STATE OF NEW JERSEY CLEAN WATER AND

WATER SUPPLY ADVISORY COUNCILS

PUBLIC HEARING

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B E F O R E:

JESSICA RITLER SANCHEZ, Chair
NEIL A. GOLDFINE, Chair

Table of Contents

Contents

Introduction: MS. SANCHEZ: 3
COMMISSIONER MARTIN: 3
Introduction: MR. GOLDFINE: 8
MR. ALLBEE: 9
MR. DOLL. 17
Q&A 20
MS. STORMS: 27
MR. WOLFE: 29
MR. DOVEY: 30
MS. PETERSON: 31
MS. BLUHM: 33
MR. BLANKENSHIP: 34
MR. TITTEL: 36
Closing 38

Introduction: MS. SANCHEZ:

Good morning, everyone. Please take your seats. Glad to see it wasn't raining this morning. Everybody's in.

Welcome to the Annual Clean Water Council Public Hearing. This morning – this public this year, we are pleased that we are doing a joint hearing with the Water Supply Advisory Committee. I will be introducing the co-host for the morning, for the day, Mr. Neil Goldfine who is the Chair of the Water Supply Advisory Committee. I'm Jessica Rittler Sanchez. I am chairing for the second year now the Clean Water Council, and I represent the Delaware River Basin Commission on that Council.

The members of the Council are in the back of the agenda so that you can see their names. We'll be introducing them later on. In the interest of time this morning, we're going to jump right into our presentation.

Just a few things. One, please, everyone, turn off your cell phones and any other beepers or Blackberries or things that you've got so they don't interfere with the recording devices that we have going this morning.

We're going to first hear from Mr. Goldfine and I and then some opening remarks. We are privileged to have Bob Martin, Commissioner Martin, here this morning. We'll have two other presentations. There will be very, very brief time for some questions and answers. And then we'll take a break, so everybody just to resettle and then we'll start the public testimony on the questions that we have before us this morning.

You will note that this is the second time now that we have -- Neil, would you mind if I just go ahead switch it.

MR. GOLDFINE: Knock yourself out.

MS. SANCHEZ: Okay. Thanks. We will go right into Commissioner -- let the Commissioner speak, because he is on a short time frame.

This is the second year in a row that we have discussed this topic or an aspect of asset management. And the reason we're doing it for a second year now is that we were so successful last year and with our White Paper and with BPU's involvement that this resonated with the Commissioner, his request, and at his request we're holding another public hearing on the specifics of the financial aspects of it. And he will be, hopefully, speaking to us this morning about the work that his staff has done over the past year and where we're going to go ahead with this program for next year. Then we'll go into the public testimony on the pertinent questions that we have before you.

So I welcome Commissioner Martin, and thank you very, very much for coming.

COMMISSIONER MARTIN:

Good morning. Thank you, Jessica. Thank you all for being here today. I also want to thank very specifically the New Jersey Clean Water Council and the Water Supply Advisory Council for your service to this State, and the work you do is excellent work and we do appreciate it and it's valuable work, and it's very timely, as you know, the challenges we have in this state with water, water supply infrastructure, water supply issues, and all the rest of that. So I thank you for your service overall.

It's always nice to be able to squeeze in hearings and everything else in between all our natural disasters, too, so I appreciate you all being here. We just seem to go from one to the other, from the hurricane to a tropical storm, the earthquake somewhere in between and the snowstorm. So it seems like we continue from one to the other. But the good part about that is we've been able to manage through it. The other good part about that is that we've been able to find the issues that we need to fix long term, which is important to all of us.

As you all know, it's no surprise to any of you we still have an aging infrastructure in the State around water supply and water treatment overall. The lack of historic investment in that water supply has potentially long-term caused ability to affect public health, the environment, and economy long-term.

The goals of the State absolutely need to be focused on improving water quality long-term, ensuring water supplies for the future, and planning water infrastructure for the economic growth of the State of New Jersey. And I'll talk about the State Strategic Plan shortly, but we can't talk about a State Strategic Plan without focusing in on critical infrastructure and critical resources in the State of New Jersey like water supply.

We also must take a holistic approach to water quality. That's one of the emphasis that I continue to talk to my team about and how we look at this. We just can't talk about water supply. We just can't talk about wastewater treatment. We can't just talk about CSOs and stormwater. We've got to talk about it holistically for a lot of different reasons, for all the reasons that are important. Again, water quality affects all our aspects by all three of those areas.

We also have to look at it from a cost point of view long-term, both in the states, from the towns, from the city, from the citizens of the state. So we if don't take all those aspects together, we can't address both the environmental aspects of it and the water quality aspects of it and we can't address the long-term how do we fund it. We all know it's expensive. And we're going to talk about that in a few minutes. They're essential for protecting the environment and the infrastructure, affects both development and redevelopment necessary in the State long-term. As you all are aware of the 2007 report, the American Society of Civil Engineer gave grades of C and D to the State's wastewater and drinking water infrastructure of the State. EPA's reports of 2004 and 2007 also confirmed that those scores for us for the State overall. Recent emergencies, as I just mentioned from the storms that we saw, exposed some of these weaknesses. We saw some of the storm -- the issues around Tropical Storm Lee and Hurricane Irene that affect weaknesses in our infrastructure. We have wastewater lines fail in several parts of the state. We saw sewage treatment plants having problems, water supply problems. And probably more importantly, we've cut off in a lot of cases drinking water supplies in several areas of the State. Again, the infrastructure work and they were able to move around through interconnection most of the water necessary. But, again, it identified some of the weaknesses in the State that needed to be fixed.

It also showed weakness -- and again, these were short-term, relatively short-term disasters that occurred. We started looking into the future, we need to be looking out what would happen if we had a disaster that affect us, you know, weeks and months and how do we deal with that with the infrastructure we currently have. So again, it's a much broader view than just worrying about day-to-day infrastructure, how it works and providing supply and what is it going to cost. It also comes back to overall long-term for the safety and security of the State overall.

EPA's projections that in the State of New Jersey that we probably overall cost of the State or overall cost in the State of New Jersey is about $40 million; about 17 billion for wastewater, 8 billion for water supply, and 16 billion for stormwater-related activities in the State. Those are big price tags. You all know that. And it's massive, it can be massive on local rates, on local taxing

authorities overall. So again, we need to look at those cost long-term. But again, what it requires is that we start to look at putting plans in place to address that overall.

The Administration continues to focus on the challenges on water supply and water treatment long-term. On Monday my colleague, BPU President Lee Solomon, over at Rider University Roundtable on Water Supply acknowledges that some of the disincentives of reinvesting in revenues in the system. For municipal systems, elected officials sometimes see the value of water utility as a revenue source, and we see that too often across the State. It's important it feeds back in these tough times for the cities and towns it becomes a key source of revenue which doesn't always mean that they're going to make the investments necessary in the infrastructure going forward.

We also recognize that private utilities need to guarantee return to their shareholders. So again, they're balancing that between capital investments long-term and rates of return to their shareholders long-term. Sometimes the full sense of the real cost of water to the State of New Jersey -- there's an interesting article in the press on Monday Water Roundtable when they talked about it. They talked about -- somebody talked about their quarterly water bill of $48 a month. But then quickly talked about their $200 cable bill. And it seemed to be of those two things, a cable bill was much more important. And look at the investment in infrastructure that's necessary for that. Again, I think that's the kind of challenges we're all dealing with long-term is the perception of what's important. And long-term we've got to invest long-term necessary in the infrastructure of the State, especially water supply.

So again, Lee Solomon and I are on the same page. Administration is on the same page that long-term we need to focus on what's important, especially in the infrastructure point of view.

The State's Strategic Plan, which just came out a few weeks ago, again, starts to focus on long-term and sustainable New Jersey sustainable water supplies. It focuses on economic growth, but it also focuses on preserving the natural resources of the State of New Jersey. It also looks as to on a regional basis how do we preserve the resources but also how do we provide the infrastructure necessary. That infrastructure necessary must include water supply. It's not just roads, it's not just electricity, it's not just natural gas; but it's water supply. We can't get water supply to an area that we're not going to grow in certain parts of the State. We may have to make that choice in the long-term. We're not going to grow in certain parts if you can't move water around properly and have enough water long-term to make sure that economic growth is there.

The State Strategic Plan, the mission, we talked about -- the focus was policies and investments, creation and retention of vibrant and healthy communities. It also talks about we'll foster that job growth and support effective and regional and local planning and preserving the State's critical resources. I take that part of it very seriously. The State Strategic Plan, I was one of the co-leaders on leading that, the direction on that plan. But we made sure that we addressed long-term that the necessary to look at the resources of the State of New Jersey that we're looking to protect the water resources of the State and looking to protect the air, water, and land and open space of the State long-term.

I see where we're going in the waterfront. I see there's five key components that we need to be addressing. And I ask all of you today as you start thinking through where we're going from an asset management point of view, because I see it as only one of the components. I see a broader view of how well this comes together. I think it needs to be a holistic approach. I mentioned that early on. We need to look at all the pieces of clean water in the State New Jersey, how we're going to clean it up long-term. That's number one.

Number two, we need to look at long-term capital plans. Long-term. I emphasize long-term. We're not going to be able to bite this all off in one chunk. We're not going to be able to make hundreds of millions of dollars of investments overnight. We know that. What we need to do is prioritize, put those plans in place and make the investments over the years; 10, 20, 30 years out, looking out to the future of how you make those capital investments long-term. That's number two.

Number three is asset management. Asset management -- and I'll talk further about it and you've been talking about it -- I think is absolutely critical to looking at how you look at those asset inventorying those assets, prioritizing those assets. What have you maintained those assets and how they need to maintained long-term.

Number four has to be a funding mechanism long-term. Obviously, you've got to look on the how long-term you build into your rates, that money to be able to put in capital investments. And just as important, looking at where we have the ability to use key resources in the State of New Jersey. Environmental Infrastructure Trust of the State is one of those key entities. That entities plays a key role, and we believe that's a key role for the future and the Governor wants us to keep using that entity long-term to help fund key water resources long-term. So that's number four.

And number five, that I think is probably how we get through it all together, is clearly overall cooperation across the board within the state agencies, including the DEP, BPU, DCA, working together on how we make this happen, because we've got to address everything from a regulatory point of view, cost recovery point of view. You know, how do we get the resources and working local governments and even the federal government in a lot of cases. As you know, a lot of the standards are coming from the federal government around water. So our abilities long-term need to tie back both working across state agencies and then working from the federal government down to local governments to make sure this works long-term, especially from a cost-effective point of view.

We do -- what do we expect from asset management? We need to proactively manage our assets long-term to minimize cost of owning and operating them long-term. We need to provide customer service long-term. We recognize that's a key component to it. While asset management planning is not capital improvement planning, they both are important. A capital improvement plan will include or could include replacement and rehabilitation of long-term assets, focused on growth long-term, using to replace and improve technologies and energy infrastructure long-term.

Capital improvement plan generally specifies priority projects. It anticipates funding sources long-term. So again, when we look at that, how do we make that happen long-term? An asset management plan would require water systems to implement a long-term program, developing a plan to reduce cost while increasing efficiency and reliability. They will detail asset inventories and the operation of maintenance long-term. Long-range financial planning must be a key component to that long-term.

Communities and utilities share a common interest around an asset management because it's the right thing to do and it's a smart thing to do. Again, the cost of repairs is three times the cost of ongoing maintenance. And that's a key thing we need to look at, continually replacing assets that are out there that are old long-term. When they break and they've got to fix them on a night in a weekend, those costs are dramatic long-term. And that's the way we have to view those investments, because they will break. And all of you know they're going to break at an alarmingly faster rate as time goes on.

We look at some of the areas in the State where asset management has played a key role already. In Camden, for their facilities, wastewater facility for Camden, they reduced their own and operating cost by 25 percent over three years; 25 percent over three years. That's significant, especially with the cost of labor as it continues to go up over time and pension plans and all the other employee benefits long-term. If you're able to plan and put a plan together for delivering, they've been able to do that

Southeast Morris County Municipal Utilities Authority, again, put together an overall plan for planning, documenting, putting in management practices. They inventoried their assets overall, identified deficiencies and efficiencies in service. And, again, overall, they gained operating cost and improved service long-term.

The other savings that we see when you deal with asset management is the saving in energy. Energy costs -- as energy continues to go up in states like New Jersey and across the country, it's going to be critical that we look at asset management as a key component to that.

Again, making the right investments in asset management to save energy long-term.

I spoke to you a few minutes ago about funding. And again, I see EIT as a critical vehicle long-term for the State for EIT, and the Governor does, too. In the past 25 years since EIT was established, it's provided $5.6 billion to municipal and regional water authorities to finance everything from sewer projects to water supply to wastewater treatment systems, stormwater basins, pollution control, energy-related projects around water supply and wastewater treatment.

Last year, the Governor signed $821 million of loans in that program. Eventually out in the street we put out probably about $450 million. This year going to the Legislature, we've got a package of about $650 million worth of projects going to the Legislature. We hope 500 million of those project end up hitting the street.

Those projects are absolutely critical for infrastructure, for long-term water supply and water treatment. They also generate jobs. Those are jobs on the street, $500 million worth of jobs that are hitting the street. That, again, does both parts to it; fixes our infrastructure, protects water quality and generates new jobs in the State of New Jersey. That's why those things become important for us long-term.

So how do we move forward? Again, we recognize the magnitude of these costs. We know they're significant. But inaction will be costlier. DEP is developing asset management strategy that provides reasonable approach and a reasonable timetable for implementation. We have and will continue to reach out to all of you, to the water and wastewater facilities for input. We're looking for all input from the public and from all of you with the expertise and the knowledge to be able to help us long-term. We're going to take a leap out and focus on asset management long-term.

We expect that implementation is going to be a challenge. We know it's going to be hard to step out and make that happen. It's happened in other places across the country. We know it works. Private utilities do it all the time. We know they do it. That's how long-term they manager their costs. So again, we need to look how plan those out long-term. One size doesn't fit all. Every utility is not the same. We recognize that. That's why you put plans together that fit that utility from an asset management point of view.

We need to also balance the timing and the cost. As I mentioned before, costs are expensive. We know that. When you start making those investments, we believe those investments need to be made soon but they need to ramp up over time, they need to be planned out long-term so they tie back to rates and rate-related programs. There needs to be

coordinated effort with interagency programs. Again, emphasizing the work that needs to be done both at the state level between the DEP, BPU, DCA, EIT, and also from both the federal government and local governments going forward.

We need to work with the communities in the regions. We recognize that. This is not something just coming down from the State long-term. We need to be working with everyone in a collaborative effort to make this happen.

We anticipate that we'll probably take this as a phased in approach. We would like to try three to five pilots first to see how they work, lessons learned, decide what works, what doesn't work. How do we make it work? You know, is a carrot on a stick approach to this. Don't know. I think that's what we need some of the input on, how we make those work long-term.

And again, I think by having pilots we have the ability then to balance out what happens looking at the future. And again, we want to develop recognition programs for those that step forward and work with us on asset management and demonstrate the leaders that are out there on asset management and how that works. We want to include education and outreach to inform the public of asset management and inform the public that there is a cost long-term to making these investments and it's necessary investments long-term.

In conclusion, we need to move forward with plans. I look forward to today, what comes out of your hearing today and your input today. And again, there's a lot of experts in this room. We need your expertise to think how we move this forward, how we operationalize this. And I need you to help us think about how we put all those pieces together long-term.

Our goals are the same. We've got to protect the long-term water supply of the State of New Jersey. We've got to improve water quality long-term. We need to grow the economic growth of this State. And it's important that we find a way to tie all those together and tie it back to a state strategic plan and tie it back to a plan that we all can live with going forward.

I thank you for your time, and I appreciate your efforts. Thank you very much.

MS. SANCHEZ: Thanks for showing us how much work has been done by you and the staff. And we look forward to -- we will gather all of the comments today, write up, as our usual, a report and submit that to you with our recommendations. And we will also be meeting at our first meeting in January is going to be with Clean Air Council jointly and Dan Kennedy to talk about a strategic plan. So we look forward to working with you and staff and helping you develop your agency strategic plan, too, along with these guidelines.

Thank you very much for your time.

COMMISSIONER MARTIN: Thank you very much.

Introduction: MR. GOLDFINE:

Good morning. As Jessica said it earlier, this is really an unusual happening. We are combining. The Clean Water Council and Water Supply Advisory Council have joined together for this hearing.

The Water Supply Advisory Council is charged with advising the Commissioner on water supply issues, as well as developing the water supply plan for the State of New Jersey. We struggled with that plan for the last 10 years and hopefully it will be released in short order.

But as we went through the plan, one of the things that we realize is that New Jersey is a water-rich state. We have enough water. We have enough supply. The issue is getting that supply to the correct places and doing it on a dependable and continual basis. And as we've

seen over the last several years, there are issues in infrastructure management. You can't keep neglecting our infrastructure. As the Commissioner spoke, and I think his words were very direct. The State is reaching the point where unless we have the continual reinvestment, it will cost more in the long run. We will not be able to develop the growth that this State needs, and the water supply and wastewater systems in the State of New Jersey will fall to a critical point. We're hopeful that this joint Council hearing will act as another step. I know that Clean Water Council has had several hearings on infrastructure management, but by combining forces at this juncture, hopefully will push the State into moving really in the direction that the Commissioner stated, to asset management and a better result for the State.

I'd like to take a moment to introduce the members of the Water Supply Advisory Council who are here. Ella Filippone is the Vice Chair, she'll wave for the corner; Chris Andreasen, say hello. The next one on my list is vacant. Pam Carolan, I saw Pam in here; Bill Hutchinson who is in the back; Norm Nelson, Norm is over here; and Steve Tambini. I only introduced the ones who are here. I didn't miss anybody, right, who's here and I didn't recognize? Okay.

I'm going to introduce our next speaker, Steve Allbee. Steve has been with the United States Environmental Protection Agency for 30 years. He's the principal author of the Clean Water and Drinking Water Infrastructure Gap Analysis, which is a comprehensive, national level assessment often cited as a primary source document in communicating the challenges ahead for America's water and wastewater systems.

Steve has held national leadership responsibility for establishing the innovative State Revolving Fund Program, something that we all like to have used it. Free money or cheap money is always good. He has led the efforts to develop unique infrastructure assistance programs for underserved and economically disadvantaged communities. He has managed a broad network of technical assistance services that provided a operations, maintenance, and related support to small communities. He has a bachelor's degree from Winona State University, a master's in urban and regional planning from Mankato State University, and a master's in public administration from Harvard University.

Steve.

MR. ALLBEE:

Thank you.

Important things. First of all, I've got to update the bio. I've been with the agency 33 years now. Left off that I was with the local government for about a decade before that in charge of planning for a large local system. And I've always felt the most important thing about my federal career is that I spent 10 years in local government before I ever got into the federal government.

Second thing that I want you to be aware of is I'm invested in New Jersey. Half of my grandkids live in this state. So I pay attention to what's going here. And I certainly appreciate the opportunity to come and have a chat with you about my viewpoint and the Agency's viewpoint regarding asset management. And I'm going to talk to you a little bit more about kind of the national picture because I think that's helpful.

A lot of my remarks will very much dovetail with the Commissioner's remarks. I think a lot of us are saying the same things now.

Sidebar. These slides, I've got 30 of them, they're going put on your server and so you can kind of get into the detail of the slides, but for the purposes here, we're going to go through this very quickly and then you can get back and say, "Well, what did he really say," when you go back to your office.

I'm going to kind of give you a little sense of nationally what it looks like, a perspective of how we got to where we are now and then a good sense of what asset management looks like in terms of its structure and intent and how you approach it. I might say that when you hear me describe asset management, you're going to hear something very similar to what the Commissioner was talking about because I'm very holistic about this. I think that that's the only way we move forward.

So I want to throw out an example here. And I think this really sinks in. I mean, if you add it up, I've been in the industry about 43 years. If you think about infrastructure in this country, how and where we live today, it's just dramatically different over the period of my lifetime. And this can be true about anyplace.

This is the Minneapolis-St. Paul region. You know, if I look back to about 1950, the population there was 1.5 million people. And they basically -- 75 percent of those people lived within that little concentric circle. You look forward here now to 2010, and there's twice as many people; there's 3.2 million people, but 75 percent of those people are outside of the concentric circle. The very character of how we live looks so different from when I -- you know, I was born into a farm household where there wasn't plumbing. That doesn't fit in that picture now. That just looks entirely different.

So you take kind of a generation step forward, and by the 1970s you had what amounted to seven colonies in that area that were, in essence, impacted by urbanization. And then you go forward another 20 years, and what you see is that all of a sudden it's from the small concentric circle to the 7 counties to the 19 counties that have got urbanization issues associated. And what really is interesting is some of those fast-growth areas in that metropolitan region are areas that wouldn't have even been considered part of the metropolitan region a generation earlier.

So let that soak in for a second regarding what that tells you from the standpoint of the assets required to live that way. And this isn't a pro-growth, anti-growth type discussion.

This is the discussion recognizing the realities of the life choices we make and the assets associated with living the way we live. Great to have a national standpoint on this. And I'm going to talk about that for a second. Also, extremely important to have a local or a state understanding of this situation.

So when I talk about the gap, I think a lot of progressive states are basically taking a look at a gap structure from the standpoint of their state interest and defined to develop their numbers to think about what's our common understanding about what we're going to have to do.

So really, if you boil it down from a national standpoint, what we have is we've got a growing population. We're physically located different than we were generations ago in terms of our population centers. And we've been becoming more -- or less and less dense in terms of our physical location for literally generations.

If I thought here about the State of New Jersey, you parallel that. You have some communities that are actually declining in their base. And you have other communities that are growing in their base. And it doesn't always match up with the question about where the water is. I always tell audiences on a national basis that we've marching away from water for generations. And I think some day we're going to see ourselves marching back to water because it's that important in terms of how we look at this.

Obviously, a little history is important here. 1970s our water quality situation in the country was just horrible. And for the first time, the federal stepped in both with, in essence, direction on permit control program and in massive public investment. In the same period of time, there was

major private investment. It was all about kind of getting us to a point where we had a better awareness of the environment. And I think the industry has a right to be proud. If you look at it, we're serving about 50 million people more today than we did a generation ago. And the service levels, the level of service out there is so much higher than it was a generation ago that it's just a different order of magnitude.

And that all comes into play. And I want you to think about this for just a second. We tend to have a whole lot of time we talk about the federal funding programs and how things actually came about over time. But if you look about the investment overall, this total investment, capital, operations, and maintenance, all the money spent in the systems, what you'll see if you look at the right-hand side -- let me see. No, it would be your left. Okay. If you look at your left-hand side of that chart, you see that over a 40-year period between '64 and '94 we spent about a trillion dollars in water and wastewater related investment. That didn't even include all these pipe networks that were in kind of the development scheme. So the actual investment in these systems in the post-World War II period is much higher than that.

And then you look at the federal resources, you know, that were put into them. And you're talking about basically $140 billion. I'm not here to tell you that $140 billion isn't a significant little pot of money. It is. But if you try and solve the discussion that we're having by focusing exclusively on the right-hand side of that picture, you're going to be missing what you really need to be thinking about, which is what's that total portfolio of asset and who's involved in managing that.

Let me give a little sense of why I think we're going actually without a doubt have to do this. And the only question is how effectively are we going to deal with this issue. But we will deal with the issue. And we're going to be adding the equivalent of about 100 million people across the country. By equivalent, that's population growth and economic growth.

Everything that's easy to do in the water business has already been done. Those of you that have been around the water business for some time know exactly what I'm talking about. If it's easy, it's been done. So from here on out, the work gets harder, more demanding.

I know, although I'm not regulatory side of the house, but I know just looking at the demographics of the challenge that when you add in those factors regarding additional economic growth, the kind of requirements that are going placed on local providers in the upcoming years are going to be higher than what's currently required. And you can see the dynamics of it because, in essence, if that didn't happen, we'd probably march our way back to about 1970. It wasn't acceptable in 1970 in terms of the water situation we had in the country, it won't be acceptable in 2020.

So we -- about 10 years ago, I authored a major national report on what does this situation look like in terms of a quantitative challenge. And I wanted to look at both the amount of money required to sustain and repair and renew the assets we already had, as well as the new investments so that we had a real holistic look at this across both water and wastewater.

And let me kind of leave you with the first take-home message. The amount of money associated with sustaining our existing portfolio is a greater amount of money, the amount of money that's required for new investment, a far bigger part of the picture. So it's really important to understand it that way.

The numbers are pretty much mind-blowing if you think about it on a national basis. It's $540 billion. I think the Commissioner talked about the capital portion of what that would be in the State of New Jersey. But it's a big numbers, you know, $540 billion in the nation over a 20-year period. And this is not highball figure, folks. This is a middle-of-the-road type way of

thinking about stuff. It's a big number. But nobody can relate to $540 billion, you know. At least until recent years, it was a number that we had some difficulty stumbling across.

What it really means is that in the typical experience, rates are going to go up at about 3 percent per year real, year in, year out over a 20-year period. Now, that sounds kind of manageable until you really understand what 3 percent real is. And what it amounts to is people are going to pay about twice as much as they currently pay for these services.

Now, for those in charge of delivering these services, people aren't going to just applaud that. They are going to want to know how did this all come about. And I believe there's a structure and a way to think about having this conversation in a much better way. But generally, what you're going to hear from me is that we could more efficient about what we're going to have to get done here, but all total we're going to end up making significant additional investments to really just sustain what we have.

My story is that to be able to obtain those revenues, people have got to have some confidence that how you manage your costs. They want to be able to look at your cost factors and understand that you're doing the best you can regarding managing your costs. And then you can have a conversation about the additional revenues required to be successful. My theory here is that these two curves work together. They reinforce each other. So the better you are at managing your costs, the better you are at obtaining the additional revenues you need.

The underlying aspect of this conversation is really about the local providers. If you're looking at where you have success -- and I know our next speaker is going to be coming at it local perspective, but I actually come at it very much from a local perspective, too. If you look at where you manage your success here, success is at the local level. Either get this stuff right at the point where service is delivered, or the opportunity to kind of work the equation differently becomes very limited. So indeed, the focus here has got to be on a very collaborative relationship between federal, state, and local providers in terms of how we get this work done. And I think we can do a lot to help that.

Another take-home message. And I stole this from somebody else, but I thought it was a perfect line. It's very, very difficult to run a first class city on second rate infrastructure. And I think it boils down to grasping that that's just very fundamental to the local challenge. So I wanted to go through all of these regarding community viewpoints. But when you look at the slides, I suggest you kind of think about some of these things.

Here's where you are if you are a local decision-maker. You're trying to manage the physical environment in terms of the impact that your systems are having on the physical environment, but you're also trying to manage the community wealth. And I want you to really get a sense of where the community wealth resides is in the infrastructure. That's the community wealth. That's whether your community is getting wealthier or less wealthy based on really what the investments are and how they manage their infrastructure package.

This decision-making process is made really difficult, tying back again to the Commissioner's remarks because some of these investments are really investments that are going to accrue benefits over multiple generations, you know, two, three, four generations, just like your grandparents paid for some of the stuff that you're benefiting from now. However, these decisions have to be made now. So you have this constant pressure of what does that mean for rates now relative to long-term sustainability. And, of course, I weigh in on you've got to understand where you're at and what those requirements are, and maybe in some cases maybe the rate are -- not just some cases, in a lot of cases, the rates are very justified and the changes in rates are very justified. But you've got to put it in the long-term perspective.

The rest of those points, they're all valid. Suffice it to say if you're local manager, a local decision-maker in these systems, your challenge is a big-time one. It's hard.

I basically am aboard this thing about the discussion really needs to be about how we manage our risk. Our systems are not all falling apart; and I know that. But I do know that if we put ourselves on the right pathway, we can manage the future here a lot better than we would otherwise.

So if you're going to really have this conversation with your communities, and you're going to have to have this conversation, there are three things that I think you need to appreciate.

The first is that we in the water business have been good about talking to each other, but we're not so great about talking to the community in broader terms. The community needs to understand what we bring to the table. The community needs to gain some appreciation for the value aspects of that. And really importantly, the community needs to believe that you're competent, if not exceptional, regarding how you do the work. If they don't think you're on you're on your "A" game, you're not going to generate the resources. And so a lot of this discussion from this point forward is going to be how do you show people you're on your "A" game.

Asset management really is a driver for me. I think it's an underpinning for sustainability. When I talk about asset management and asset management plans, to a large degree I'm talking about sustainability and how you think about these services and community requirements in a very sustainable way.

Definitional stuff here for just a second. And again, I'll just pick up on a few of these things. But fundamentally what I'm about is not project-by-project relationships. I'm about how the whole portfolio is managed. It's the management structure that you apply to everything you own. I'm about the idea that you want to minimize the total cost of ownership. So it's not necessarily a question of what's the initial capital costs, it's the lifecycle cost that I need for you to be able to understand and appreciate in terms of how the decisions are made. And I'm about appreciating that there are limited resources. I don't think there's anybody in the room if I said, "Do you have resources you need," there's nobody in the room that's going basically raise their hand and say, "You bet, I got everything I need." So a whole lot of it is about how do you set priorities to make sure that the money that you do have goes toward the right thing, respecting what regulators are requiring of you and respecting the risk factors associated with managing these systems.

Here's the substance of this discussion. We basically adhere to a five-step or five-core question, ten-step process. Okay. And it starts with understanding the current state of the assets. The bottom line is it's pretty straight forward on this. If you don't know what you have, where it is, what condition it's in and what value it has, there is no way you can really tell me that you're managing that system. So this is all background work, but if you don't have a handle and get on what you have, where it is, what condition it's in, what it's value is, you're just not in a position to make good decisions on down the line. So this is about kind of petitioning your situation. You have to -- and there are many people that do this. There is just as many people that don't do this.

So what's my required level of service? Well, level of service is really a question of what are you expecting that asset body -- those assets to do for you. Okay. And it's more than just what does your MPDS permit is saying, or it's more than your water quality criteria. You have fire management standards. You have, you know, service breakdown standards, you all sorts of other things going on in your community that define your level of service to that community. And that level of service has costs associated with it. So you can be thinking about a level of service

that's here or a level of service that's here, and the cost associated with the delivery of that service is different. And you have to have that very open discussion about what that means.

In my world, not everything in your systems has equal criticality. Not everything is equally important. So I want you to be able to think about these systems from the standpoint of risk of an event and the consequence of event and making sure you can figure out where you really want to put your money, where the priorities are for your system. If you know that, then how do I optimize what I do from an operation standpoint, how do I optimize what I do from a capital standpoint, and what's my long-term funding strategy.

If your long-term funding strategy is you expect us to return to the grant programs of the '70s, I suspect that's not a winning long-term funding strategy. I don't think that game is going play out again. And I try to be very honest with audiences about that. I think you're looking at the equation earlier on, this is about the ratepayers. This is about local taxpayers for the most part regarding the revenues, whether they be loan or other mechanisms. You've got to be thinking about that. This is the structure I'm talking about when I'm talking about what an asset management program looks like.

The Commissioner mentioned you do this at different levels. You absolutely do. And I think the structure fits different size communities. But the way you do that is you adjust your practice level to be appropriate to the sophistication of your organization. So you can do -- if you're an organization that's managing a couple hundred thousand assets, and the large utilities are indeed doing that that, you have a whole different level of sophistication involved in that process than if you're small community who is basically focused on a couple thousand assets and how you organize and manage that information can be different.

So I usually think of that in terms of what amounts to a level 1, level 2, level 3 application. I basically am in the business to do stuff at the level 1 before you move it on up to more sophisticated levels. Then there's a matter of practice regarding how these various things are done.

Let me talk about, and kind you bring you to closure here, the elements that I think are really important to this process. The first one is I'm all about sustaining communities. I really want you to be assured that your investments are aligned with sustainable principles. And so it's kind of every dollar from every source isn't moving you down that sustainable pathway. I'm very big on the think first thing here. If you want to get this right, what really counts is how you think about it in the beginning. And think first doesn't necessarily mean repair or replace or something like that. It means exactly what it sounds, it's think first. Set up a process to really think with detail about what your opportunities are on a long-term basis and how you can proceed in a way that's going to deliver less cost to your communities.

You got to have confidence that the choices are the right ones. I think that happens through a couple of things. I think it happens through adhering to a solid process. And I think it happens through making sure that that process is fed by competent data. So I'm a data process type person. I really say you got to be thoughtful about this, you've got to understand the process, you got to feed it with the right data.

I also think that you improve your knowledge here with what amounts to research and development. There's an awful lot of stuff in the research and development area within the water and wastewater business now. Been going on for like 10 years now. You know, a decade ago, we were spending about 40,000 a year on infrastructure-type research at the Agency. We're spending about 5 million a year now. So the game has changed a lot.

I'm into basically thinking about asset management plans is an integrating platform. This is very much tied back to the Commissioner's remarks earlier. We're guilty, at least at the Agency,

and I don't know whether you're guilty of that here in New Jersey or not, but we at the Agency tend to think to about things very much in the silo fashion. We'll have kind of -- energy is our thing now or water conservation is our thing or just that adaptation associated with climate. You know, we tend to develop these kinds of lines of thinking very independently. And where I'm at and I think where the Agency will be over time is that if a community has a highly development asset management plan where they really put some thinking into it, our relationship from the standpoint of permitting, our relationship from the standpoint of enforcement, our relationship from the standpoint of funding should all be organized around that asset plan. I think that when we have initiatives like energy or climate or water, conservation or adaptation, they ought to be a structured part of that asset plan. So we're all operating off the same page.

Now, I think you've got to really -- when I think about documenting progress, I think very much about what people call the triple bottom line, thinking about the environmental measures, the social measures, the economic measures associated with how we track progress in the country, and I'm big on that. I think it's a big-time practice. We really ought to have and professionalize this practice. People ought to have credentials in terms of when they're responsible for doing this in the community. I'm big on collaboration here.

We're facing the same kinds of issues in the transportation industry and the rail industry and in our schools and parks and rec, which are all asset-type based situations. And I think the same process and practice applies.

Finally, I know that it's going to take at least a decade to get from kind of an introductory practice level to really sophisticated practice; and that's fine. I just want to be driving this system in the right direction over time. So I'm very much with a couple of take-homes here.

Operations renewal, replacement, it's all an investment. It's all investment. So don't think about investment as just being capital dollars. It's every dollar you spend is an investment. This is what an asset management plan looks like at a very sophisticated level. I'm not going to tell you do this, but I wanted to give you a vision of what this looks like and chat with you for just a second about it.

On this axis we have probability of failure. And in this axis we have consequence of failure. They have, like, 25 plans like this. This is from the Washington Suburban Sanitary District. And these are -- in essence, what they've done is they've taken these 10,000 assets that are in that particular basin and they've risk rated them from the standpoint of where -- what were their priorities in the organization. So in essence, this is their risk tolerance curve. And what they're basically doing is saying these are assets we have in our system where the risk associated with the failure and consequences of those assets are beyond our tolerance level, and we're going to have management strategies to drive those back below the line over time. Really sophisticated stuff. And frankly, I love it. I'm into stuff like this. But I'm suggesting anybody try and start out there. Okay? If you're on their automated system, you flash on that, up will pop the asset they're talking about and the asset plan associated with that particular stuff. Most of us are not ready to do this level of stuff. We can do something as simple as a 1 by 3 where we basically focus again on what assets are really important to the long-term success.

Another take-home, folks. My whole career in the capital programs, it's been about, in essence, new investment, enhancement, augmentation. For 40 years in the country we've been focused on augmentation. Okay. Either in terms of a lot of our services climbing up or additional service requirements. Everybody that's getting their career started now, your next 30 years are going to have a little bit of this, but an awful lot of this. You're going to be dealing with how do I sustain correctly the asset packages that I already have and the assets that I already have.

So what I want you to think about from a community standpoint or a state standpoint here is what's the minimum you really need to know to gain confidence that these projects that are coming at you are sustainable investments? I mean, if you were redoing projects today, I'd basically say what's the minimum that I want to know about that project to feel confident that it's the right thing for the community to do. Here's the trick. Most of us in the federal and state business aren't going to see a project until it's here. All of the big-time decisions about that project are going locked in lifecycle costs, 65 to 85 percent of lifecycle costs are going to be locked in very, very early. It gets back to the think first thing again.

If we want to really be good at this, local governments need to be really good about this process early on and you've got to kind of tell them what the expectations are and make sure that you have a clear conversation -- and this is a two-way conversation, it's not a one-way conversation -- about how you get good decisions at this point.

So that's it. I went over by five minutes. And I apologize for that. But I think we have an opportunity for question and answer later on. That's a real quick wheel. So thank you very much. I appreciate your time.

MS. SANCHEZ: While we get the next presentation set up, I'm going to take the time to introduce the Clean Water Council. They are all sitting here. We've Pam Goodwin, Esquire, whose our Vice Chair; and Dan Van Abs who is the second Vice Chair. They will both be moving up one step next year and you'll see their faces up here.

George Bakun from business and industry; Bob Breslin, representing the AFL-CIO; Stan Cach representing DEP. He already spoke. He kicked us off this morning. He actually pushed us to start this morning. James Cosgrove, representing the New Jersey Society of Professional Engineers; Ella Filippone who does double between the two Councils; Russ Furnari, representing the Chamber of Commerce; Amy Goldsmith who came in; I missed Ferdows Ali, representing the Department of Agriculture; and Tony McCracken, general public; Mr. Neely in the back representing the League of Municipalities; Jim Requa, representing the Department of Community Affairs. Is Tony here? I didn't see Tony Valente, Department of Labor. Oh, he's in the -- okay. Thank you. He's in the back. And I have Ray Zabihach, New Jersey Association of Counties. And thank you. We have a full compliment. I'm very pleased that everybody came this morning.

Our next presenter is Dennis Doll, President and Chief Executive Officer of Middlesex Water Company. He has served as president since January of 2006 and he's also chairman of the company's board as of May of last year.

Middlesex Water Company is a provider of regulated water and wastewater utility services, as well as contract option services primarily in New Jersey and Delaware. Under Mr.

Doll's leadership, Middlesex Water has received numerous honors, including Top Ten Most Trustworthy Companies in America for corporate governance and finance transparency. Some of what Mr. Allbee was talking about, getting public confidence. And the 2009 NJ BIZ Green Leadership award for green education. Most recently, the company was recently awarded the National Association for Water Companies 2011 Management Innovation Award. Middlesex Company's core values include a commitment to developing and maintaining sustainable water and wastewater solutions that appropriate balance the current and long-term needs of the environment, the company's customers, as well as its shareholders. That's a triple bottom line on that one.

Mr. Doll himself has more than 25 years experience in both regulated and non-regulated utility management. It's very wonderful to have his experience here today. He has a risk financial management background related to water and wastewater utilities and contract operations, including asset and capital management.

And with that, I am going to ask you to please come -- and he also presented on Monday at the New Jersey Spotlight. So hopefully he'll talk a little but about what was said at that meeting.

MR. DOLL.

Good morning, everyone. I first want to thank the Clean Water and Water Supply Advisory Councils for having me this morning. And second, I would like to commend you for having tap water on the water as opposed to bottled water. Nothing sends the wrong message more, especially in forums where you're being videotaped on the sustainability clean tap water to see a bottle of water on the table. So thank you for that.

I'm going to give you -- first of all, there are really consistent themes and comments that I heard across the speakers this morning, starting with Commissioner Martin. And what I want to do is share something with you that you haven't heard before, so I'll take a little bit of a different approach, but at the same time, there are some very common themes.

You'll note that from the headline of my slides, I put in quotes, prudent asset management. And I think prudent is a key word that all of us need to have a very good sense of when it comes to determining what we should do, how much we should spend, and when we should do it. I also put the line up there, is it a no-brainer or is it a morass? And I would argue that it's a little bit of both. So with that I will move into slides.

A basic definition, most of you, I don't think you need to know the definition. You know what it is. But it is all about the process by which systems are monitored and maintained with the objective of providing the best possible service. Pretty basic definition. It's very simple and simplistic in the definition, but I would also argue that it is extremely complex with respect to implementation.

It's universally accepted that prudent asset management is a good thing. So why is not practiced consistently? We all know it's good. We all know we should we do it. So why don't we do it and why don't we do it consistently? There are really two simple reasons in my mind. There are vastly different views as to what is prudent. When I get a financial guy in the room and an engineer in the room to reconcile what we should do and how much money we should spend, you get very different views as to what is prudent. So getting that reconciliation of mindsets and perspectives is critically important. Not just between the financial people and the operating people, but at all levels within an organization who play a role in delivering these projects and managing and maintaining these assets.

But the second one, the second simple reason which can be, again, complex in implementation -- I give you a bit of a hint there on the slide -- is leadership. I think leadership is absolutely critical to success in any asset management program; and I'll explain why.

When it comes to prudence, it is all about risk management. You heard some of those comments before. It's totally about risk management. So how much reliability is enough? And how much money should we spend for what level of reliability? In our industry, we can solve many, many problems if we spend enough money. But we all know that resources are limited, so how much money is enough to get the appropriate and prudent level of reliability? As if that weren't a big enough challenge to agree on what the appropriate levels of reliability and costs are, the really hard part is the leadership.

And again, this is my simplistic view. Strong leadership is the greatest enabler of prudent asset management programs. And lack of leadership, I believe, is the greatest inhibitor.

So why is strong leadership in asset management not practiced consistently? And again, a very simplistic view: Money is a big one, and politics are another big one. So what I mean by that? The public takes reliable service for granted because they don't see the infrastructure. We all know this. This is not new to any of you. It's underground and we've delivered the service so cheaply and so seamlessly for so long. We heard earlier about the size of a cable bill versus the water bill. The public water and wastewater services is not the first thing on our customers' and our consumers' minds because our industry has done it so well for so long.

And when I industry, I don't mean publicly traded investor-owned utilities like my company. I mean across the board, municipal as well as investor-owned.

So because it's underground and no one sees the deterioration in the infrastructure, there's no sense of urgency. And what I find when we look at different states and different opportunities, one thing is for certain, no one is sell the good systems. Everyone is looking to solve a problem, and it's all about a problem that may have been precipitated over a very long period of time that the general public is largely unaware exists. And this is a just snapshot of a main with some significant tuberculation, which in and of itself is a problem, but there are certainly other problems that are much more onerous than these to solve.

So sometimes it's politically expedient -- and I would say more than sometimes -- to keep the cost low in the near term. Despite what everyone generally understands is the fact that inaction does result in higher costs down the road. Everyone knows it. But because of the political expedience with respect to costs, things don't happen as often or as quickly as they may need to.

The tools that are needed to implement a robust asset management program can be expensive. They include things like well-trained staff. We have really a lot of really smart people in this industry. Municipal, investor-owned, many of you are in the room here today. So you know you've got the talent. We know what problems need to be solved and we know how to solve them. But it's not just about the talent. You need resources in addition to your labor. You need technology. You need equipment and you need a very strong management structure to enable the execution of these programs.

And another big one for me is education of the public. Educating the public about the risks and the costs related to maintaining reliable utility service into the future, I believe, is sorely lacking. I can't tell you how many people I speak to -- many of them are our customers and not our customers -- they don't know who their water provider is. They don't know whether it's investor-owned utility or if it's a municipal system. Because the water bill is such a small portion of the household budget, it's one of the things that they don't pay close attention to. And I'm not suggesting for a minute we want our customers to get up in the morning and have their water service be the first thing on their minds. I'm quite happy to have them take our service for granted because that means we're doing our job. But at the same time, I do believe, as you've heard from some of the earlier comments, the public is largely unaware of what it costs to deliver the service and why that cost will need to increase into the future.

So what does all this have to do with leadership? Every level of leadership involved in the delivery of an asset management program needs to adopt and diligently manage a common view as to what is prudent. So a common definition of the problem, a common definition of what's the appropriate level of reliability, I believe it is the starting point.

A shared commitment to implement and maintain a robust program in good times and in bad, recognizing they're all bad. As a regulated utility, we are governed by the rules and

regulations of the New Jersey Board of Public Utilities. None of our companies, and I know some of you are in the room, none of us like to go before the BPU asking for a rate increase, especially when we're in difficult economic times. But having been in the this business for more than 25 years and been through many rate cases, it's never fun even when times are good. So no one wants to pay more ever, whether we're in good economic times or in bad times.

We need a shared commitment to make very difficult political and financial choices and to sell the vision, the vision about what prudent asset management looks like, to sell that vision and the plan to those who ultimately pay for the service.

And we need, last but not least, a commitment to adopt full cost pricing. I can't say enough how important the concept of full cost pricing is, in my view, to the ultimate success of an asset management program. Our company, being regulated by the New Jersey Board of Public Utilities, and my other peers in the industry all implement full cost pricing. Our costs are totally transparent. There's a rigorous process to challenge those costs when we're in for rates. Everyone sees what our return is. Everyone sees what capital programs we gave, what our operating costs are. And you can have a healthy debate about what is prudent and what is not. I don't want to disparage any particular business model, but there are several that have different levels of full cost pricing. You've got municipal systems that are part of the municipal government.

You've got municipal utilities authorities. You've got investor-owned companies. Each of them has their pluses and their minuses with respect to their ability to demonstrate full cost pricing. But I don't believe we can have an intelligent debate nor do I believe we will ultimately have a consistent approach to asset management across our State until we have the ability to adopt full cost pricing on a consistent basis everywhere. I've seen too many examples, and not just in New Jersey but in other states, where you've got an executive director of a local utility, whether it's a municipal system or an MUA, it really doesn't matter, but where these individuals are very skilled and talented, they know what needs to be done, they know what is prudent asset management, but they can't get the funding for a variety of political reasons. They know how to implement these programs, but I have to say they put themselves at great personal risk when they go to try to get the funds to implement the programs.

You also have a very difficult time to be able to benchmark what exactly is standard operating procedure to what should be an SOP when you have different cost models in different places. If you can't have a consistent view as to what it costs to deliver the service, how can you begin to understand what the scope of the problem is and how you will pay for that service down the road. I can't underscore the importance of that enough.

So we have two choices. We can do nothing. We can kick the can down the road, as you've heard before. We can possibly lose service for prolonged periods of time. And we can pay much more for the service later. Or we can be leaders. We can face reality about the cost and we can forge ahead with a prudent program at potentially great personal risk. And by that, again as I indicated previously, a local executive director of a utility, they put themselves at great personal risk because sometimes, and unfortunately all too often in my experience, it's all about whose up for election. There's no money for the utility because we can't raise rates. We have to keep property taxes low. And unless you know what it's costing to provide the service, you're going to struggle to implement a robust program.

So who pays? In the end, the cost is borne by the user of the utility service. And that's done through the utility bill, as we all know. If you don't have full cost pricing, it can also be paid through your local property taxes to the extent there's cross-subsidization between departments or between entities, you don't necessarily know what the full cost is of providing the service.

And/or we pay for it in our state and federal taxes through the various grant programs and subsidies that may occur on a national level.

But like every service we receive, ultimately the cost is all borne by the consumer. It's really all a matter of how we carve up the pie. We all know that there is a revenue requirement associated with maintaining a utility. And included in that revenue requirement is the cost of capital, the debt service associated with implementing and maintaining an asset management program. So being able to identify the revenue requirement should be relatively easy. How you carve that revenue requirement up across the various ratepayers or taxpayers, that is the challenge.

So with that, it's a very simplistic view of what asset management is from the management perspective, in my mind. You certainly all understand from the asset perspective, the engineering and the operations aspect of it. But the management piece combined with the asset piece, to me, is ultimately is what's going to get this done.

So with that, I thank you for having me. And I'll turn it over to Neil, I guess.

Q&A

MS. SANCHEZ: Thank you so much.

We've had two terrific presentation this morning.

I think that I can speak for the entire -- at least from my Council, some of the best we've heard in our past public hearings.

We are going to very briefly open this up for a few minutes to question and answer.

I don't keep it going too long because I'd like to be able to take a break and give our recorder a little bit of a break and the rest of you also a little break to take advantage of our water infrastructure at DEP.

I'm going to open it up first to Council members to ask questions of the presenters. Any Council members have any questions or any additional thoughts or clarity? Yes, Dan.

It would be helpful if everyone identify who they are when they're speaking so that they can be captured on tape. Thank you.

MR. VAN ABS: Dan Van Abs. For Steve. One of the critical questions that we keep on coming into when we're deal with asset management is the question of how do we know whether we are, in fact, managing the asset. And that gets to a point that Dennis talked about very briefly benchmarking. How do we know how one utility stands relative to another utility? How do we know whether our utility is doing a good job relative to needs? How do we measure all of this?

MR. ALLBEE: You just kind of asked the $64,000 question right off the bat here. First of all, if you don't have some way to measure and think about this, you know, in a sense of setting up specific targets and measurable things that you're doing, you're just never going to get better. And so the idea of measurement is a integral part of setting up any structure.

The second part of this, I think, is that we do have a lot of benchmarking exercises now. Actually, many of them on an international scale, regarding how certain process and practice activities occur in our industry. And there was a major benchmarking of some 75 different international utilities, including perhaps 25 or so from the US a few years back. And it started to point a direction toward things that we do well and things that we do not do quite as well. And so there's no quick how do you know when you're in the right place. What I do know, part of that is associated with knowing when you're in the wrong place. And when you're in the wrong place is

if you haven't really a very organized way of understanding the asset components of your system, some structured way meaningful for decision-making, you can't be in the right place.

If you don't do any kind of condition assessment work on your system and you just fix stuff when it breaks, you can't be in the right place yet. You've got a long way to go. And it's in your economic interest to do that.

If you don't have any sense of the value of your system, you can't be in the right place.

If you don't have a sense of the options that you have regarding repair and renewal and replacement relative to particular assets within some framework, you can't be in the right place.

And I'm trying to kind of get to your question by admitting I'm not sure exactly where we can go with this because it's continuous improvement thing. But I am sure about the set of conditions that exists where it's impossible for you to be in the right place. And it's all those basic things that I think you really have to kind of come to terms with. And then looking over to my colleague here, I think there's reasonableness about this.

How you might want to think about risk and reliability in a very small system is quite a different thing than how you have to think about risk and reliability in a large system, not in terms of the idea that you need to do it, but in terms of the practice level associated with the how to of the particular task.

Is that helpful at all to what you're trying to get to here? MR. VAN ABS: Yes.

MS. SANCHEZ: Any other questions from our Council?

MR. NEELY: Wonderful. Dan, obviously, the cost of water is not comparison among systems and among users. I didn't hear you say that, but I thought it was interesting Commissioner Martin talked about how we've got to have a long-term approach, DCA and BPU and Environmental Protection. And then our friend from the federal government talked about with the new 100 million population in the next 25 years or 20 years we're going to have more regulations. Why -- we have regulations on books and we've allowed DEP and DCA have allowed for years for towns to suck money out of the utilities and to milk them and not put capital back into it. Why would we think that we want to take a long-term approach? Why wouldn't we take a short-term approach and start correcting some of the problems today with our urban cities where they have milked the system and they've stole the money and they've let the systems collapse and enforce the current rules instead of thinking long-term. I'd like to have Commissioner Martin suggest that.

And I think that they are there are too many rules and regulations and paperwork that screw up getting good infrastructure done. And for you to suggest that that's the long-term approach, I would think that the long-term approach would be to allow rates to become effective and to allow towns to have less regulatory interference and to be moved forward. And you might want to respond to that since you're a regulatory person of the last 41 years as you would talk about. Thank you.

MR. GOLDFINE: Lou, would you -- I know you need no introduction.

MR. NEELY: Lou Neely from East Brunswick and I serve on this representing the League of Municipalities. That's not the League's view, that's my view. So I don't want to get them in trouble.

MR. ALLBEE: I would have been disappointed if I didn't get questions like that.

First off, I didn't say -- point of clarification here. In 33 years in the agency, I've never written a regulation and I've never -- (Clapping.) MR. ALBEE: I've never enforced an action. I

respect, though, that sometimes compulsion is required to get people to do what they have to do. And I also respect that the law is the law.

Now, with regard to what I actually said, I didn't say that there has to be new regulation to deal with this. What I said is that there are more expectations that are going placed upon you as an organization regarding how you do your work and what's required of you. That doesn't necessarily mean that the only way to get at that is through a regulatory structure. I'm not necessarily a big fan of saying that the way you have to move forward is with a regulatory structure.

And you'll notice that we have been talking about asset management for 10 years in the federal government and we have not constituted -- you know, we haven't pushed this forward into a regulatory environment. And the reason that we've done that is because we really think that the knowledge and training and the transfer and approach regarding how you do stuff is not readily accommodated in a regulatory structure, that it's much better to kind of focus on working with communities regarding how they go about doing things.

All of that said, we have to get on the right pathway here, one way or the other. We can't just let, you know, the situation get worse because, quite frankly, we're abusing our kids and our grandkids, you know, without dealing with that. So I am willing to say absolutely when compulsion is required, I'm ready to go down that pathway.

A final point. And I'm not sure that I exactly understood what you were suggesting, but I kind of understand it. What I heard you saying is that certain income is being pulled off of the utilities and put into other public purposes. And frankly, here's how I see this. If a utility clearly understands what its costs are for the provision of a service and it's established how it's going cover those costs, then if it includes some kind of surcharge is the owner of the system that they take back into the community for other purposes, that's fine. But I would never let a community take money -- and I'll bet your regulations don't allow people to do that. But I would never let a community take money out of the basic enterprise fund to do other stuff if they hadn't fully funded the long-term obligations of the enterprise account. Do you understand what I mean?

MR. NEELY: I understand what you mean, but they've done it.

MR. ALLBEE: I can't speak to that. I'm not knowledgeable.

MS. SANCHEZ: Were there any other questions directly related to the presentations that we saw this morning? We can get into public comments on other issues later. Yes. There's a gentleman right here.

MR. DILLON: Alan Dillon from the Bureau of Safe Drinking Water. My question to Dennis.

How do we overcome the knowing-doing gap? How do we take -- we know what the issues are. What are the concrete steps so that short-term political considerations don't obscure what we need to do for the appropriate stewardship of multi-generational assets?

MR. DOLL: That, in my mind, is the key question. In my mind, it's about consistency. It doesn't matter whether you're an investor-owned utility or an authority or your utility is a subdivision of the local government. I believe we need some consistent rules about full cost pricing. Because if we can compare apples and apples across any system in our state, we at least know what it's costing to provide the service. I don't believe you can determine how much you need in the future until you know what it's costing you currently. And I'm not suggesting for a minute that every non-investor-owned system is a problem. And I'll look to Mr. Neely as one of the classic examples of one of the best run municipal utilities in the State. I know that because I work closely with him.

And another example I'll offer is the New Jersey Water Supply Authority. Our company buys 85 percent of our water from the Authority, and we scrutinize their financial statements. We understand what it costs to provide the service. It is a very healthy debate about what the service cost, but we all know what it costs.

So in my mind, unless and until we remove the politics from the process of managing a utility, we will never make meaningful progress toward a consistent view of asset management anywhere.

MR. ALLBEE: I echo that. I've got to make one additional comment here.

Part of my role with the EPA is that I do a lot of public speaking similar to the discussion we just had. And I would say about 75 percent of those audiences tend to be people who are kind of in the water sector. And they will tend to come up and tell me, "Listen, we get the stuff you're talking about. We understand this. We know this. But our local elected folks, our local folks don't want to hear this."

My other 25 percent of the time I talk with elected people, locally elected people. And they will consistently tell me, "Steve, we don't hear the same stuff from our people." So, in a sense, what I'm getting is that there needs to be some clarity, some structure. I call it an asset management plan, but some way to have a concrete discussion about what's really involved in successfully managing this system into future because that discussion in many cases is not taking place. And you can't get someplace until it does take place.

MS. SANCHEZ: There was another hand over here. Remember to identify yourself, please.

MR. WOLFE: Hi. I'm Bill Wolfe. I'm a Hunterdon County resident. Too much like the Oprah or Phil stuff here.

I'll take the flip side of Mr. Doll's comment. It seemed to be -- I heard you say that there were abuses occurring by municipal diversions of water money to other public purposes. And that apparently is regulated by the DCA or the BPU. If there are violations of those regulations, why aren't the professionals who are cognizant of them speaking out in public forum to penetrate -- Mr. Dillon's question -- penetrate the politics with professional integrity and transparency which goes to some of your leadership issues? That's the way to push back against the politics and keep professional standards and objective criteria from political interference and undermining. So I don't see the solution being abolishing regulations. It means enforcing them and putting in place stronger regulations that more clearly make the system more transparent and objective.

And my question about the presentation was to appreciate your presentation, but to go to a comment the Commissioner made, and that was also made at Monday's New Jersey Spotlight thing, and it deals with -- the Commissioner, and I took it down very clearly and have notes on it, made a statement that there are competing interests between shareholder return and investment either in O&M or capital dollars. And if there are finite resources and if moneys have to go to shareholder concerns, what then -- what piece of the pie is that are we talking about? And that goes from cost financing, et cetera, because 10 percent rate of return was the number that was thrown out as the benchmark, as I understand it, as a regulated utility. And private financing seems to be more expensive than what the environmental trust finances.

So could you kind of give me a ballpark estimate as to what shareholder returns compete against operating and capital costs and what private investment cost versus what I believe is a lower cost public option? Goes to the privatization question.

MR. DOLL: Great question. To me, it's all about balance. We have to balance the needs of our customers, provide reliable service against the need to provide an appropriate return for our

shareholders as an investor-owned utility. In order to be able to do that, we have to attract capital. So how do you attract capital? There's a market out there that will provide the capital at a certain rate of return that they expect for the risk associated with that investment. And there's a whole science around what the number, the 10 percent number, how that's determined. And frankly, we spend a lot of money on testimony to develop that, so there's a science around that.

We also obtain low-cost financing. We are long-time customer of the Environmental Infrastructure Trust Fund. The gentleman sitting in the front of the row here heads up that organization. He knows full well the kind of relationship that some of the investor-owns have with that entity.

We spend $4 million a year through the EIT on our -- we call it our Renew Program, which is main cleaning and lining. We're 15 years into a 25-year program. And as we heard earlier from Steve's comments, the cost of rehabilitating infrastructure today is going to be much less, and as the Commissioner said as well, than having to solve a problem under an emergency condition later on. So we use that low-cost financing for that program every year, and we've been doing it for many, many years.

So it doesn't really matter to me whether you're municipal or investor-owned. We all have to attract capital. You have to raise money through bond issues on the municipal level. So you still have the same issue. The key difference for us is there is a profit element, absolutely, but at the same time we have to deliver the same quality of service as a non-investor-owned.

So there are a lot of similarities between the models, and I don't think one is better than the other. But there are certainly some things where we need common ground, especially when it comes to asset management if we're going to solve both our state and our nation's infrastructure problems.

It's a long answer, but hopefully it touched on what you were looking for.

MR. ALLBEE: One more follow-up comment on that, because this discussion we could be having transportation or we could be having it about a whole series of other things that are going on in our society. It seems to me that the underlying big picture issue we got to deal with here is that we have got to get to the point where good sustainable management of our infrastructure is good politics. It seems as though the perception is those things are not aligned right now, you know, that politics is short-term and it's next year's budget. And infrastructure is long-term and it's out many years and we'll figure it out. And it seems to me that until we basically make this long-term approach to thinking about infrastructure and services and reliability, good politics, we're probably not going to get in the right place. And that's all about transparency and clarity about what you're doing.

I don't think there's one of us in the room that basically sets out every day to say, well, how can we abuse our grandchildren in terms of their generation. We don't start out to have that happen. We just haven't figured out to deal with this question of intergenerational equity in a way that it actually comes out to be good politics. But our grandparents figured that out. So I don't know what's happened here on that, but that's critical to this discussion.

MR. GOLDFINE: Before we move on, I would like to answer -- I don't know if this is on one of the issues that this gentleman just raised: If there are legal things going on, why aren't the professionals screaming? Well, the reason is, if you know regulations, there's always a way around regulations. So what's going on in most of the communities, most of the utilities, is it's not illegal what they're doing. What they're doing is putting a lot of stress on the system because then they don't have the resources. Anyone who's a professional in the field gets to complain. I believe there were comments about putting themselves at personal and political risk. But it's not

illegal. What's going on isn't illegal. There are ways to move the budgets around so that it complies with the law. So it's hard to stand up and complain about an illegality that doesn't exist. It does stress the system. The money is being moved. I think that the numbers of utilities, municipal utilities that are now moving money into municipal budgets has risen dramatically since 2008. Lou probably has better figures than I do. But from the people that I talk to, almost every utility has been attacked.

It's not illegal, so how do you make a forum in front of the press in front of the public on something that is provided in the statute and you've complied with by either reducing your infrastructure, reducing your cash balance, or raising your own rates.

MR. ZIMMER: My name is David Zimmer and I head up NJEIT. I just wanted to supplement some of the comments that Mr. Doll made.

So NJEIT is the authority, the partnership that worked with DEP that lends very low interest rate funds to local municipalities for infrastructure projects. And there's clear evidence for companies, utilities, that have used the Trust to -- in terms of asset management, to replace and modernize and update their infrastructure systems. The increasing debt service that they take on by utilizing the trust funds -- and we're very low rates. This year, we'll probably lend out somewhere around 1 percent. If most municipalities try to bond their own projects this year by themselves, it probably would be somewhere between 4 and a half and 6 percent, depending on their credit righting. So that differential saves anywhere between 30 to 40 percent over the life of the loans. And the people that utilize our program and utilize it in an asset management perspective, what they're doing is their taking that savings that they would normally use for debt service if they went out and funded it on their own, they're taking that savings and reinvesting it back in their infrastructure, back in their systems.

Camden County MUA is a clear example of this. If anybody remembers driving down past the Philadelphia Airport 20 years ago and the stench that you -- even just on the highway going 60 miles an hour. And what the CCMUA's been able to do by utilizing our program over the last 20 years, they almost have a model system in terms of what they've been able to reinvest in, the number of complaints and actions that decrease in those.

So, again, to Mr. Doll's point, we're available. We do get used by certainly not enough of the utilities and the authorities in the state right now. But we are a very effective tool for anybody that wants to take advantage of our rates. And again, the way to think of it is the cost, the low cost in -- the increase in debt service that you take on by investing in more modern equipment, the savings in operating and maintenance that you get from these newer systems, that drop in your cost more than offsets the increase in debt service that you have taken on to buy those new assets.

So a lot of people say, "Well, folks won't really take on asset management unless we compel them, unless we make regulations." I don't necessarily agree with that. I certainly think if you do that, you'll end up with that result. But a better way to do it is to show them that it makes sense financially.

And so for anybody that hasn't heard of the Trust, I throw our name out there, I advertise. Certainly come to us because we've got examples where you'd be able to prove that, again, the cost savings that you get in your operating and maintenance budget will be more than offset by the savings that you take from our program.

MS. SANCHEZ: Thank you.

I have one question, if I may. Not a question exactly about your presentations, but yesterday Russ Furnari and I were at a conference up at Rutgers about making New Jersey

climate ready, prepared for climate change. And part of what I do is report on the results from our 2009 public hearing which was precisely on water policy and climate impacts.

Did any of the figures that you showed us today -- well, I forgot one thing. I know that EPA is very big on climate ready utilities and has some very good tools out there for this.

Did any of the numbers that you showed us today include the cost of changing infrastructure, replacing it, moving it, whatever, to being prepared for climate -- the impacts from climate change?

MR. ALLBEE: No. MS. SANCHEZ: That's the short answer, right?

MR. ALLBEE: And should it? Yes. But when you talk about $540 billion is the national thing, if you're talking about $600 billion or $450 billion, the public policy discussion is the same. It's a big issue. And you have to think about how are we doing it now and how could we do it differently. So I'm not terribly troubled by the fact that the number is probably less than what it really is. It's big enough to cause us to think about how do we do it.

What I say is the biggest specific challenge with us regarding climate ready questions is actually that this is very much an asset plan in that you need to know two things in your asset planning. You need to know is that future condition predictable? And if you know it's predictable, can you do things that are cost effective to prevent the consequences? The challenge that we have in some parts of the country is that the climate Science puts us in a direction, but it's not hard enough yet to make the kind of really big investments that are necessitated in some of these areas.

In other parts of the country, in the coastal areas in particular, the clarity regarding the climate science is much more straightforward, and people have a pretty good sense of what kind of changes will they have to be making in these utilities to be reliable systems 20 or 30 years out. And they know what those numbers are. But I would contend that how they're approaching this is they're integrating that into their asset plan if they've gotten to that stage.

MS. SANCHEZ: Do you find that most of the utilities you're dealing with, what percentage is including -- on the coastal states, I just wondered if you find that they really are taking -- are they taking that into consideration? MR. ALLBEE: We have here an example of what happens when you have an aging asset; I couldn't hear that. So try it again.

MS. SANCHEZ: With the states that you deal with, are they, in fact, taking that into consideration with their plans?

MR. ALLBEE: It's a very big mixed bag. We probably have 20 different utilities in the country that are doing really significant work in the climate area in terms of facility adaptation and what should be different here based on the investments. East Bay MUD in the area of San Francisco and Oakland, good example of a utility that's done a tremendous amount of work on climate change issues for that particular utility.

So I would say you probably got at least 20 major utilities where they have thought a great deal about this. I suspected what you would find is that when you get into smaller utilities, there probably hasn't been the same level of thinking because there's a lot of science-type questions and a lot of engineering-type questions and, frankly, some very clear investment requirements associated with really getting your thinking to the level where you know what opportunities you have.

MS. SANCHEZ: Thank you. It happens to be a topic that's very dear to not only my heart but I know my Vice Chair, so I wanted to cover that. Thank you.

Hearing no other questions, I think I would like to give everybody a break, including the court reporter. We can reconvene in 10 minutes, please. And at that time, we will start the public testimony. So make sure you're signed up and we'll start fresh in 10 minutes. Thank you.

Oh, I didn't say thank you to our speakers. I'd like to do that. Thank you.

(Recess.)

MS. SANCHEZ: It's now time for us to start the public testimony, actual public hearing. We have five people that are signed up.

We'll take those first. If anyone decides at the last minute that they'd like to speak, you'll have to wait. We're going to allow -- as usual, we allow five minutes for testimony. We'll give you a one-minute warning when you have one minute left if you insist on running that long, and at five minutes we'll ask you to please stop. And direction will come Amy Goldsmith over here. And since the Council is all sitting out there and the audience is out there, we're going to -- instead of standing there talking to a wall, why don't you just come up to the podium and speak from here.

It makes more sense at this time. It's not the way we usually do it, but it makes more sense.

I hope everyone is here from outside.

The first speaker is Carol Storms America Waterworks Association, New Jersey Section.

MS. STORMS: Another example of aging infrastructure.

MS. SANCHEZ: Please state your name and your affiliation.

MS. STORMS:

My name is Carol Storms. I'm manager of water quality and wastewater with ACUA New Jersey, but today I am representing the American Waterworks Association, New Jersey Section. I'd like to thank Chairwoman Sanchez, Chair Neil Goldfine, and the members of the Clean Water Council and members of the Water Supply Advisory Council for allowing me to submit these comments on behalf of the section of AWWA.

The American Waterworks Association is the premier organization representing the water supply industry in the US and throughout North America. The New Jersey Section AWWA counts among its members the leading municipal authority and investor-owned water suppliers throughout the State, as well as numerous professional organizations, individuals, and suppliers that dedicate themselves to the provision of safe, reliable drinking water supplies to the residents of our great State.

Water utility facilities provide a vital and critical infrastructure that supports residents, businesses, and organizations throughout New Jersey. Water is essential for health, sanitation, fire safety, and economic growth.

The October 11, 2011, draft of the State Strategic Plan, the New Jersey State Development and Redevelopment Plan, includes infrastructure needs assessment through 2028. The infrastructure needs assessment estimates that approximately $18 billion needs to be invested in water and wastewater infrastructure.

The New Jersey Section AWWA supports the need for cost-effective investment in the infrastructure renewal that is based upon sound and comprehensive planning. AWWA provides the following responses to some of the questions outlined in the November 30, 2011, Clean Water and Water Supply Advisory Council's request for testimony.

What standards of performance should apply to asset management? AWWANJ supports the maintenance of existing and future infrastructure through asset management practices that include proactive evaluation of critical assets and the prioritization of investments in infrastructure renewal. There are a number of programs available through EPA and other sources to use as a reference to develop asset management practices. The Effective Utility Management, EUM, Program is supported by AWWANJ.

How should New Jersey assure sufficient funding and budgeting for proper asset management? Asset management and infrastructure renewal are critical components to the true cost of water. Adequate funding and financing are needed to support sustainable infrastructure management and renewal through customer water rates, infrastructure rate surcharges, state revolving fund financing, and other sources that support a sustainable approach to infrastructure, investment, and management. Limits should be placed on the transfer of utility revenues to non-utility municipal funds and programs.

How should we measure long-term success in utility management? Reliability and resiliency should be measured through a series of consistent indexes like water main failure rates per mile of pipe, infrastructure renewal ratios like dollars invested per dollar of existing assets and other sustainable benchmarks.

How should we facilitate improvements for utilities that are doing a poor job? One, education and awareness. Educating the decision-makers, political and municipal officials and technical staff on the principles and benefits of asset utility management is required in order to gain full community support for proper rates.

Two, enforce existing regulations s conduct a review of existing regulations to assess the ability to require infrastructure improvements.

Three, SRF funding. Provide greater emphasis on utility management, EUM, practices related to the award of SRF funds for capital improvement projects. Bad behavior and bad practices should not be rewarded with low cost and no cost funding to provide short-term solutions.

And four, retain utility revenues. Limit the transfer of operating revenues and cash reserves from municipal water department enterprise funds and from municipal utility authorities to general funds of the creating municipalities. Funds collected from utility ratepayers should not be transferred to the general fund except to reimburse the general fund for the actual cost of goods and services provided or to provide a reasonable surrogate for the municipality's return on investment in utility assets.

How should we recognize and reward successful utilities for doing a good job? Highlight the successes. Highlight successes with recognition through an annual award DEP, DCA, or BPU, recognizing the utilities that have implemented exemplary asset management programs.

How do we convince the public to support these actions? Community stakeholders actually will benefit from proactive asset management and infrastructure renewal by minimizing impacts due to system failures.

Thank you for this opportunity. And we will be submitting written comments on behalf of the section. Thank you.

MS. SANCHEZ: If someone does have written comments, make sure to turn them in to Stan Cach, myself, or Geraldine Skrajewski.

Mr. Bill Wolfe is up next.

MR. WOLFE:

Good afternoon. My name is Bill Wolfe, W-O-L-F-E. I'm the Director of the New Jersey Chapter of Public Employees for Environmental Responsibility. We're a group federal and state environmental and natural resources agency professionals that seek enforcement of environmental laws and promotion of environmental integrity. And with that organizational mission in mind, I can't help but respond to some of the earlier comments with respect to professionals that take great personal and career risks trying to make prudent decisions, trying to identify mismanagement, regulatory violations, et cetera. That's what we do -- and promote scientific integrity. Those are the things we do as an organization. So if there are professionals out there with those kind of concerns that want to have somebody like me run interference for them at a professional level so they can retain their position and their career, I'm here. Look me up.

At any rate, I didn't prepare any remarks. I was here to listen, but I want to make a couple of quick observations.

I read the last year's recommendations, and I was pleased to note that the report included two things that I raised as a concern. One, in recommending -- the 2010 recommendations recommended that the Department pursue existing regulatory authority in the safe drinking water program and the NPDES program to put in place so that things the standards and criterion objectives and uniformity that Mr. Doll suggested, and I think the Department needs to move forward with that initiative and actually move forward to implementation.

I was very disappointed to hear the Commissioner say that the Department was merely preparing a strategy. We're way past that. This is over the five-year period we've discussed infrastructure in the Clean Water Council four times; 2007, 2008, last year, and this year. That's four years out of the last five, and yet we have no programmatic output from this Department. That's disappointing.

The other point I'd like to make is to stay away from what I'll call jargon and buzz words and slogans like one size fits all and end of pipe regulation. Those disparage very effective regulatory tools that have gotten us the progress that we have now that we're on the verge of losing due to lack of investment and due to ideological opposition to government and ideological opposition to revenue raising in the public sector and ideological opposition to regulatory intervention.

So my point is the regs and government and command control structure has worked, and you all have benefited and the public interest has greatly benefited. And those things are vitally under attack right now, and I think we need to talk about the political gorilla that's in the room, whether we like it or not.

And with that in mind, with respect to the points on leadership, I can't help but note our Governor is not exerting leadership. He's attacking local authorities for patronage for excessive rates, and that does not create the kind of climate that promotes public confidence in the professionals running the systems and their ability to secure additional revenues. And so if we can't recognize that political point, then we're also not being honest.

The last thing I'll say is that I'm very troubled by the strategic plan that State's adopted, the State Planning Commission has adopted a draft strategic plan. That plan will usurp by definition, by Executive Order, and by the State Planning Commission's approach and by the Commissioner's own testimony, that plan will usurp the functional plans of this agency which are mandated under statute. And the two critical ones for our concerns here are Water Supply Management Plan and the Water Quality Management Plan.

Both those plans are now being subordinated to a larger strategic thing that I think hurts, at least from my perspective from an environmental public health and public interest standpoint, I think that that plan undermines those functional plans of this agency and would urge the Department to come forward with those plans. And I think I heard that the Water Supply Master Plan was forthcoming shortly. So we'll look forward to reviewing that.

Thank you.

MS. SANCHEZ: Thank you.

It would be very helpful for the Council, notwithstanding that the remarks and ideas from everyone are helpful, but it would be especially helpful to have specific comments on the questions that are at hand as we prepare something for the Commissioner.

Rick Dovey, please.

MR. DOVEY:

Good morning. My name is Rick Dovey. I'm here today to represent the Authorities Association of New Jersey, the Environmental Authorities Association, AEA. I'm the president this year. I'm also the president of the Atlantic County Utilities Authority.

I also do not have prepared comments, but I do want to fully support Carol's prepared comments. They were right on, on all the points. The Authority's Association feels very strongly, I think, on every point she made.

It's pretty well established that the assets that we have are underfunded and the long-term commitment to it. And from the Authorities Association point of view and our members is this -- and I know it was discussed earlier -- this move to free up our capital reserves and move it to the general fund for relief at the local level primarily, but also even at the regional and county level at some levels to move that money. We're underfunded to begin with. We need to use it. It's been used effectively over the last 25, 30 years. The record is pretty clear. And we do not need to transfer. The future needs are much greater, as this infrastructure which was largely put in place by federal grants to a large degree, and in the interim between then and now by low-cost borrowing through the Trust. It's time to replace many of them, much of those assets, and this is absolutely the worst time.

Now, it has been addressed by both speakers so far. There is a political climate of not raising rates, of transferring funds that is very difficult at a local level for the professionals running the authorities and the utilities at the local level. It's also very difficult for the Board members and people that represent and oversee these organizations.

And the context and the last point here about how do we get the public to focus on. I will agree with Bill, that the political context of this discussion has not been accurate. And focusing on the exceptions who have been abusers of the system for whatever purpose, whether it's the municipal level, at an authority level, whatever. All levels of government have bad apples. To raise up the bad apples in the utility authorities, the local level as an example, as a serious problem, this is probably perhaps the most professional set of government managers, executives, that New Jersey has for a long period of time consistent. Many of the leaders and executives who run these facilities and these authorities have been in place for decades and are well versed on background of financing and maintenance and the future needs. Their technical expertise, their knowledge of the system and how to solve problems, environmental problems, build around solved by water supply and wastewater systems should not be taken lightly. And the salaries, the perks, are not the focus. Professional folks in this business need to be compensated adequately. That isn't the focus. There are reserves that should not be easily accessed.

Now, the Legislature is responsible for basically making this okay and as a God-given right of municipalities to transfer that. That needs to be reversed. And the education needs to be focused on the Legislature.

The AEA has proposed draft legislation that makes the dissolution of authorities and the transfer of money a much more public process, and it's critical, about this time last year was building some steam. The political climate changed that completely and the economic climate changed that completely. When the legislator who was willing back and understands the issues says, "You know, the time is just not right," we have to listen to that person because they know what they're talking about. They know what the situation is down the street and what's possible to accomplish. Somehow we have to turn this around.

There is a huge educational process that has to happen and it has to involve us, the professionals who are in business, both private and public. And we're engaged here. The people we need to talk to aren't in this room.

Except the other part of this equation that I think has not successful and hasn't been focused on enough and hasn't -- there hasn't been enough responsibility, is I think the environmental community of New Jersey needs to understand this issue much better and also needs to be a partner in this discussion. That will make our voice broader, deeper, stronger.

I reach out, and I know all the authorities feel this way, to the environmental community to join hands in this effort to reeducate or educate the public, the legislators, both the local level and state level. We need to change this around quickly.

Thank you.

MS. SANCHEZ: Thank you.

Teresa Peterson.

MS. PETERSON:

Good morning. My name is Teresa Peterson, and I am the President of the American Society of Civil Engineers, New Jersey Section. We appreciate the opportunity to speak to you this morning in response to your request for testimony on the topic of New Jersey's water infrastructure.

Founded in 1852, ASCE represents more than 140,000 members of the civil engineering profession worldwide and over 4,400 members in New Jersey. We are dedicated to advancing the science and profession of the civil engineer for the welfare of humanity. ASCE facilitates the advancement of technology, advises on matters of public policy and advocates infrastructure and environmental stewardship.

Noting that the current management of our water infrastructure results too often in systems that are run to failure rather than managed for success, this request for testimony seeks input on standards of performance for asset management, identifying responsible parties for assessments, recognizing and rewarding successful utilities, facilitating improvements, assuring sufficient asset management funding, and securing support, public support.

While there are a host of recommendations and solutions from individual experts, ASCE would like to offer two specific points. First, ASCE believes that proper asset management is a necessary first step in understanding the scope of the challenges facing New Jersey. And second, that water infrastructure management can be improved by the appointment and retention of qualified professional engineers to decision-making and management positions within our governing, authoritative, and regulatory agencies.

With a population of over 8.7 million people, New Jersey remains one of the most densely packed states in the nation. In 2007, the New Jersey section released its report card for New Jersey infrastructure. Drinking water received a grade of C, while wastewater received a D. These grades are based on the age and general condition of the assets, availability of funding, and their impact on quality of life issues.

The 2009 ASCE national report card issued a grade of D minus for drinking water across the country, noting that over 7 billion gallons of treated water are lost each day through leaking pipes. In New Jersey, we lose over 60 million gallons of treated water each day.

In our 2007 drinking water needs survey and assessment, the US Environmental Protection Agency identified needs of over $334 billion over the next 20 years to communities across the country to continue to be able to provide safe drinking water to the public. Of this amount, 200 billion representing 60 percent of the total funding is required for transmission and distribution projects. And the majority of that amount is going to refund replacement or rehabilitation projects for our aging mains.

In New Jersey, we began installing water mains in 1850s. Our conveyance system is one of the oldest in the country. But without effective conditions assessments and asset management programs, developing strategies to restore our infrastructure to a state of good repair could be compared to taking a shot in the dark. It is far easier to inspect aboveground assets like pump stations or treatment facilities. It will be costly to inspect our distribution networks, but the cost of emergency repairs can be three times as great as the cost for planned repairs. Our neglect of our buried or hidden assets has led to a situation where they have become the weak points in our systems.

That same 2007 EPA report estimates 8 billion of total needs in the State of New Jersey over the next 20 years, with 4.7 billion of that amount reserved for transmission and distribution means.

The EPA Clean watersheds needs assessment 2008 report to Congress identified over $298 billion worth of investments over the next 20 years for our wastewater and stormwater infrastructure, with $36.6 billion required in New Jersey. This represents a 137 percent increase over their 2004 estimates and includes $2.7 billion for pipeline repair and conveyance systems.

Planning for the repairs and rehabilitations required while ensuring continuity of service to customers will require initial resource investments. We cannot begin the planning process without an understanding of what we have today. Asset management programs force owners to evaluate the conditions of their systems and may reveal hidden problems.

EPA defines asset management as the management of infrastructure capital to minimize the cost of owning and operating utility systems while delivering high quality service. Effective management programs allow owners to establish priorities, plan projects, monitor the progress, and evaluate the success of the program. They can also offer transparency which may help restore public confidence.

As to my second point, in accordance with ASCE's policy statement 416, ASCE recognizes the importance of having qualified professional engineers leading agencies that are integrally involved in the practice of engineering. In addition, Title 45, Chapter 8 of the New Jersey statutes permits only those engineers licensed in New Jersey to practice engineering. Professional engineers are licensed only after achieving significant levels of education, experience, and examination, thus assuring their technical and professional confidence. Professional engineers are subject to rules of conduct imposed as a condition of licensure.

In New Jersey, licensure of professional engineers is regulated by the Department of Law and Public Safety which explicitly highlights our responsibilities and liabilities for the safety, health, and welfare of the public. It was important that the management who established the policies and procedures have the expertise to understand the implications of their engineering decisions.

Thank you for your time. And we will be submitting written comments.

MS. SANCHEZ: Sara Bluhm. Is Sara Bluhm in the room?

MS. BLUHM:

Good morning. Sara Bluhm, New Jersey Business and Industry Association. We represent over 22,000 businesses in the State, and we find that in most utilities, businesses are the major user and ratepayer. We're looking at this from the perspective of the need for comprehensive planning.

Right now, the Board of Public Utilities who are examining the Energy Master Plan, which is looking at the electric and natural gas infrastructure, and this is looking at water, but really looking at a need for the State and all of our different utilities and providers to be looking at what is our needs for the next 20 years and who is going to be paying for this.

Right now, the Board of Public Utilities, they're also looking at the D6 surcharge as a way to pay for water infrastructure and how our ratepayers are going to be assessed for all of this.

We're looking at also how is electric infrastructure going to be upgraded. I think both the snowstorm and hurricane have shown us what can happen to business and how we can be interrupted when we lose our utilities. I know many of our water processing plants also were impacted by electric outages. And looking at how do we plan so that we have the lowest interruption but also have the best infrastructure upgrades being made.

In terms of education, there definitely is a need to educate businesses on what infrastructure is coming into their business, how they can be impacted, and also what the future costs are for having a reliable system.

Looking at different resources, we would also say, too, that there's a need for education for both our local providers as well as our regulated community to use all of the sources available to them. I know many of our regulated water companies have recently started using Board of Public Utilities Clean Energy Fund for both upgrades to facilities, as well as installing solar, and encouraging our local authorities, as well, to be taking advantage of some of these programs so that we can lower costs to ratepayers in other areas besides just the water service.

But one of our big concerns is who's going to ultimately pay for this and how are we going to pay for it. In fact, to the educational plan as well so that we know if we have a 20-year comprehensive planning process for all of our utilities, how are we going address electric, natural gas, and water infrastructure and what the rate impact is going to be for businesses.

We look at mitigating risk and also being able to plan. And I think these tough economic times have shown business how to get down to the bare minimum but looking forward, how can we plan what the upgrade costs are going to be so that that can be covered into the cost of business? And our companies that are recovering and trying to get through this recession, that they can start to plan for these costs as well.

So if we know what is on the horizon for the next 5, 10, 15, 20 years, then that would be able to be factored in and our companies can continue to thrive here and use the infrastructure that's in place. So we just wanted to raise that.

Everyone is for infrastructure and having the great quality of life and business opportunities that we have here in the State. I think it just ultimately comes down to how are we going pay for this and how do we minimize the risk for ratepayers as well.

Thank you.

MS. SANCHEZ: Steve Blankenship.

MR. BLANKENSHIP:

Thank you. My name is Steve Blankenship. I'm the Executive Director of the Hammonton Township MUA in Atlantic County. I don't have prepared remarks but will submit written comments after this.

Basically, I think this issue is part of, really, what I call stewardship. As an employee, a public employee, we're given a set of assets that are very important to the economic development of our townships, of our counties, of our areas, the health of the people that we serve.

Water is a product that you ingest. All the other utilities, you don't do that. So we have a real key mission here that we need to focus on. And I see stewardship as part of that. And again, I go back to stewardship.

We come in, we work here. As Mr. Dovey noted, many people put many years, decades of work into this. And so I think a lot of us in this industry like to think that we come in, we can do our part, leave it a little bit better for the person that's going to take over after us and for people that are after us. And I think this is a key point in how we can do that.

For the standards of performance, I think industry-wise there's a lot of benchmarks that are available to many different utilities and to the regulatory agencies that can be looked at, and I think that would be a place that we should start and come up with some key benchmarks and let's see how things go with that.

Who should be responsible? I think the utility themselves have a responsibility, you know, with this transparency that's going on, many of us have developed websites and other means of putting out reports. And I think this is something, depending on what we're to come up with, that could be added to that. So I don't see that as being something that would be hard to do.

I think in many cases, especially in public utility, we kind of lay low. We try to get our job done. We don't want publicity and things like that. And I think maybe that's something that we need to change. I think we need to start to toot our horn to say what we are doing. And that maybe goes down to the last bullet.

How do we recognize and reward successful utilities? I think those utilities in a way -- it's nice to have an award, but it's pretty hard to come up with a criteria. I think the best reward is really to the ratepayers. Your rates tend to be lower. Your out-of-service experiences, your quality issues tend to be lower. You're going to be attract, as I said, business to your area. And I think that recognition should suffice.

For those that are doing a poor job, I think we also with this thing with consolidation, I think there's probably going to be some small utilities out there that are going to have an issue and they're not going to be able to do that. I think people have to take a serious look at that.

Does everybody that is a utility, are they going to be able to stay a utility as regulatory issues increase, as financial pressures increase? And is the political wherewithal there? So some very small systems may not be able to survive. They may have -- we may have to come up with a different program there.

But I think one of the other things is poor systems shouldn't be rewarded. When we talk about funding, there should be something there. Why if you're doing a good job and somebody's not, why should they get a benefit? Why should they move up on a list for funding or grants or things like that? As Mr. Doll also noted, a lot of our systems were built with grants. Basically, that was our parents' money, our grandparents' money through taxes and things like that. I think that's the other thing that people really are going to have to realize, that there is no free money out there. It's our money, whether we borrow it or whether we save it. It's still our money that we're going to have pay for or the people after us are going to have to pay for. And I think many systems for too long it was the government's going to bail us out, whether that be the state government or the federal government. You know, they're going to come through with a grant and that will help us rebuild that.

I think we have to get over that. I think the asset management would help us doing that.

As a municipal entity, also, we have a lot of contributing capital, especially in a lot of suburban systems. Basically, you've had a lot of residential growth. Developers come in, they put the infrastructure in, and then they hand it over to the utility.

Well, automatically your costs are going greater because a lot of times they're starting with undeveloped land. When you as the utility go back to rehabilitate or replace that infrastructure, you're no longer undeveloped. You have houses, you have cars, you have people there that you're going to have to deal with. Automatically your costs are greater. So that's something that I think we haven't looked at and really talked about.

How do we fund? I think one of the things from a municipal point of view that was mentioned earlier is approximately, I don't know, half a dozen years or so ago, this law that was put into effect where townships can now ask for up to 5 percent of your unrestricted funds and things along that line. That's got to change. Basically, if you have a $10 million budget, you're going to be handing over half a million dollars a year. That adds up very quickly. And that's just a lot of small budgets. That's money that can't be reinvested into the system. That's money that's not going to go towards jobs. Because, again, all of the infrastructure reinvestment creates jobs and it creates a utility that is ready to service the customers. And again, that's going to be an economic driver. And I think that's another message that needs to be spoken about.

So while towns have needs, and right now we're in a very fiscal precarious situation in many cases, I think the shared services is a way to go. That's a way, I think, all of us on the public sector need to take a look as to how can we share some of our services, especially on some of the technical ends. Can we do it more efficiently? I don't necessarily believe that the utility authority should be dissolved, because they were created for a reason. They took on a lot of debt, they took on the expertise to do this. And so I think we still need to play a viable part. But does mean we need to continue to operate as an island? I don't think so.

I think one of the other things that we need to take a look at on the public side is with regional authorities. You know, a sending authority to a region authority. Is there other things that we are do to share our knowledge, to share our services and things along that line.

Purchasing cooperatives. We've just entered into one for electricity that's going to serve us, like, 30 percent on our electric bills. So those are the kinds of things that I think are key.

How do we convince the public to support these actions? I think it needs to be a joint education venture. I look at it as part of the litter campaign. It's not something that's going to happen immediately, but it's a long-term just like our asset management plan. We have to really get people to think about that. We talk about the legislative people, but really who are the people that are really going drive the change? It's going to be the person that we service.

Politicians are going to face a lot of pressures. They tend to want to deliver things. Everybody likes to be liked. But it's really going to be up to our ratepayers if we can educate them through a cooperative effort through industry, through environmental groups, through the State DEP that tell them what the importance is and how we can save them money, how in the long run it will save them money, how it will attract jobs, how it will help our economy.

Thank you.

MS. SANCHEZ: Jeff Tittel.

MR. TITTEL:

Thank you. Jeff Tittel, Director of New Jersey Sierra Club. I just wanted to start off and talk about, I think, the state of our water in New Jersey I. Think most people here, you know, sort of have an understanding because they try to work with it on a daily basis.

New Jersey has probably some of the most serious water problems of any state east of the Mississippi. We're a state where either we get too much water and we're seeing flooding and sewer plants getting overrun and CSOs hitting our rivers creating a witch's brew that's flooding properties. On the other side we have seen some major droughts and we have streams because of overdevelopment the whole water budget for that stream is gone. What used to be a 10-year drought happens every other year. Places like the Ramapo where we see flooding one year and it's dry as a bone the next year. And so we have serious problem. It's not going to go away. It's going to take a lot of hard work and a lot of political commitment that has never really been there. We've always nibbled around the edges, but we haven't really taken things on full.

When you think about back in 1999, the Passaic River right before Hurricane Floyd hit was running at over 10 milligrams per liter of nitrates, impacting water supply in Passaic Valley. At the same time as the Wanaque Reservoir, its filters were getting clogged with algae, because in order to meet our water deficit in the state we pump up nutrient laden waters from Two Bridges up to the Wanaque Reservoir, and that creates major algae blooms and other problems in our reservoir. And so we're at a stipulation where we're almost running out of water and without the Rockaway Valley Sewage Authority doing some things with their plant to lower their nitrates, we would have had a serious calamity.

In any given year, Bergen County can run out of water. They don't have enough storage capacity, and we've seen major problems there on a given year. And so many towns around New Jersey that have to go on water restrictions even in a year where we have flooding. So you know we have serious problems.

We also have serious problems with water quality. 65 percent of the streams in the state are impacted for phosphorus. The number is probably larger, but we don't have enough monitoring networks out there to know.

We have seen salt water intrusion move up Cape May Peninsula faster than the traffic on a Sunday afternoon on the Parkway. We've seen salt water intrusion in Salem County and barrier islands and a lot of other places. We've seen depleted uses impacting us all over. In fact, some of the places that we want to grow may not have the capacity to grow because City of Newark has sold a lot of their water capacity out to the suburbs to get money and now they may not have the water for themselves. You know, we had a major battle years ago to stop Trenton from taking a couple million gallons a day of sewage from the Merrill Lynch site, which would have brought Trenton's future growth. You've seen Jersey City sell water to suburbs above their own reservoirs and then get more pollution in their reservoirs from it.

So we have a system that's really broken and out of balance. What we really need to do is start looking at some of the bigger issues that we have to deal with, like CSOs. Combined sewer

overflow is a major problem in our cities. We really have no programs in place or funding in place to really help those cities who don't have that money. We want to see Patterson redevelop, but every time there's heavy rains, you see the raw sewage coming out of the ends of streets and up manhole covers. In Hoboken there's areas of the city that actually flood from sewage water because it backs up. They're below sea level, and what they did is they put a pump that could pump it out into the Hudson River. Not exactly good for the Hudson River water quality.

We need to tackle these problems. And we're not going to tackle them by just saying we need to do something; we actually need to come up with the resources and the funding to do it. There's legislation that we support in the Assembly and Senate to require blue and green roofs in area that have CSO problems to help deal with some of the stormwater issues to stop some of that water from coming down.

We need to look at water reuse for cooling. Power plants and other industrial users are some of the biggest deplete of uses we have in the State, and we need that water for potable water. We can't keep using it for cooling when we're running out of water in so many parts of the state. And so we really have to we take that on and require water reuse for cooling.

We also need to be looking to the future because it's very expensive to retrofit. But there's no reason why large commercial and industrial facilities don't use recycled wastewater for their sewers. There's no reason why we don't develop as part of a green and blue roof cisterns and other things so that we can use the rainwater off the roofs for non-potable uses like watering lawns and gardens instead of taking fresh water all the time. We've seen the amount of water we use go up, but the amount of supply we have in the state is staying the same. And so we really need to take these on.

Pennsylvania put in a flush tax to help get funding to do upgrades for sewer plants and to deal combined sewer overflow and INIs. We need to be looking at that. I know tax is a dirty word, but without the funding we're spending a lot of good time and resources trying to deal with serious problems that we won't have the resource to do, whether you're a sewage authority or water company or government. Without the funding, it's not going to happen.

And it's the same thing true with the water supply. We need to be buying up land and protecting those water sources, whether it's well protection areas and recharge areas where the key headwater areas above are streams. And that's why we've always supported the water surcharge as a way to come up with a stable source of funding to buy that open space to protect that water.

We want the State to grow and we need to grow. But the City of Camden, water supply is being threatened by toxic groundwater that's coming closer and closer to their well field. They had to build a new well field because their old well field was contaminated. And meanwhile, the tri-county pipeline that's supposed to help Camden and Pennsauken with water supply is going past those cities down to Gloucester and Salem County for more suburban sprawl when our urban areas need that water. And we paid for that system and now we're going to see that pipeline heading south. And those places that we actually want to grow won't get the water and won't have the water for future generations and for the growth that they need.

We also need to deal a lot more with non-point pollution or pointless pollution, as I sometimes call it. Florida had put together a stormwater utility program. It worked. We need to be thinking about doing stormwater on a regional basis and having the funding to do retrofits. You know, everybody talks about Barnegat Bay. Well, there's 2,000 malfunctioning stormwater basins within just that watershed. And they need to be cleaned up and fixed. That's a lot of money. And we are not going to get it with a little bit of loans from the Infrastructure Trust

because we don't have that kind of funds. And you can go basin by basin like that, whether it's Passaic Basin. I see Pat there, and he always complains about everybody's going after the sewer plants to reduce and we leave non-point alone. We've got to go after the non-point in our urban areas, but we need funding to do it. The cities don't have the money. The federal government is not in the business anymore, so the state is going to have to come up with a plan to do it. And having a utility and charging a small discharge fee because non-point discharges really are becoming point sources because it's so concentrated. It's the only way we're going to get the funding to do it.

So I think the point that I wanted to make is that we can do a lot as far as cost savings and trying to get the smaller utilities to merge. We can do a lot of things with combined staffing and acquisitions for those sewage authorities. We could be looking at renewable energy. The City of Boston gets 25 percent of the power to run sewer plant from hydroelectric turbines that are discharged and capturing their methanes to create electricity and they have windmills. We could be doing that to lower the bills, but we can only do so much. We can merge every sewage authority and we're still not going to have enough money to deal with CSOs. We can come up with cleaner renewable energy for the plants to lower costs, but it's not going do enough. So we need that investment of capital.

We have sewer systems in the state that go back to the Civil War. We have water pipes that are still wrought iron that are put between logs to keep them from cracking. We need to do those upgrades, especially in the urban areas. Without that, the State is not going to grow. We're not going to have an economy for our future. And our three largest industries, food processing, pharmaceutical, petrochemical, and we rely on that. So I say to the Clean Water Council you're going to have to come up with some tough recommendations. And even if the political leaders don't want to hear it, they need to hear it.

Thank you.

Closing

MR. GOLDFINE: Is there anyone else who would like to make a comment? I get to go last then, right? MS. SANCHEZ: Right. Best for last.

MR. GOLDFINE: I just like to wrap up quickly. I'd like to thank everyone for coming here today. I'd like to thank all the presenters. I think this was very interesting. I think it was very important today. But I would like to say very quickly I don't think the system is broken, but I think Jeff's last analogy about the traffic moving up the Parkway on a Sunday afternoon, because I've been in it, is very much like where we are. We're moving. We're moving slowly. We're moving surely. The problem is that there's something else that's creeping up behind us like the salt water intrusion in Cape May County, and it will overcome us. We will not be able to meet those needs. Rick Dovey pointed out before, a lot of the facilities that we're talking about were built in the '70s and they are now almost 40 years old. They need renewal. They need the investment. We can't keep traveling on the investments that we made 40 years ago.

A lot of cases, as some of the presenters the rules have pointed out, the rules have changed and a facility that met the standards in the '70s does not meet the standards in 2011. So these are important things and these are why we need the infrastructure management, we need asset management, and we need the investment in the system. Unfortunately, the pressures today are in the opposite direction.

With that, I will conclude. I'd like to ask that the submission of detailed written comments is strongly suggested to augment testimony. And they will be accepted until the end of the calendar year. Testimony should be addressed to the Joint Public Hearing on Infrastructure

2011 and mailed NJDEP, Division of Water Quality. We can give you the mail code. It was on the back of the agenda, because I know no one's going to remember from my saying it. And they can be directed to Geri Skrajewski at 401 East State Street, Post Office Box 420. They can also be mailed to her e-mail address.

Again, I'd like thank everyone. I'd like to ask the members of both Councils to remain after the hearing for a brief conversation. Again, thank everybody here.

(Hearing concluded at 11:55 a.m.)

C E R T I F I C A T E I, Lisa C. Bradley, a Certified Court Reporter and Notary Public of the State of New Jersey, do hereby certify that the foregoing is a true and accurate transcript of the testimony as taken stenographically by and before me at the time, place and on the date hereinbefore set forth, to the best of my ability.

I DO FURTHER CERTIFY that I am neither a relative nor employee nor attorney nor counsel of any of the parties to this action, and that I am neither a relative nor employee of such attorney or counsel, and that I am not financially interested in the action.

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LISA C. BRADLEY, CCR CCR NO. 30XI00228700 Dated: December 27, 2011