Guard Station. We will all be affected. We have been working with the City and the permitting people on this for a number of years, and we are ready to go. This project should get out of the door very shortly.

MR. HALL: I think these are all, for the most part, projects that you've probably seen before, in some respects, in our budget requests for the Department prior to State funding. We had asked for capital funding in our capital budget request. A number of these projects have been in there for years and haven't been funded.

ASSEMBLYMAN WOLFE: I'd like to follow up on the Senator's question, and that would be, what procedure do you follow?

MR. MOORE: These are all--

ASSEMBLYMAN WOLFE: Lead us through a request.

MR. MOORE: When a municipality or a county comes to us with a request, we go back out and we take a quick look at it to see if it is a valid request. We then meet with the county engineers or the local municipal engineers and do a

little more discussion. Based on those discussions, then we kind of rank them in an informal manner as to where we would get funds, how we could get funds.

ASSEMBLYMAN WOLFE: Do you have a cycle in which they must turn in their applications?

MR. MOORE: No, no, the time is open. All you have to do is send me a letter and we will respond to your request.

ASSEMBLYMAN WOLFE: If a project is not approved, does it then fall into the next available funding category, or is it just--

MR. MOORE: It could, or it could -- if it's not a major priority, then it could be scheduled for a later year in which funds would be available at that time. Now that we have a stable funding source, you can begin to program and know that you have \$15 million.

MR. HALL: I think I understand your point. The problem to date has been that we have continuously gotten a lot of requests--

ASSEMBLYMAN WOLFE: Right.

MR. HALL: --and no real money to fund any of them. So there is a tremendous backlog that we are dealing with now. We are trying to deal with what are the most urgent in terms of actual structural needs, cost-benefit ratio-type issues of where you can derive the most benefit. As we move forward, I think as we see how--

Our first commitment has been, and will continue to be to match Federal dollars. I think one of the things you are going to see over time is that that Federal dollar commitment-- In this first year, because of past credits, we are going to be able to do a fair number of State projects; more than two-thirds of it will be that. As we go into next year and the year after, you're going to see it shrink down to half -- to one-third will be State projects, because most of the money is going to be going to Federal projects.

So there will start to be-- There is going to continue to be-- It's going to be a very difficult process of trying to sort out how you deal with those remaining funds, how you do that. Part of that is commitment that comes from the local level and their ability to participate, because we do share 75/25 on the local level. We do the best we can in ranking from a priority standpoint and the statewide interest standpoint of where those funds need to go. It's not a very pure science, quite frankly, on how you do that.

ASSEMBLYMAN WOLFE: So it's not like an Arts Council grant where you must apply by June 15 for next year?

MR. HALL: No, it's not traditionally. I have the Green Acres Program under me as well, and in that we have a very vigorous standardized approach as to how we do issue grants. There is a standard issue where you have to apply. There is a standard point system and all of that. With these projects, because of the number and because of the change in seasons, I mean, every year is different. You can't just set one time period and say everybody get them in, because two months later because of a storm event or something else, all that work would be for not. So you have to continually work with the municipalities. You have to continue that dialogue with them, and you have to work them in as soon as you can.

ASSEMBLYMAN WOLFE: With the increased effort, perhaps work such as this Committee-- With the money not coming in for shore protection, how is your staffing? (no response)

MR. HALL: The staffing, Bernie.

MR. MOORE: Pardon?

MR. HALL: The staffing, Bernie? The question was, how was your staffing?

ASSEMBLYMAN WOLFE: The question was, with the increased emphasis now, moneys being available, and concerns such as this particular Commission, how has your office

prepared for these projects? Are you adequately staffed? Are you understaffed, overstaffed? I know you're not overstaffed. You're not going to tell me that. (laughter)

MR. MOORE: We have lost a number of positions over the years because there was no funding, and when people retired those positions were not filled. Right now, we are probably down four engineers. We are down certain inspectors and field crew members, and also right now there are only two people running this entire program. That's John Garafalo, who is the Bureau Chief, and you met the manager and myself. I kind of divide my time toward shore protection and all the other flood control and other projects that I'm involved in.

ASSEMBLYMAN WOLFE: You know, there is nearly a million dollars for administration -- \$800 million for these projects. How can you explain that? How is that?

MR. MOORE: Right. The people that are on the payroll that can pay out of this particular account amounts to about \$700,000.

ASSEMBLYMAN WOLFE: It's \$800,000, not \$800 million.

MR. MOORE: To operate the office, we have budgeted about \$80,000 to \$100,000 for the papers, pencils, and all the other things -- gas and mileage. We only intend to spend it this time -- \$800,000 out of that administrative side. If we can get away with less, we will get away with less. I do not run a lavish office. It is bare bones, always has and always will. But the salaries alone-- There are 21 people on the payroll. We have taken a major hit because of lack of funding. Understand what we saw when the accountant looked at our books and said, "You have no money, and you're not doing any projects out there. Why do you have all these people?"

MR. HALL: I think one of the reasons you'll see a shift, and the reason you see that funding there and not a change necessarily in staffing in his office -- except where we'd like to fill a couple of vacancies -- is the fact that his

office in the past had been funded from the 1983 Shore Protection Bond Fund. Those funds are all but gone, so there had to be a shift. From there, there was \$0.5 million a year, and the balance had been picked up by State funds in the past. As the State appropriation has shrunk, and obviously the bond funds are now gone, we've had to shift those costs over to this fund.

SENATOR CIESLA: Can I just follow up on that just so I understand it correctly? Five hundred thousand dollars a year for your staff of 21 came from the '83 Bond Act--

MR. HALL: Correct.

SENATOR CIESLA: --which ran out in Fiscal '93? So for Fiscal '94, you're taking that \$500,000 out of the \$15 million--

MR. HALL: We are looking to shift that over to here, yes.

SENATOR CIESLA: Okay, there is an additional \$300,000 that was--

MR. HALL: In the past there had been other--

SENATOR CIESLA: --out of the State Treasury?

MR. HALL: Yes, there had been State appropriation costs that were shared from the Aids to Navigation Account and all the others.

SENATOR CIESLA: So it's really two cost shifts that are coming out of this fund, one to make up the \$500,000 and then--

MR. HALL: For funds that no longer exist, correct.

ASSEMBLYMAN GIBSON: Mr. Chairman, I would have some concern about that. As I looked at the list earlier, I rationalized maybe overoptimistically. We have a \$15 million permanent source of funding, hopefully the great majority of which will be actual construction dollars. I like the idea of matching it with Federal because, on a 65/35 split, we are talking perhaps \$50 million a year when we reach that and

above. We certainly need that. Your total here, Mr. Chairman, shows me \$15,972,000. I assume the administrative costs were over and above the \$15 million. Is that so, or is it not so?

MR. MOORE: It's included in that \$15 million. In other words, \$800,000 has been allocated out of that \$15 million towards administrative cost.

ASSEMBLYMAN GIBSON: Mr. Chairman, but the total was \$15.9 million, so we have fortunately somewhere another \$900,000?

ASSEMBLYMAN WOLFE: Right.

MR. HALL: Right, and some of what is on the list is money we anticipate fronting for FEMA, because some of the FEMA reimbursements are expected down the road. So we get reimbursements for some of that.

MR. MOORE: For instance, there is a project in Shark River just up the road here in which the jetty was damaged in the cold months. FEMA awarded us a fund to do that, but let's say that they awarded us \$100,000 to do the job. When we go out to bids, we anticipate the project to cost a lot more than that. When I work and sign a contract, I have to have the total amount of money available to put into the pot so that the contract can be executed.

So I'm up-fronting the cost initially for that project out of the \$15 million I will be reimbursed. It's an accountant's nightmare, but that is the way it works. Then we will get the feed money back into the account, and that would be carried forward along with other State moneys that match the FEMA funds.

ASSEMBLYMAN GIBSON: Thank you.

MR. MOORE: One of the projects that we have is the State/municipal--

ASSEMBLYMAN WOLFE: Excuse me, Bernie, let me interrupt.

Some people have raised their hands during the course of the morning. If you have a question, wait until he's done. Wait until he is done and we will call on you.

MR. MOORE: Under the State/municipal program, we have a project in Old Bridge Township. This was originally one of the projects that was authorized back in the '60s by the Army Corps of Engineers. We built it. It's our responsibility to maintain it, and we have not maintained it over the years. So that is a beach fill project there in Old Bridge Township that should be coming out on the market for advertisement before August -- I mean, before September of this year.

Union Beach has a beach fill project there. Our commitment to the project goes back several years ago, and it is the second phase. They built the first phase with us, which was the bulkhead up in that area that was damaged by the FEMA storm, or the December storm. This will complement the bulkhead and the other amenities up there. Coming down here, of course in Spring Lake and in Belmar, we have the experimental reef project which will be going in. The project is scheduled to start in May. It should be-- All of the sand should be in by the end of May, and the reef itself will begin to be installed somewhere around the first of June.

The other project that we have in Spring Lake is the idea of the concrete. It is a project, again, designed by a New Jersey engineer and tested at Stevens, bound to have some merit. Spring Lake was willing to undertake this project several years ago, and now we are just going to expand it and do a good installation with monitoring and all.

Coming down the line here down in Harvey Cedars on Long Beach Island, this project was originally put in there long before the storm ever hit. We are now looking at that project to expand into North Beach and the Surf City area, so we are working very closely with the municipalities there. That should probably come out in October.

Down in Atlantic City again is the steel bulkhead project. In Sea Isle City, we have two projects, and we are reimbursing the municipality on these projects. One is a beach

fill and one is a groin. The beach fill the City put in last summer, in '92. That project was eligible-- That area was eligible for FEMA funds as a result of the January '92 storm.

The municipality went forward and put in a beach fill the proper size and what have you, and they did that up front, with the idea that if they did get some money, we would eventually reimburse them. So we are going to uphold our agreement with them. The same thing with the groins. The reason why their beaches got so eroded was because of two groins that were missing in the field. They went ahead and did that, and that was just completed this summer. So we are reimbursing and making good on our commitment.

The Sea Isle end and Cape May Point, of course, is the other reef project. That project should also start in late spring, and the reef should be installed starting June 15. Those are all the projects that we have at this time. Some of these projects will slip and slide, and maybe there are some ways of making some adjustments as we go along.

ASSEMBLYMAN WOLFE: I'd like to thank you and just-- I have a question. The number of questions-- Mayor Winterstella raised the issue of the engineered beach, and I am sure the people from Mercer Management will also be talking about that. The criteria for the engineered beach, and from the Federal government or from the State-- Who establishes that criteria?

MR. MOORE: It was established by the Statford Act of the Federal government. It is the act under which FEMA operates, and what it basically does is say that a beach will be established or have a design elevation at the top -- a design slope -- and it will be maintained. By maintaining, they talk about going out yearly or semi-yearly, getting cross sections across, seeing the loss of sand that was on the beach.

If the loss of sand was minor, it could go for one year and the next year see what changes have to be made. If

there is a need to bring sand in to reestablish this cross section that you have established, then you do it. If you have a cycle set up so that you do it every three years, and can prove that you've done it every three years, that's fine, then you are eligible. But the trick is to establish the beach initially, and then show and maintain records that you have done it, and you have maintained the structure and the beach of the designed cross section.

Avalon and Sea Isle City are two cases where the municipalities have done this traditionally. This is another advantage of going with the Army Corps projects. Ocean City -- the beach was in prior to the storm. The storm hit. Yes, we lost some sand. Out of a \$4 million-- Out of a 4 million cubic yard job, we lost about 800,000 cubic yards. This spring we were back in there with the Army Corps of Engineers and the municipality, and we repumped the beach. With the Army Corps, you will get out of FEMA requirements. You will get out from underneath that FEMA umbrella.

ASSEMBLYMAN WOLFE: I just might add: I believe one of our future meetings will be with people from the Corps of Engineers, and also with FEMA, because I think we have received a number of inquiries regarding the criteria for an engineered beach. I think obviously one of the Commission's concerns is that municipalities know what they are, and if there needs to be assistance given to them, then perhaps we can direct them to the right place.

MR. HALL: I think the key to understanding what Bernie is talking about is that aside from having that baseline, what FEMA wants to be able to understand is that there has been an ongoing commitment so that they know when a storm occurs and someone is going to report a loss, that in fact it is a loss, and not something that's naturally occurred over the past several years.

ASSEMBLYMAN WOLFE: Assemblyman.

ASSEMBLYMAN CORODEMUS: Yes. Mr. Moore, all the towns, I am sure, up and down the coast are anxiously awaiting to see these artificial reefs come in, because if they are successful, we want to see that technology implemented throughout the State. Have we learned anything so far in the process for the most current artificial reef projects? For example, Mayor Winterstella has testified earlier that due to a glitch, they didn't buy the sand and they might not get reimbursement from FEMA. Didn't Belmar and Spring Lake have a problem with the funding originally for the artificial reefs? Is there anything that we can learn? I'm sure that has been resolved since then.

MR. HALL: On the artificial reefs, I think you have to understand some of what went on there was how that project was originally sold. Originally, when the project came to the State and was discussed, it was sold as a three-party agreement, that there would be some Federal appropriations for it, a State appropriation, and local participation. This was before the storm, before any discussion of FEMA.

ASSEMBLYMAN CORODEMUS: Right.

MR. HALL: From the Economic Recovery Fund, the Legislature and administration forwarded \$1 million for the State's cost share of that. By happenstance, at that time -- shortly thereafter, the storm occurred and there was the ability to marry up some Federal money from FEMA in the case of Avalon because they were already an eligible beach and had a design engineer. In the case of the others, that hasn't really been determined whether or not it was eligible for that fully. It's expected that it wouldn't be because they weren't designed and engineered beaches. But in addition right now, it's probably going to come out, in part, from the \$15 million to make up the difference. We are going to also get a little bit better participation, I think, from the locals.

The other thing that I think you have to realize on that is that what took place in there-- There was never a commitment from FEMA to fund all of the departments. As hazard mitigation money is available -- because it was going to come from hazard mitigation money available -- from the State policy perspective, even if they were all eligible, I don't know if it would be a smart thing to do. At this point, we are estimating hazard mitigation money is going to be a total of maybe \$1.5 million or \$2 million. To take all of the hazard mitigation money and sink more than half of it into one set of three experimental projects, I don't know if it would be a sound thing to do.

The State is very interested in these projects, and wants to see them in place and see them soundly monitored so we know the benefit of them. We tend to believe, based upon some of the tests from Stevens, that there is a good potential that they can be primarily a benefit for extending beach fill projects -- the life of them -- so that the periodic nourishments perhaps would be in lesser frequency. That would save money over time.

That's what we think the value may occur and we want to see if, in fact, under different scenarios that is likely to be the case. That is why the State is interested in moving the projects forward and finding a way to make the money work. But there was never a commitment from FEMA or anyone else, because there was never any other Federal appropriations to come in. So some of that got lost in the whirl of what was going on there.

ASSEMBLYMAN CORODEMUS: It got confusing after awhile.

MR. HALL: Yes.

ASSEMBLYMAN CORODEMUS: Just one follow-up question, Mr. Chairman.

Mr. Moore, the \$15 million that was already appropriated for Fiscal Year '94, has it been exhausted? Is it likely that Fiscal Year '95 will be exhausted from the backlog

of applications? Do you have any yardstick on this whole thing?

MR. MOORE: Well, we have made a sheet that I think your Committee Aide has provided to you, showing about \$15.6 million -- something like that -- that we have proposed to spend out of \$15 million. Again, there are going to be some slippages there. Yes, we have programed the next \$15 million as we normally do for capital budgeting purposes, and we've expanded that out over the period of the next three years.

ASSEMBLYMAN CORODEMUS: Would you characterize those projects as -- I don't want to use the word remedial, but I'm looking forward towards a more perspective -- affirmative-type programs, to move anticipations of deteriorating features, perhaps--

MR. MOORE: As we get into next year, probably a third of our budget will go towards Army Corps projects, and the other two-thirds will go towards the State/municipal projects. Fiscal '96, probably about two-thirds of that \$15 million will go to Army Corps projects, with one-third going to municipal/State projects.

MR. HALL: Depending upon the timing of Federal projects as we move out and more come on-line. I mean, you can find anywhere from two-thirds to most of the \$15 million going to meet that commitment for the Federal projects. A lot of that is going to depend upon the timing of the Federal appropriations and how Congress moves forward in giving appropriations to the Corps. So that may shift to be less, or I think the greatest amount we will expect will not exceed the \$15 million.

SENATOR CIESLA: Through you, Mr. Chairman, one of the things that I am very concerned about, and while I fully would like to maximize Federal funds, part of my belief in making the \$15 million available is that we would have some ability to put in place projects that we would have some input in, based upon what the people in our district said to us. I am afraid, from

what I am hearing, that we already have one-third of the money -- \$5 million is going to Federal, the next year \$10 million is going to the Federal. I can hear the third year going to the Federal, "Sorry Andy, the seven-year pipeline is already complete." We don't have any money available for our projects because-- Bernie had mentioned before, going back to 1950s the Federal wheels started to churn in order to make these other projects available.

One thing I want to make sure -- and maybe we need to have a direction or a road map or something like that -- is that we don't lose control of the \$15 million simply for chasing Federal funds over which we have no control, because the process began 10 or 15 or 20 years ago.

MR. MOORE: No, I understand where you are coming from, but I think that bulkheads, groins, things like this all are a tool in shore protection. The best shore protection device you can have is a good, wide beach. Generally, we say 100 foot wide, with the appropriate slope. We back that up with a dune system. The groins are a new part of that. Groins, again, are used to spread out the nourishing cycle.

If the Beachsaver reef works, and it has to work in conjunction with a beach fill, by itself, it will not do anything, so its purpose is to spread out the nourishment cycle. If that works -- we think it's got a good possibility of doing that, it has proven that in the tanks -- then that will expand the new renourishment cycle. Now you are talking about big dollars down the road in saving, not only State, but also Federal, because the renourishment cycle instead of being every six years, could be spread out every eight years. You could drop off two or three renourishment cycles over a period of fifty years.

MR. HALL: I understand your concern about where we are going with Federal projects and where that leads us in a path. But I think we have to understand when you are looking

at some of these projects that the State, even with \$15 million, couldn't do a heck of a lot unless we are going to try and get some Federal dollars. You take the Sea Bright/Monmouth Beach-- It's about how many miles of beach?

MR. MOORE: It's about 12 miles of beach.

MR. HALL: About 12 miles of beach. That's a \$100 million project. It's important to us to be able to get those kinds of projects, because they are the ones that are going to afford the most protection. We are doing some of the other State projects. Those are stopgap things in trying to take care of what are very dire situations. It's not really a long-term strategy that's going to preserve the shoreline as effectively as some of the Army Corps projects would with the major beach fills.

ASSEMBLYMAN WOLFE: Jack.

ASSEMBLYMAN GIBSON: I have a couple of follow-up questions on the reef pilot projects. There are three projects proposed. Is there any difference in design in between any of the three?

MR. MOORE: The ones in Belmar and Cape May are sandwiched in between a groin field -- between groins. In the case of the Avalon project, the northerly end of it is sandwiched to a jetty that exists at the head of the street -- the inlet. The southerly end is a submerged end. It is not attached to anything, and that design is very critical because if the end is not designed properly -- that is what the monitoring walls will tell us -- you will have rapid erosion, just as you will have a build up of beach behind the reef. You will have a very rapid erosion of the sand at the tail end of that reef if it is not designed properly. That's the problem with artificial reefs, whether they be submerged or shown above the water, the ends are very critical.

MR. HALL: The three sites were selected so they did represent different kinds of situations.

ASSEMBLYMAN GIBSON: The structure itself is basically the same, but the project site is unique in what we expect to get from that particular kind of location.

MR. HALL: In the case of Avalon, the structure is amended somewhat. They did have to go in and amend the structure where it ends so that it's a step down kind of structure. It tails off. The other ones are located between groins fields, and it's the same cookie cutter put in across. But they did want to see how it reacts in kinds of situations and different kinds of installations.

ASSEMBLYMAN GIBSON: The Avalon site was the first one that we knew we were home free on, and most members of this Committee -- all members of this Committee and probably everybody in the audience is excited about this and very much in favor of all three of these proceeding. We were concerned a little earlier because it looked like we were going to lose out in Cape May Point, which is important in my district, and the one here also is important.

The engineered beach concept, it becomes important on these things too. Avalon was home free because they had an engineered beach. The other two, there was some question. Through efforts of everybody, we salvaged the other two projects. They are going to proceed, and we are glad about that. I just want to raise a question as to the source of the additional State money that took the place of the FEMA money that we had hoped to get -- the source of the additional State money. I would like to be assured that that's not coming out of any other beach projects that we are looking forward to receiving money from.

MR. HALL: No, at this point we are working that in within a schedule that we have here. There was the planned revetment potentially in Spring Lake that this in some part is going to replace, so there may be some cost savings associated with that.

*New Jersey State Library*

ASSEMBLYMAN GIBSON: But Spring Lake will still get their planned revetment?

MR. HALL: At this point, I think we have to see what -- we need to see what the Beachsaver reef does in regards to that. I am not sure that you need both.

ASSEMBLYMAN GIBSON: Is the Governor a source of additional funding that salvaged these projects? Isn't that from EDA, it's not beach projects?

MR. HALL: It's going to be a-- My understanding is it's going to be a combination of some will probably have to come from the \$15 million, and there may be some that comes from a contingency fund or someplace else.

ASSEMBLYMAN GIBSON: Mr. Chairman, would you get that formally one way or another so we can have some-- Thank you, Mr. Chairman.

ASSEMBLYMAN WOLFE: Okay. Thank you.

Mr. Moore, Mr. Hall.

At this time, I--

Do you have a question?

SENATOR CIESLA: Yes, I would like to formally ask the Department for determination on the Spring Lake revetment. It's my understanding that project was to go forward. It was to be funded. It wasn't to be replaced by the moneys that were made available for the Federal share. My recollection -- and I could be wrong -- was that the money to replace the Federal share was to come out of an emergency fund maintained by the Department of Law and Public Safety. In fact, I think that is what was contained in the Governor's press release.

ASSEMBLYMAN WOLFE: The press release, that's right.

SENATOR CIESLA: It was not to come out of the \$15 million projects that were already in place. It's experimental technology. It's designed to work, as you've indicated, to extend beach nourishment projects. It's not designed to replace an existing condition that we've identified as being

troublesome. So I would ask the Department, through the Chair, to respectfully find that out. It's of extreme concern to me.

MR. HALL: Okay.

ASSEMBLYMAN WOLFE: Thank you.

At this time, we are going to take a very brief five-minute break. It's my hope that we can conclude our entire hearing by noon if we can. Some people have raised their hand. If you have a question, please, there is a form up here next to Mr. Hall, at least there was one. We'll get you one. Just fill it out and we will call on you as soon as we get done.

Thank you. We will convene in five minutes.

(RECESS)

**AFTER RECESS:**

ASSEMBLYMAN WOLFE: Okay, I would like to call on Captain James Momm of the New Jersey State Police, Office of Emergency Management.

Captain, thanks for coming. I appreciate you being here.

**CAPTAIN JAMES MOMM:** Thank you, Mr. Chairman. Thank you, Commission. Basically, we have been invited to explain the Emergency Management Process -- I am from the New Jersey State Office of Emergency Management -- and how the various disasters have affected funding and the different programs that are before this Commission.

When we receive a presidential declaration, the Office of Emergency Management Services and the coordinating agencies for all the other departments are brought to bear to cope with that disaster. On the public assistance sector on that side of the house, there are funds that are made available to the amount of 75 percent Federal and 25 percent either State or

local. In the case of the most recent disaster, the State opted to pick up 25 percent in its entirety. In other disasters, that has not always been the case.

A portion of the public assistance funds are available for mitigation programs, and as it's been discussed earlier on and very appropriately detailed by Mr. Hall and Mr. Moore from the DEPE, one of those considerations was the artificial reef program -- the reef savers, I believe we call them. There is a committee that was put together composed of various representatives from different State departments within New Jersey to look at all applications that were solicited from the local, county, and State agencies within government in the State for the \$1.5 to \$2 million. The bottom-line number is not known yet because all of the DSR -- Disaster Survey Reports -- haven't gone through FEMA, and the funding has not been totally approved for the program. So we will not actually know what the overall funds are that are available until that is done.

The Hazard Mitigation Committee was put together, and they ranked all of the programs that were submitted by the various government agencies within the State. Based on the funds and the amount of funds that could be dedicated, in an effort to spread out and affect the largest cross section of the population, a program was put together which included funding for the artificial reef in Avalon, and did not include funds for the other artificial reef programs which subsequent to that were picked up by other sources.

That's basically where the Office of Emergency Management is at this point, sir.

ASSEMBLYMAN WOLFE: Does anybody have any--  
Assemblyman.

ASSEMBLYMAN CORODEMUS: I ask the same question when I go to each local Emergency Management Coordinator. After the December 1992 storm, I was hoping that and perhaps your office would be the focal point of the study to take all the

collective experiences of everybody up and down the coast and prepare some type of a disaster manual for the future. God forbid we have another large storm like that. Is anything like that being done?

CAPTAIN MOMM: We have a number of disaster manuals, pamphlets, and training courses that are available through the Office of Emergency Management, and in order to be a Coordinator or to fully qualify under the law, it is required that most of the local people -- I shouldn't say most -- that a local and/or county, depending on what level they're at, meet certain training requirements. But, yes, there are manuals available. There are training courses available, and any requests for that type of assistance -- if you are referring to our office at headquarters, the number is (609) 538-6051. We would be more than glad to assist the individual, depending on the type of assistance that he is looking for.

ASSEMBLYMAN CORODEMUS: Well, let me ask you this, maybe I didn't make myself clear: After the December 1992 storm-- I live up in Atlantic Highlands, and I toured the flooded areas of Highlands and Sea Bright the day of the storm. Certain things became apparent to the emergency management people in the localities there, for example, what type of large vehicle had to be mobilized, where they should be in anticipation of a large storm, certain types of communication failures, certain police departments don't have generators to recharge their walkie-talkies, then they can't speak to one another when the power is down.

All these types of things I think-- I'd hate to see that whole experience be put behind us, and not be preserved and collectively worked on throughout the State so that if we have another 100-year storm -- I hope it's a 500-year storm -- that we know a little better and be a little better prepared, preserve more property, and hopefully, have no loss of life.

CAPTAIN MOMM: Approximately two or three months ago -- in fact, it was a short time after the December storm, we hosted a meeting up in Edison for County Coordinators. One of the topics of discussion was that very topic that you're talking about, Assemblyman -- was to discuss some of those very issues, and they were discussed at that meeting. To get into the specifics as far as what is needed at the local level, or what should be available, this is all part of the Emergency Management Planning Process. We have people that sit down and review those plans at headquarters. Should there be specific concerns at the local level that are shared across the board by other Coordinators, those are things that should be presented at the county level first.

That's the general design of emergency management in this State. It goes from the local, to the county, and then to the State. We also have at the State level a surplus property function. That's available where some of those things such as generators are available from Government surplus sources that can be provided if the local municipalities identify them. But as far as -- to get back directly to your specific question that was done a short time after the December storm, we got all of the County Coordinators to discuss those specific areas, along with other areas. We routinely do that on a regular basis, both on a regional, north, central, and south basis, as well as a statewide basis.

ASSEMBLYMAN GIBSON: Mr. Chairman, as storm cleanup and restoration work proceeds, sometimes you discover things that you didn't know right after the storm, some things are buried and you don't see the extent of the damage. How long is the application book open after the December storm? Is it still open?

CAPTAIN MOMM: No, the cutoff is set by Federal regulations. As Mr. Moore or Mr. Hall stated, the regulations are set by the Statford Act, which is a Federal law. FEMA sets

-- I shouldn't say FEMA -- that sets the tenor of the way FEMA must react and all cutoffs, basically at this point have been passed. We've cut off all of the dates for submission.

ASSEMBLYMAN GIBSON: And when was that?

CAPTAIN MOMM: There was a 30-day extension. It was approximately two or three months ago. I don't know the exact time, but generally like a 60-day--

ASSEMBLYMAN GIBSON: Do you have a feel or a total figure that you can share with us of what the total damage was New Jersey-wise?

CAPTAIN MOMM: On the public sector side?

ASSEMBLYMAN GIBSON: Yes, on the December side.

CAPTAIN MOMM: Both the State and Federal portion combined will come in somewhere around \$40 million. That's the projection right now.

ASSEMBLYMAN GIBSON: From that single storm?

CAPTAIN MOMM: From that single storm. That's on the public sector--

ASSEMBLYMAN GIBSON: And private is in addition to that.

CAPTAIN MOMM: That's correct.

ASSEMBLYMAN GIBSON: Thank you, Mr. Chairman.

ASSEMBLYMAN WOLFE: Thank you. I'd like to ask a couple of things. First of all, one of the suggestions after the storm was that a plan be developed to pick up the debris. Such storms in the future-- Has such a plan been developed?

CAPTAIN MOMM: I'm not totally sure if I am -- realize what the question is here.

ASSEMBLYMAN WOLFE: After the storm, apparently one of the reports that came out as a follow-up to the storm recommended that a procedure be developed for the collection of debris following future storms. Has that been forthcoming?

CAPTAIN MOMM: That, again, is part of, and should be part of -- debris pick up and removal should be part of the local plan, and it should be included as part of the Emergency Management Plan. Now, in all honesty, I know that certain municipalities don't have -- either don't have a plan, or don't have an up-to-date plan, but that is one of the things that should be included in that plan. There are sources whereof assistance-- Should ability of the local municipality be exceeded, either the county or in some cases the State level-- I don't know of any request during the December storm where local debris removal became an overburdensome problem for local jurisdictions. Where to put it eventually created some problems with landfill and such, but--

ASSEMBLYMAN WOLFE: Are you aware of how many hazard mitigation claims have been filed offhand?

CAPTAIN MOMM: Not off the top of my head. But I know that there were more claims -- a significant number of claims in excess of the number for the amount of funds that were available to be expended. I can say that for sure. I've reviewed it, and those that qualified far exceeded the funds that were available or projected to be available.

ASSEMBLYMAN WOLFE: Thank you.

Does anybody else have any questions? (no response)

CAPTAIN MOMM: Thank you, sir.

ASSEMBLYMAN WOLFE: Thank you very much.

At this time, I would like to ask Mr. Kenneth Smith, Coastal Advocate.

**K E N N E T H J. S M I T H:** Good morning, Mr. Chairman, and Commission members, that sounds great. I am glad that we reconstituted the Commission. I've brought with me today one of the greatest supporters of wide, healthy beaches, my daughter, Kelly. So on her behalf and kids everywhere, I'll speak to you.

Thank you very much for the opportunity to testify at today's hearing. Before I get into my testimony, I just want to respond very quickly to what Mayor Winterstella had questioned regarding the FEMA requirements. I think that it is absolutely critical for local communities to understand just what those requirements are. They have been around for a while. There was an attempt to change them or modify them that Jim Saxton made last year, and it went nowhere. My personal opinion is that FEMA is not real enthused about paying for sand loss. They will pay for it under public assistance under the Statford Act, but there is pretty cut-and-dry criteria.

I think attached to the package that I gave you is a copy of our newsletter from February of last year which will delineate pretty clearly just what those criteria are. FEMA can get into it in even more depth, and should for you one day.

The remark about beach scraping and bulldozing sand up from the shoreface, that is not considered an eligible activity by FEMA. They are talking about nourishment, either from offshore or from an outside source to qualify a project, and they are looking for a professionally designed and engineered beach. There are a number of profiles that if any -- well, you might slide by with one missing, but if there are a couple of them, then it just will not qualify.

The other question was brought up by-- I forget who mentioned it about navigation projects, and putting the sand on beaches, the Water Resources Development Act of 1986, and Section "933" being adopted. It used to be that when you -- when the Corps dredged an inlet for maintenance dredging, they were required, and still are, to dispose of that dredge material in the least costly fashion; very often that material was then lost from the system.

If the community or region wanted that sand put in their beaches, they were required to pay 100 percent of what is known as the delta cost -- the extra cost. Section 933 allows

the Federal government to pay 50 percent of that delta cost. The New York District has done several of these, and both New York and Philadelphia are familiar with that process. That might make some extra funds available.

Well, I am testifying today for my constituents at Coastal Advocate, Inc., which includes 10 coastal municipalities and over 400 businesses, property owner, associations, and residents of the Jersey shore. I am also representing the New Jersey Alliance for Action and the American Shore and Beach Preservation Association. There are some good reasons for that that have to do with the importance of maintaining our beaches.

The Alliance for Action is, I am sure, familiar to you as a group that has been very successful in securing Federal funding for civil works projects in New Jersey. Through their actions, we have received virtually every appropriation -- Federal appropriation for flood control, dredging, shore protection that we requested from the Federal government over the last several years.

As a very important member of the New Jersey Maritime Advisory Counsel, this group goes to Washington every year and secures those dollars. We've been very successful with that. If you haven't seen it, this is the State of New Jersey FY '94 Civil Works Appropriations Request, and all the projects are in here, from channel dredging to shore protection. New Jersey has really just come on board with this as a sponsor of this -- a full sponsor in the last several years. When we are competing for Federal dollars, other states bring the governor and everybody, you know, right on in. We have the approval of the Governor's Office when we go down there, so we have been successful in that.

The American Shore and Beach Preservation Association, of which I am a Vice President, really is the premier voice of coastal professionals in this country. Within our memberships

are over 1000 of very best coastal engineers, geologist, and coastal planners in the world. I mentioned them to make you aware of the talent that is available to be directed to New Jersey's beach erosion problems.

In my capacity with that organization, I met with the Corps of Engineers' Coastal Engineering Research Board in June at their meeting in Atlantic City, and one of the things that we are working on is an economic study of the benefits of beach restoration. We have subjective thoughts from Ocean City, from merchants there, but we really need to quantify what the benefits are. We need to quantify not only the direct beach related benefits in local areas, but what the benefits are to the ancillary businesses throughout the State, and really the nation, that manufacture goods that are sold at the shore. We are working on that with some college from Florida and hope to have that funded in both states.

The American Shore and Beach Preservation Association was founded in New Jersey in 1926 by a fellow named Dean O'Brien. Morrrough O'Brien was the Dean of Coastal Engineering at the University of California and was really the father of coastal engineering in this country. Our organization was instrumental in creating the Beach Erosion Board, which later became the Coastal Engineering Research Center of the Corps, and we have been involved in coastal issues since.

We put out a quarterly journal, "Shore and Beach", which is a review journal for coastal issues, geology, geomorphology, and coastal engineering. This is an issue that did focusing on the New Jersey shore at a conference that we held in Atlantic City about three years ago on beach nourishment.

So I mention all of this so that you understand that this is not just a local-- I am sure you do understand this. The preservation of New Jersey's beaches has national implications, economic implications, as it does regional and State.

The reconvening of this Commission is indicative of the new legislative focus on coastal erosion, and it is a focus that it is certainly warranted and overdue. In some ways the last two year's storms have had an unexpected benefit for the coast, in that they served to expunge the neglect of the past as we begin to concentrate on practical and affordable ways to protect our coast.

At this meeting, a long discourse is not necessary on every reach of coast. I think Bernie and Jim Hall addressed that adequately, so today I just want to discuss one issue with you generally; and that is, the long-term planning and funding of a professional and adequate management program for our shoreline.

Some of the post-storm discussion-- A retreat strategy was suggested which might be applicable to certain coastal areas where either the erosion rate was too critical to defend, or where an economically justified benefit/cost ratio could not be realized. I know there are a few areas that exist like that. I think we'd be hard-pressed to find very many of them at the Jersey shore. Most of the shore shouldn't have any trouble economically justifying shore protection/beach restoration projects. We are about to go through a process of revising the shore protection master plan.

My personal feeling on that is that I hope that it doesn't consume too much time, energy, and money -- we don't go back and reinvent the wheel. That plan was almost outdated the day it was released. There is some good information in there, but what we really need to focus on is working closely with the Corps of Engineers towards "federalizing" our coast over the next decade. The Federal match that comes with that, which averages 65 percent, really makes shore protection doable. I can't emphasize it enough that we need to stay with that program.

Almost the entire Jersey shore is either under review, study, or coming to bid. Cape May is getting ready to renourish their beach through a Corps project. We know the process is long and it's comprehensive. It's frustrating sometimes. Communities say, "My God, why do we have to study it again?" But it's the process, and there are many agencies -- entities that have to comment on these plans.

In addition to the coastal processes, the studies review the economic benefits relative to storm protection, and most importantly, they assess the level of local support and the non-Federal funding commitment to the project. I can't stress enough the importance of local support. The Corps does not initiate projects on its own. The Corps responds to an expressed need. A cohesive partnership of all levels of government focused solely on the goal of maintaining our beaches will be essential to the success of our efforts in future years.

The passage of the Stable Shore Protection Fund last year was a significant step forward, and the \$15 million annual appropriation might -- with a big question mark -- be adequate to meet our needs assuming no unusual storms. But you and I know that storms are going to come certainly but unpredictably, and we are going to be forced to respond to an emergency situation with State funding. To the extent practical, we should fund that risk prospectively instead of scrambling for dollars in the poststorm context. What is a reasonable amount for a reserved fund for storm response? Well, I would suggest \$5 million a year for starters.

In addition to meeting the Federal cost-sharing requirement, which by Fiscal Year '97 will approach 100 percent of the \$15 million fund, we need to fund State projects. The recommendation that I would make, and that the Alliance is making in its gubernatorial white paper that they've prepared, is an increase incrementally of \$5 million a year for the next

three fiscal years, up to \$20 million, \$25 million, \$30 million. Let's take a look around, but we have to understand that the money is not all for ocean beaches. There are back-bay areas. There are requirements for sand replenishment, bulkhead construction in those areas. There are stabilized areas with seawalls, rock revetments that required maintenance and restoration -- a lot of work and a dramatic increase in the Federal level of activity.

We can, through Bernie Moore's office in the core districts, provide the Commission with projections of future funding needs. I would basically think that would be some of the first information that you would want. Once you'd have that information, I would hope that you are going to convene future workshops and maybe some specific workshops, something with the Corps. Bring them in so that we understand that process, so that we can define specific objectives, and so that we can work toward accomplishing them in a timely fashion.

My sense is that New Jersey is finally ready to get serious about protecting our beaches, which in turn protect our multibillion dollar coastal tourism industry. The multiplier effects of that beach related industry are realized in job and revenue benefits throughout our State. So don't let anyone tell you that beach restoration is only a subsidy for property owners. It is much more than that. Indeed, it is an investment in the economic future of New Jersey. The local, statewide, and national interests I represent here today are more than willing to roll up their sleeves and go to work with you for our beaches.

I thank you again for allowing me to speak to the Commission and for your commitment to the coast.

I have one more thing that I'm just going to show you. I just got this and I can prepare some copies for you. I was in Washington Monday to meet with the Natural Disaster Coalition. As you may know, we have an insurance problem here

at the coast that has to do with coasts nationally. It has to do mainly with wind storms, but there is also the Flood Insurance Program that is severely stressed.

There is legislation that has been introduced which would fund a reinsurance fund in the U.S. Treasury through insurance industry dollars that would act as excess and would be sufficient to bring the primary carriers, the reinsurance carriers -- and also State pools and residual markets could buy into this. Basically, the long and short of this is we bring stability back to the market in New Jersey so that we can transfer a property, so that we can move with -- we can facilitate business at the coast.

One of the things they've prepared are charts which are based on hurricanes striking the North Jersey/New York City area. Several scenarios, I won't get into them in-depth, but basically they say that we are at risk. We all know that. This is an attempt to quantify just what the hundreds of millions or the billions of dollars in property damage could be and where.

A trick question for you: When's the last time a hurricane made landfall in the Jersey coast this century? It didn't. We haven't had one make landfall since the 1800s. They don't have to. All they have to do is graze us. Look, you can't design completely for every Andrew, but there is nothing like a wide beach and a wide dune. We've said that over and over. That will give us protection against most of the elements out there.

Thank you very much.

ASSEMBLYMAN WOLFE: Any questions? (no response)  
Again, thank you. That was very thorough and I liked your approach to the big picture, which is really what we are looking towards.

Mr. Ed McCrohan, please.

**E D W I N B. M c C R O H A N:** My name is Ed McCrohan. I'm from Point Pleasant Beach, and although I am a member of Ken's organization, as well as the American Littoral Society, which is not represented here today, I would like to give you a little bit of perspective on the situation from the point of view of Point Pleasant Beach.

As I am sure you are aware, Point Pleasant Beach is on the southern end of the Manasquan Inlet. The northern part of Point Pleasant Beach, the sand has built up over the past 50 years as a result of the Corps of Engineers' jetties. That sand, of course, has been accumulated at the commercial beaches at the expense of the poor folks in Manasquan who have lost the sand.

By the same token, at the southern end of town, we are subject to increased erosion due to the construction of groins in Bay Head. I as an individual would be involved in litigation if the State or the Corps of Engineers started to extend the groins in Bay Head, because I would consider them to be a public nuisance or a private nuisance, depending on how you looked at it.

Also, Point Pleasant Beach is different than most of the shore towns in that we have a beach that is both owned by the municipality at the southern end of town in the area of the condominium hotel, which the contracts have been let to demolish, and in the area my wife and I live the beach is privately owned. It was purchased to prevent development of the beach about 50 years ago.

At the north end of town where there is still a boardwalk, most of the beach is commercial. We still have some construction and reconstruction to the east of the boardwalk. To the western side of the area in which I live is a chain of lakes -- I live right opposite the Lake Of The Lilies -- geologically those are the northern extensions of Barnegat

Bay. We are originally the low area that was considered to be the appropriate place to dredge to Point Pleasant, or the Manasquan to Barnegat Canal back about 1910 or 1920.

With regards to the December 11th storm and the March 13th storm, one of the things that was so startling to my wife and I -- and this was the first major storm that we stayed at the shore -- was how bad the weather reports were. We were being told as late as 10:00 or 11:00 at night, when we began to lose power, that the storm was no more severe than the previous October's storm. In the previous October's storm, we made some provisions for bringing stuff off the beach and putting up storm windows. There was absolutely no damage whatsoever.

By the time we lost power at 1:00 or 2:00 and the wind was clearly up to the order of 70 miles an hour and the house was beginning to shake, we knew that the weather forecast had been blown. But it wasn't until after normal high tide at about 8:30 to 9:00 in the morning that we began to get wave wash over the dune. Our dunes are about 20 feet high and the beach right now is about 150 feet wide. In front of my house, there is about 150 feet of sand dune, although admittedly, I had to pay to restore it myself.

I am particularly concerned about the relationship of beach restoration to some of the other Federal programs, such as FEMA and the National Flood Insurance Program. We in Point Pleasant Beach have learned a lot of things about the Flood Insurance Program that aren't all together favorable, some of which have appeared in some of Ken's newsletters from time to time.

For example, Point Pleasant Beach is a fully participating member of the National Flood Insurance Program. We found in Point Pleasant Beach a couple of cases where people got FEMA disaster relief despite the fact that they had not paid for their Federal flood insurance. Part of the deal that was cut in Congress when the Flood Insurance Program was

established in 1968 was that if a town was a participant -- and they had to notify you on your tax bill, this is part of New Jersey administrative -- New Jersey statutes -- then you are eligible to buy flood insurance federally subsidize. If you fail to avail yourself of that, you are waiving FEMA disaster relief to the extent where your loss could have been insured.

Now, Ken's information that's been distributed to members shows that in New Jersey something like 25 percent of the people eligible have it. That doesn't address the issue of whether or not they have the most that they could buy. Out in the Midwest where the Clinton Administration is throwing all sorts of money, only 7 percent in some of those states pay for it.

Now, what should you be paying for Federal flood insurance? Well, interestingly enough, I collected the Federal insurance rating map for Monmouth Beach for Derrick Bennett last -- after the storm in December. It turns out that the flood insurance rates in Monmouth Beach are based upon the assumption that the seawall holds. Presumably, also the flood insurance rates in Iowa were based on the assumption that the dikes or levees held. That's not really very sensible. If you are in an area where the dike could go, you should be paying the rates and you should be building your house at elevations still to minimize damage. So there needs to be a relationship between the Federal flood insurance rating system and FEMA disaster relief with what we are planning in the State.

The Mayor of Mantoloking is justly proud of the efforts of the citizens of Mantoloking in beach restoration. One of the problems we had that you need to be aware of and he didn't raise was, when they responded quickly and did dune restoration after the December 11th storm-- At a point were we couldn't get the Borough of Point Pleasant Beach to do anything, it took two months to get the Borough Engineer to walk the beach. They got in a bad political squabble about who pays.

Now, I own beach. I own an oceanfront house, and I own a house that is inland from that. I don't believe that all of my cost of dune restoration that I paid was -- should be borne just by me. Fortunately, part of it's tax deductible. I think that the people inland who get less flood due to having a sand dune should help to pay, and by the same token, the people in Mantoloking, if they maintain their dune, the people on the western side of Barnegat Bay will benefit.

So you can't say all those rich, oceanfront property owners should pay all the cost. There has to be some equity in the allocation of that cost, and it does have to recognize that in New Jersey we have commercially-owned private beaches like Jenkinson's. We own private-owned beaches like mine. Some of our neighbors claim they own and still have riparian a thousand feet out in the ocean. But we had to buy that beach to keep it from being developed with cabanas, like up northern-most Ocean County -- Monmouth County. So our rights -- property rights and the fact that we've paid taxes for many, many years -- big taxes -- must be respected. Then, of course, is the area down at the southern area of town, our municipal beach, which was given to the town. That's subject to erosion if the groins are extended out in Bay Head.

One of the concerns that I have is that during -- on the afternoon of the December 11th storm, I was out beginning to restore my dune. I had extra sand fences up within 24 hours of the high tide because I was worried that there was going to be another high tide. Usually a northeaster is six high tides, not just one. My dune's walkway to get over the crest of the dune was probably the eastern-most structure on December 11 in the Borough of Point Pleasant Beach, or at least the southern part.

We did not have a mechanism through the town to get a bulldozer out to my north, where the dune had been breached as a result of that neighbor not maintaining beach grass and

having actually bulldozed the dune 12 years ago just before it became illegal to do it. His house was seriously damaged. My damage mostly came from water coming back from Ocean Avenue as a result of the wave going through his yard.

So we do need quick emergency response between high tides in a northeaster kind of situation. During a hurricane it's not a problem, but during a northeaster we have to be able to get bulldozers out and do spot repair to the dune system between high tides. That should be part of the Emergency Management Plan.

We found that the Federal Flood Insurance Program would not pay for any dune restoration to protect the house from the next monthly high tide. Of course, the reason we spent a lot of time and money was we knew that northeaster in December -- there was a good chance there might be another one in February or March, and lo and behold, there was in March. But the interesting thing about the March 13th storm in Point Pleasant Beach was we had gotten the Borough Engineer and the Borough Council to allocate money finally to create a dune's reference line such as they already had in Mantoloking.

The aerial surveys were done on March 11, before the March 13th storm. I lost about another 50 feet of sand again on March 13, and I had the bulldozer come back and push most of it back. As far as the new CAFRA and CADRA requirements, I am probably better off than anybody else because my photographs were taken before the March 13th northeaster.

One of the things that I have run into in talking to the Assistant to the Director of the Federal Insurance Program, and talking to Senator Chris Smith (sic) and his office, is that I think there is a problem with our New Jersey congressional delegation not really going to bat for us. I think it's a fact that we only have two Senators, and some states out in the Midwest have two. I think that unless the public and the press light the fire under a congressional delegation, we are going to take the short end.

I think you saw the money going into the Midwest, and I don't think we would have gotten that kind of money because we are just New Jersey. Now, maybe if it was New Jersey, New York and Delaware combined, maybe we would of gotten a little attention. But I think-- Who gets FEMA disaster relief? I think it's political as well as legal, and I think that we need to get better support from our congressional delegation.

Do you have any questions?

ASSEMBLYMAN GIBSON: Mr. Chairman.

That was a very good presentation. You just did that off the top of your head with your notes, and there was no prepared statement. Will we get some kind of a transcription of-- Okay, I would ask for that, because I'd like to refer with what you had to say again.

Thank you very much, Mr. Chairman.

ASSEMBLYMAN WOLFE: I was interested in your between the tide comments. It was very good.

MR. McCROHAN: We lost about 150 feet of sand dune that included sand fences and a lot of beach grass that went down 5 and 6 feet. It was very unusual for a northeaster to get that much erosion on one tide, and we were terrified that we would lose two houses. So everyone was out there.

We happen to have a neighbor that is about 300 to 400 feet further south, who is a landscaper. He was out with his bulldozer pushing up sand in front of his house between tides. He also feels a little bit bad about it because his house was one of the last houses to be built in our town where it wasn't put on pilings. He built his new house just before we started enforcing our coastal high-hazard requirements.

Now he and his wife are talking about remodeling a house on the river, moving to that, and selling the one on the ocean. That is because he didn't put in pilings. Certainly one of the things I found was that if my oceanfront house went out, the Federal Flood Insurance Program does not include any

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of the coverage that's required to do the engineering studies and to put a new house on pilings. You don't get the money to put in the pilings or bring electric wiring up to code.

Now, our oceanfront house is rented, and therefore we can only insure it for its replacement value, which is \$40,000. It would cost us \$35,000 to \$40,000 to tear away the debris, to do the engineering, and to put in new pilings on which to build a new house. That may influence whether my wife and I move into the oceanfront house legally so we can get replacement value Federal flood insurance on it. We can then get \$180,000 worth of insurance if we live in it. We can live in it six months or eight months a year, although I personally do not like the thought of living on the oceanfront during January and February. It's not a very pleasant place. It's much nicer to be on the river or facing west.

But this storm could have been much worse on December 11 if the second high tide had really had any wind energy behind it. The wind speeds got up to about 90 miles an hour on March 13. We had very severe sand abrasion of the structures as a result, partially, of having pushed up coarse sand from the low beach between the storms. One neighbor had \$3000 worth of plate glass windows that were abraded that he had--

The weather reports weren't sufficiently bad that people went out there and put up hurricane shutters, so it was partly a result of not being totally prepared. The weather reports were bad, but we do need-- Well, we couldn't get out-- I could have gotten out of our house for three days with a four-wheel drive pickup truck they have. My son had new tires on it, and I didn't want to drive it through all the debris, including nails and whatnot.

Ocean Avenue in Point Pleasant Beach is an emergency evacuation route. It's a county highway there. I took pictures of the debris from a structure that disintegrated east of the boardwalk, or the dune's reference line, and drifted

into an intersection there of two county roads. That blocked the whole southern end of Point Pleasant Beach. The southern end was severely flooded. It wouldn't have been except that the county pumping station between Bay Head and Point Pleasant Beach -- if it had worked as it was suppose to, there probably wouldn't have been severe flooding. It was amazing. There was one house in our area that suffered about \$125,000 worth of damage. The one that was written up in the New York Times. It was right next to Bradshaw's Beach, which came apart -- the pavilion.

The point I am getting at is, if you'd look at the debris in our town, you'd see an awful lot of it was rugs and whatnow from people that were inland, because the waves came over or broke through the dunes and got inland. Many of those places, I will bet you, had finished basements or low places in their houses below the base flood elevation. Water never got anywhere near the hundred-year flood elevation.

It was a lot of wind energy and a lot of the erosion of the dunes, but it was not more than a 20- or 30-year storm. We can expect another one like that in the next couple of years because statistically the storms on the Jersey shore come over a 5- to 10-year period. You get most of them, and then for 20 to 30 years you don't have many problems. So we could expect a nice hurricane on the full moon in September.

ASSEMBLYMAN WOLFE: Thank you for the--

Anyone else wish to speak? (no response)

Okay, I'd like to thank--

ASSEMBLYMAN GIBSON: There is a gentleman.

ASSEMBLYMAN WOLFE: Pardon?

Yes, we know Mr. Furlong.

**R O B E R T J. F U R L O N G, S R.:** I am a Director of the Jersey Shore Partnership, and as you know, we've tried to do what we could to foster and prosper the various things that you fellows are doing. The \$15 million project -- \$15 million

fund -- we've worked very hard on that. We are thinking-- We've suggested a few things like coastal commissions. This particular entity makes a lot of sense, and I think you have to give a lot of thought as to where you want to go, because I think the road is wide open.

But most importantly, I think the job of this Committee is to make other legislators in the State totally aware of the economic importance of the Jersey shore in the entire economy of New Jersey. We are talking jobs; we are talking tax money, all kinds of things. What I fear is the impression -- since all of you are shore legislators -- the impression that will be given is a totally parochial type of operation. It's a circling the wagon mentality, which is terribly dangerous.

I think this entire State must realize that this has become probably the single most important industry. Because it doesn't put kids in school; it doesn't do a lot of things, and I worry that that is overlooked often. They think of rich landowners. They think of all these different things. It doesn't make sense at all. What you are doing is protecting the entire State of New Jersey, not the Jersey shore.

Thank you.

ASSEMBLYMAN WOLFE: Thank you, Bob.

I'd like to thank all of you for coming, and also for the family members for being here. I think you can see that our task is a very exciting one, and I look forward to your participation in the future. I would also like to thank Mr. Moore, Mr. Hall, and Captain Momm.

Thank you for coming. We will be adjourned, thank you.

**(HEARING CONCLUDED)**

APPENDIX



TESTIMONY  
OF  
KENNETH J. SMITH, PRESIDENT  
COASTAL ADVOCATE, INC.  
P.O. BOX 475  
SHIP BOTTOM, NEW JERSEY 08008  
609-361-0550  
BEFORE THE  
STATE BEACH EROSION COMMISSION

AUGUST 25, 1993  
SPRING LAKE, NEW JERSEY

Mr. Chairman and Members of the Commission:

Thank you for the opportunity to testify at today's hearing. I am speaking today for my constituents, which include ten coastal municipalities, and over four hundred businesses, property owner associations and residents of the Jersey shore. I am also representing the New Jersey Alliance for Action and the American Shore and Beach Preservation Association.

The Alliance for Action is, I'm sure, familiar to you as a group that has been very successful in securing Federal funding for civil works projects in New Jersey. Through their actions we have received virtually

every appropriation for flood control, dredging, and shore protection that we have requested from the Federal government over the last several years.

The American Shore and Beach Preservation Association, of which I am a vice president, is the premier voice of coastal professionals in this country. Within our membership are over 1,000 of the very best coastal engineers, geologists and coastal planners in the world, and I mention them to make you aware of the talent that is available to be directed to New Jersey's beach erosion problems.

The reconvening of this committee is indicative of the new legislative focus on coastal erosion, a focus that is certainly warranted and long overdue. In some ways the last two years' storms have had an unexpected benefit for the coast, in that they served to expunge the neglect of the past, as we began to concentrate on practical and affordable ways to protect our coast.

At this meeting of the commission I think a long discourse on each and every reach of coast, beyond what has been provided by other speakers, would not be appropriate. I prefer today to address one issue: the long term planning and funding of a professional and adequate management program for our 127 miles of shoreline.

In some of the post-storm discussions a retreat strategy was suggested which might be applicable to certain coastal areas where either the erosion rate was just too critical to defend, or where an economically justified benefit/cost ratio could not be realized. While I know those areas exist, one would be hard pressed to find many of them at the Jersey shore. Most of the shore should have no trouble justifying shore protection and beach restoration projects, and I would hope that, instead of reinventing the

wheel through an analysis of our Shore Protection Master Plan, we would work closely with the Corps of Engineers toward "Federalizing" our coast over the next decade, a goal that would result in our obtaining the matching Federal dollars which help make beach restoration affordable.

Almost the entire New Jersey shore is either under review and study, or coming to bid, or (as in Cape May) getting ready to renourish their beach through Corps activities. The process of review is long and comprehensive. Sometimes it seems frustrating, until you realize how many agencies and entities must examine the plans and comment on them. In addition to coastal processes the studies review the economic benefits relative to storm protection, and most importantly, they assess the level of local support, and the non-Federal funding commitment to the project.

I cannot stress enough the importance of local support. The Corps responds to an expressed need: it does not generate work on its own. A cohesive partnership of all levels of government, focused solely on the goal of maintaining our beaches, will be essential to the success of our efforts in future years.

The passage of the stable shore protection fund last year was a significant step forward, and the \$15 million annual appropriation might be adequate to meet our needs, assuming no unusual storms. But you and I know that storms will come, certainly but unpredictably, and we will be forced to respond to emergency situations with State funding. To the extent practicable, we should fund that risk, prospectively, instead of scrambling for dollars in a post-storm context. What is a reasonable amount for such a reserve fund? Perhaps \$5 million per year.

In addition to meeting the Federal cost sharing requirements, which by FY 97 will approach 100% of the \$15 million fund, we need to fund State

projects. We must also understand that the money is not all for ocean beaches. There are smaller back bay areas, with requirements for sand replenishment and bulkhead construction, and stabilized areas with seawalls or rock revetments requiring maintenance and restoration.

We can, through Bernie Moore's office and the New York and Philadelphia Corps Districts, provide the Commission with projections of future funding needs, and I would think that is the first information you would want. Once that information is provided, the Commission should convene future workshops, to define our specific objectives, and to determine how to accomplish them in a timely fashion.

Our sense is that New Jersey is finally ready to get serious about protecting our beaches, which in turn protect our multi-billion dollar coastal tourism industry. The multiplier effects of that beach related industry are realized in job and revenue benefits throughout our state, so don't let anyone tell you that beach restoration is only a subsidy for property owners. It is much more than that: indeed it is an investment in the economic future of New Jersey, and the local, statewide and national interests I represent here today are more than willing to roll up our sleeves and go to work with you for our beaches.

Thank you again for allowing me to speak to the Commission, and for your commitment to our coast.



Kenneth J. Smith

August 25, 1993