DATE

ENVIRONMENT, PLANNING & AGRICULTURE COMMITTEE

OF THE

SUFFOLK COUNTY LEGISLATURE

MINUTES

A meeting of the Environment, Planning & Agriculture Committee of the Suffolk County Legislature was held in the Rose Y. Caracappa Legislative Auditorium of the William H. Rogers Legislature Building, 725 Veterans Memorial Highway, Smithtown, New York on May 5, 2014.

MEMBERS PRESENT:
Leg. Kara Hahn, Chairwoman
Leg. Al Krupski, Vice Chair
Leg. Sarah S. Anker
Leg. Thomas F. Barraga
Leg. Thomas Muratore

ALSO IN ATTENDANCE:
Presiding Officer DuWayne Gregory
Leg. Robert Calarco, 7th Legislative District
George M. Nolan, Counsel to the Legislature
Sarah Simpson, Assistant Counsel to the Legislature
Lora Gellerstein, Chief Deputy Clerk of the Legislature
Tom Vaughn, County Executive's Office
Craig Freas, Budget Review Office
Laura Halloran, Budget Review Office
Sarah Lansdale, Director/Department of Planning
Lauretta Fischer, Department of Planning
Frank P. Castelli, Economic Development & Planning
Glynis Berry, Peconic Green Growth
Walter Dawydiak, Environmental Quality, Health Department
DeWitt Davies, Chief Environmental Analyst
Cornelia Schlenk, Sea Grant Program
Alison Branco, Peconic Program Director
Marge Acevedo, Aide to Presiding Officer
Catherine Stark, Aide to Leg. Krupski
Brendan Chamberlain, Aide to Leg. Muratore
Justin Littell, Aide to Leg. D'Amaro
Ali Nazir, Aide to Leg. Kennedy
Michael White, Long Island Commissioner/Aquifer Protection
And all other interested parties

MINUTES TAKEN BY:
Diana Flesher, Court Reporter

THE MEETING WAS CALLED TO ORDER AT 10:03 AM

CHAIRWOMAN HAHN:
Welcome everyone to the May 5th meeting of the Legislature's Environment, Planning and Agriculture Committee. If we could all rise for a salute to the flag led by Legislator Krupski.

SALUTATION

There are no cards. There are no cards submitted. Would anyone like to address the Committee? Anyone? Seeing none, we'll close the Public Portion. We do have a presentation this morning. We have representatives of the Division of Planning and Environment and Environmental Quality, who will offer a presentation on the Aquaculture Monitoring Program and Harmful Algal Blooms. Come on down. Thank you for being here.

SLIDE SHOW PRESENTATION

MR. DAWYDIAK:
Good morning, Madam Chair, members of the Committee. Thank you for the opportunity to be here. My name is Walter Dawydiak. I'm the Director of Environmental Quality for the Suffolk County Health Department's Division of Environmental Quality.

I'm joined by DeWitt Davies, Chief Environmental -- Chief Analyst for the Suffolk County Planning Division; and Cornelia Schlenk, the Assistant Director for New York Sea Grant; and Alison Branco, our Peconic Program Director. Dr. Branco is also here to answer any questions.

We're going to give you a little bit of background on the history of Suffolk County involvement in the harmful algal blooms. We'll talk about why we're embarking upon this action plan and how we're going about the Peconic Aquaculture Lease Monitoring Program. Got a few slides that I want to go through fairly quickly. Feel free to ask questions at any time.

This slide is taken with permission from Dr. Gobler. A few of these slides are from our prior presentation of his -- that he did with me a couple of years back. This is a nice one because it places into context the history of the HABs. We had these green tides in the '50s when the Moriches Inlet closed up from duck farm waste. Once the inlet was open, we had this 30-year stretch without harmful algal blooms.

Now just by way of background, the harmful algal bloom, my layperson definition of it is an algal bloom that reaches some level of intensity, frequency or duration that it causes toxicity to either humans or the ecosystem.

So we had this period of time through '85 where we had a very robust clam and scallop fishery that was disrupted by the Peconic Brown Tide blooms of the mid-1980s that gave birth to the Brown Tide Study in the year of the Peconic Estuary Program. These blooms were so intense that they actually overwintered and survived throughout the ice. It was a three-year period from '85 through '88. We had never seen anything like it in terms of either intensity, frequency or duration.

The light shading decimated the eelgrass. It wiped out a nationally significant scallop population. About 28% of the country's scallops were from the Peconics. They've rebounded somewhat, which is good news. We still have a ways to go. We'll talk about that later.

So the Brown Tide came back again in '91, '95 in the Peconic Estuary. And then it kind of petered out. And there's various series about that we can talk about, but it's kind of taken up camp in the South Shore Estuary Reserve, which is terrible news because it's taken to decimating whatever was left of that nationally significant hard clam population, multimillion dollar fishery, 6,000 jobs, part of our lifestyle culture, folklore, substantially eradicated by this recurring Brown Tide bloom.

Next thing we faced was cyanobacteria, which is a blue/green algae, which is a human health risk that appears mostly in freshwaters and is affecting some of our bathing beaches. Cochlodinium polykrikoides is called the Rust Tide colloquially. It's caused a number of fish kills and harmed the ecosystem mostly in the Peconics but also Shinnecock and more recently Great South Bay. Alexandrium, a Red Tide, causes paralytic shellfish poisoning. We'll talk about that in a moment. That's been detected virtually every year at harmful levels since 2006. And since 2011 we've been looking at dinophysis, particularly in the Huntington/Northport area.

So this is a just a map of 2013, which was a banner year for these harmful algal blooms. You see that substantially all of our intercoastal waters are blanketed by these -- by these harmful algal blooms. The Red Tide paralytic shellfish poisoning, which started out in Huntington/Northport. Now, in Meetinghouse Creek, Mattituck Creek, Sag Harbor and Shinnecock Bay, the diuretic shellfish poisoning, DSP from Huntington/Northport Harbor are now being picked up at very high levels in Meetinghouse Creek. The Rust Tide C poly substantially affects the entire Peconic Estuary and also made it to Shinnecock Bay back in 2013.

Cyanobacteria is one of the biggest concerns for us as a Health Department. There was an account of a dead dog on the East End back in 2012, I believe. It was autopsied by Cornell University. It was confirmed that that animal ingested microcystin detox and associated with cyanobacteria; and that this indeed resulted directly in the canine's mortality. We haven't had human cases here. We want to keep it that way.

Lake Ronkonkoma was closed on a number of occasions this past summer due to C poly. There is a camp beach at D Pond. It's a Boy Scout Camp -- cyanobacteria -- I think I said C poly -- I apologize. D Pond was also affected by cyanobacteria. Lake Agawam and Mill Pond further east also had some very high levels. And these are levels that as per World Health Organization standards are likely to have significant health risk if substantial exposure winds up occurring. Brown Tide, again, very intense throughout the South Shore Bay system this past year.
So what causes a Brown Tide? Nobody can say with 100% certainty, but after a lot of time and effort, it's pretty universally accepted that nitrogen is a primary contributory factor. And from the bottom up it's probably a causal factor, particularly organic nitrogen. Some of the seminal work was done by Dr. {Nuzzi} in the Health Department, first picking up little spikes of organic nitrogen that preceded Brown Tide blooms. {Lorashen Wallace} did some more work that correlated the ratios of inorganic and organic as they fluctuated with climate changes and precipitation patterns. That's really been validated and pretty well accepted that not only do harmful algal blooms not bloom unless they've got the fuel there, but this disparity of organic and inorganic nitrogen is probably one of the causal factors. It triggers a bloom.

From the top down there's a very prominent hypothesis that Brown Tide when at low levels in a health ecosystem is kept in check by grazers like shellfish. When that part of the ecosystem is taken out, they can explode and persist. So the mechanisms that cause its triggering and its persistence are related, but a little bit different. So when both of those are at work, and that's one of the issues in the South Shore where an effort to seed the South Shore failed due to intense Brown Tide bloom, there's still too much nitrogen going into the South Shore Bays and not enough of it to develop shellfish population. So we haven't had success in the South Shore even though the scallops have become -- begun to come back, which is good news.

LEG. KRUPSKI:
Excuse me.

MR. DAWYDIAK
Yes.

LEG. KRUPSKI:
Just go back to that last slide. Did anyone ever look at the loss of vegetated wetland over the last

50 to 75 years as part of this problem of excess nutrients in the water column? If you look at the shoreline hardening, the cut and fill operations, you know, we've lost how many thousands of acres on Long Island, not only Great South Bay, but also in the Peconics due to, you know, development. How -- has anyone tried to quantify that in terms of how much nitrogen and other nutrients could have been filtered out and used in that ecosystem that now is just completely walled off and completely basically sterilized? If you take a look how -- how it's been filled; cut and filled.

MR. DAWYDIAK:
Legislator Krupski, that's an excellent observation. And if I could just hold that off until the very last slide about how we're putting all this together. Unfortunately I'm not going to have an entirely satisfactory answer for you because that question is not fully resolved but it is definitely on the radar screen as one of the issues that needs to be integrated into this process better.

So the last real work plan we had, the last real strategy we had to address harmful algal blooms was in 2001 with the Peconic Estuary Programs Brown Tide Chapter. Brown Tide was still irrelevant in the Peconics back then. It's still irrelevant in the South Shore, but we really have no coherent overarching strategy to either monitor, research, mitigate pollution control or restore resources in relation to all of these different algal blooms, which have somewhat overlapping related sources, but they happened at different times and different places. This is a real weakness in the Peconic Estuary Program as identified, that we in the Health Department have identified, that we worked with Sea Grant to come up -- and the Economic Development Planning Department to come up with the solution for, which is to update our harmful algal blooms strategy.

Back in the 1990s the County spent about a million dollars on Capital Project 8228, which was then the Brown Tide Study. And we looked at all of these issues. It was eventually leveraged into $3 million in Federal research funding from the National Oceanic and Atmospheric Administration. Miss Schlenk could speak more to the process and outcomes of that. It was a wonderful, successful effort that provided a lot more information about the Brown Tide. The scallops are coming back. They're maybe at 10, 20 percent of historic levels. It's major. It's not where it should be. We're hoping the trajectory continues in the Peconics. There are efforts being made to improve submerged aquatic vegetation.

The big thing to emphasize is that there's been a tremendous amount of work being done that's been done in the '80s, '90s and 2000s to reduce nutrient loading. The duck farms are either not there or have been significantly upgraded. That was a major source of organic carbon and nitrogen that took years to burn itself out and minimize those levels of organic nitrogen that were going into the Bay.

Every wastewater treatment plant discharges to surface waters. And Suffolk County has been upgraded to tertiary and in most cases advanced tertiary treatment. Again, a major direct source of nutrient inputs into the Bay that's been mitigated. The big problem is non-point source pollution and we'll talk about that in a moment. That's the pre-existing non-conforming lots that are out there with no advanced wastewater treatment. They're still pumping nitrogen into the system. And that's one of the things that's closely related to this initiative that we want to emphasize.

So the total maximum daily loads are in place. Wastewater treatment plants have been upgraded. And as the Brown Tide waned in the Peconics, we realigned our focus on public health related harmful algal blooms, which is Capital Project 8224.

So one of the big ones we focused on is C poly, the Rust Tide, which has occurred every year since 2004 in the Peconics on multiple occasions with associated fish kills and aquatic mortality; crept into Great South Bay a couple of years ago; has also appeared in Shinnecock Bay. There was a massive bloom this past year. And when this organism occurs, it not only turns the water to a blood-like color, but it can cause rapid mortality in fish, shellfish and larvae. So Dr. Gobler is working with us on this, not only to look at causal factors, temperature mechanisms, toxicity, things that encourage

its forming, but the way that it overwinters and moves in cysts. And we're looking at environmental measurement technologies, fluorescent insight to hybridization and epi-fluorescence light microscopy. It's a protocol that we can either do in our lab or have Dr. Gobler do to better figure out exactly where and how this organism is moving. And, again, the hope is to figure out exactly why it's there and what we can do about it, whether it's nutrient management or some other resource restoration techniques. Before you really understand what's going on with the organism, you're just shooting darts and not really knowing whether anything you're doing is having any particular effect.

So this Red Tide was actually first picked up in our waters by the Health Department back in the late 1990s. It was one of those Northeast blooms. It was happening in Rhode Island and further Northeast. We thought our waters were not really prone to this, that it would not really hit us, but we wanted to test this anyway. We found the organism but not the toxins at levels it would be toxic to humans. So it was kind of back burner, but it was picked up by the State DEC as part of the Marine Biotoxin Monitoring Program. And in 2006 they found very high levels of a toxin itself in Huntington/Northport. Every year in this sort of warm -- the time window when the water starts to warm in mid to late May, the warning goes out from the State that the waters are closed due to this toxin and it stays closed until the toxin levels are reduced. And, again, this is an organism that's now been picked up in a number of other places over the East End.

Dinophysis is one of the newer organisms on the block. Dr. Gobler's done a lot of work on this, diuretic shellfish poisoning. He saw record levels back in 2011 can cause human health impacts: Diarrhea, nausea, vomiting, cramps. Again, either paralytic or diuretic shellfish poisoning. We're not aware of any human cases that have happened in Suffolk County yet. And, again, we want to do our best to keep it that way.

The cyanobacteria back in 2004 Dr. Gobler did a survey under contract to us under this Capital Project. And we looked at 20 lakes and it was a bit of a surprise that 15 of these lakes had this blue/green algae and 5 of them were moderate to high risk, meaning any exposed contact, ingestion of the waters could harm humans in a recreational setting. So we started looking for this more routinely. Initially we used a tat test to see if the water was sticky. That was one of the ways to determine whether it was cyano or some other harmful algal bloom. This is actually like a thick oily paint, when you stick something in it, it'll stick to whatever you're putting in. And that's one of the telltales. But our staff is better at just recognizing it based on color and appearance.

Once the water looks blue/green, kind of oily, the beach is closed. A test kit has been developed. The levels of toxin need to be reduced to safe levels before a beach is reopened. And that's 10 micrograms per liter microcystin because sometimes even after the blue/green color disappears, there can be residual toxin in the water that can be a harmful human agent. A number of health effects here: Rash, hives, skin blisters, eye and nasal irritation, everything to liver, kidney and neurotoxicity. And, again, that dog's death was in Georgica Pond in East Hampton back in 2012.

So, we did work closely with State Health. This is a State and national issue. We developed a very detailed protocol on warnings advisories, closures and procedures. Our sanitarians are all equipped with kits and they know what to look for. And we're at least happy that we're at the limit -- or the state of how to recognize and address this. Although we want to know more what causes this and how to present -- prevent this from happening. And, again, Dr. Gobler's report's going to help us do this. This is a shot at Water Mill Pond in Water Mill.

This is the area of Red Lake, Ronkonkoma. This blue/green water can cover very significant areas and it could move with the wind and with currents.

So how do we spend our money? Over the past 11 years for this Capital Project 8224, a lot of it was spent on equipment, almost $200,000 for handheld water quality monitoring devices, one sampling vessel, microscopes, engines and LSI Sondes which is continuous underwater monitoring

equipment that can look at temperatures, solidity, Ph and other marine parameters. We've also done a lot of contractual work with Dr. Gobler and others to monitor for the presence and to look at some of the causes of these things. And the end game is always to leverage the monitoring, make sure we know who's looking where and how so that we're all doing it most efficiently; and also to support planning necessary for either pollution control or resource restoration; where are we going to best cut down on the nitrogen, how do we do it and how do we restore things like clams and scallops and eelgrass most effectively knowing that these are a fact of life for the foreseeable future until we get them under control.

So, again, specific examples, the water quality's gotten better in some areas. That's not to say that the ecosystem is fully rebounded. It's certainly not. The scallops are coming back. I think we're doing a much better job protecting public health from Red Tides and blue/green algae cyanobacteria than we were a few years ago. We want to continue to better understand what the causes and impacts are, develop programs to manage those. In the South Shore the ideal goal would be to reduce the terrestrial or land base nitrogen mostly from wastewater and concurrently restore the hard clam population to have a healthy self-sustaining ecosystem for the economy and the quality of life.

Again, at Suffolk County we're blessed with over 190 bathing beaches. That's more beaches than any other county in the country with the exception of {Barnstaple}. We have a fishing industry worth almost a billion dollars; boating we're a three quarter billion. All these things are related. This comes back to Legislator Krupski's point, you know, back in the '90s, a mean benchmark was dissolved oxygen. The totally maximum daily load was geared toward having enough oxygen so that if a critter swims there, it won't go belly up and die because it can't breathe. It's a lot more complicated than that. It's not a food chain. It's a food web. All these issues of wetlands and eelgrass and coastal resiliency are connected. So in answer to your question, Legislator Krupski, the State is updating its status and trends on wetlands and we're integrating those into the Comprehensive Water Resources Management Plan that I'll talk about in just a moment.

I wanted to turn the microphone over to the Assistant Director of Sea Grant, Cornelia Schlenk, to talk a little bit about her organization, who they are and how they fit in with our future.

MS. SCHLENK:
Good morning everyone. My name is Cornelia Schlenk. I am the Assistant Director of the New York Sea Grant Program. And I wanted to just take this opportunity, if I may, to describe a little bit about what our program is. I understand some of you may have had some questions about our organization.

We are a research, education and extension program that's university-based. We're part of the National Oceanic and Atmospheric Administration, which is NOAA. And we receive the bulk of our funding through that organization. The main goal is to provide a link for the Federal Government to academia. So we are a university-based program. My office and the administrative offices for Sea Grant are located at Stony Brook University in Stony Brook. We are a program that is to cover the entire State so we deal with the Hudson River; we deal with Lake Erie and Lake Ontario as well as all the other marine waters around Long Island. We have a staff of about 20 people so that's not a very large staff to be covering the entire State, but we do a lot of our work through our extension program. And we fund research throughout the State. So a big part of our program probably -- the intent is for half of our program to be funding research that's important to stakeholders in trying to understand the issues about marine and Great Lakes issues.

So, for example, you've heard a little lot about Dr. Gobler. New York Sea Grant funded basically his entire graduate career and some of his earliest research. In fact, we're continuing to fund him now also as is the County to deal with some of these harmful algal blooms issues.

I think the few points that might be most useful for you to know as we move forward and there's a

description and discussion about this -- about these proposals, is that New York Sea Grant is a cost-effective and accountable organization. Being a university program, we are not a company. We are non-profit. It's a very large return for the investment. We are used to being accountable. Since we receive Federal dollars, we need to account to NOAA. We also need to account to the State because we receive State dollars through the SUNY system.

Another thing I think that might be useful for you to know is that we are non-advocacy. We are -- we take great pains to remain unbiased relative to issues and provide information to stakeholders that covers all sides of the question. We deal with the highest quality science. When we fund our research projects, they undergo a peer review process that's similar to the national -- that is used by the National Science Foundation. So we want to ensure that the work that we're funding, the research that we're funding really is of the highest quality. And the information that we bring to stakeholders, we take great pains to make sure -- we verify the source, the quality of the research and usually university-based science.

We are also open access, which I think is important for you to know because we are a cooperative program of NOAA, Cornell and the whole SUNY system. We are located at Stony Brook University, but we are not only Stony Brook University. We fund people at SUNY campuses throughout the State as well as other institutions throughout New York. And when there are experts that we need that are beyond the borders of New York, we find them and bring them in also. So we've had some examples of that with some initiatives that we've done that are similar to this. In fact, the original Brown Tide research initiative brought researchers from Maryland, Delaware, Maine and other states who are dealing with Brown Tide to New York to help us answer these questions. And similar would be done for this -- for the projects that we're talking about, or that we will be talking about at the rest -- during the rest of this presentation. Happy to answer any questions.

CHAIRWOMAN HAHN:
Does anyone have any questions at this time? Legislator Krupski.

LEG. KRUPSKI:
Thank you. I do have a question about the different -- the Brown Tide, the Rust Tide, the -- help me out here, there's another -- the Red Tide. That's it. These have been just like -- it seems like they're like newly discovered, right, since 1985. Has there been any other historical evidence of them existing in our systems before that? And now that they're here, are they here to stay? Is this like an invasive species like phragmitis as an example, once it's here in our system, it's going to be impossible to eradicate and we have to learn to adapt to it if, in fact, we can?

MR. DAWYDIAK:
Legislator Krupski, that's an excellent question. And whether they're here to stay, I can say at this point, nobody can answer with any certainty. The Brown Tide back in the '80s and '90s, everybody thought was going to be a Peconic main stay forever. It wound up disappearing and setting up camp now in our South Shore Estuaries for far too long a period of time. In terms of the background flora and fauna and the presence of these organisms in ours and other waters, that's a question that I would defer either to Cornelia Schlenk or to Dr. Branco on. And I wanted to point out that we have another 10 or so slides before we finish our presentation. We're tag teaming between myself, DeWitt. So the questions for Cornelia were mainly specific to our Sea Grant.

MS. SCHLENK:
I guess I could just offer that relative to some of these other tides, these other colored tides that -- the Red Tide in particular has been prevalent in Maine for many, many years. And there's one idea that some of those cells are coming -- making their way further south. One of the problems with some of these blooms is that they form a resting cyst stage. So even when they're not blooming, they've got this cyst that's sitting in the mud on the bottom and ready to regenerate in the next year when conditions are ripe. So, you know, whether there are ways to mitigate the cysts or other conditions are things that are being looked at right now. But, yeah, it's a good

question whether, you know, is it here now to stay.

LEG. KRUPSKI:
Thank you.

CHAIRWOMAN HAHN:
Legislator Anker.

LEG. ANKER:
I want to thank you for the work that you've been doing, I mean, everybody here speaking. And, again, it's a shame that there's not more financial resources that you can dip into, but I guess the EPA and the DEC, you're able to work with them in addition to your not-for-profit.

MS. SCHLENK:
Yes. We often partner with the DEC. In fact, on some of the Red Tide blooms, they approached us very early on to do some of that early monitoring. And so it's really -- we're lucky that our organizations work so closely together and the people within them know each other and can just pick up the phone and say "hey, you know, do you have anything that you can put towards this?" So Sea Grant has a small amount of funding that we reserve out of our budget to deal with specific problems like harmful algal blooms. We have been funding research relative to harmful algal blooms since Brown Tide and even before that we -- some of the earlier work about these Green Tides was funded by Sea Grant also. We're dealing with cyanobacteria blooms also in the Great Lakes. So some of our budget goes also to examining what's happening in that area. And that information can translate down here as well.

LEG. ANKER:
Do you work with BNL or Cold Spring with these projects?

MS. SCHLENK:
The Brookhaven National Lab, their Oceanic Department has really been reduced. So there aren't very many people there for us to be working with on harmful algal blooms any longer. Early on there were some people there that were -- were good contributors. Cold Spring Harbor has a different focus, really. So we are not particularly working with them on this issue.

LEG. ANKER:
Another question, again, trying to figure out how did this -- you know, why is this happening? It seems like the nitrogen seems to be a big proponent of this issue. What about, you know, again, global warming, you know, you talk about microbes being frozen and now I'm sure a lot is being released and it's making its way from north, it sounds like, coming down to the south. What's your perspective on that?

MS. SCHLENK:
I think there are going to be some interesting issue with that. And I think we need to look closely at it. The Alexandrium bloom, for example, and actually several others of these harmful algal blooms, are triggered by temperature. So if we're seeing earlier Spring times and longer Summers, warmer Winters, there's a possibility that these blooms can persist through those times or come to us earlier, start blooming earlier in the Springtime.

Sea Grant funded some work under the original Brown Tide Research initiative and also we've done work on hard clam and trying to synthesize this information. Part of what we do is bring the various researchers together so that they can have a conversation about their various results and really try to synthesize the information. And I think that's something that's been lacking recently. And it's one of the reasons that Sea Grant's excited about these projects is because it can bring these people together. But the point I want to make was relative to temperature, for example, when we looked at what was happening with the hard clams, we were looking at what their reproduction was down in

the South Shore Bays and trying to figure out what, well, you know, what has changed and why is that population not coming back. And part of the question that we were looking at was, is the timing off? And the result -- the answer actually was that the timing was still okay. The time that the phytoplankton bloom of good food for them was happening at the same time that they were in their larval cycle or they were in their reproductive cycle so that the larvae could use that. And so that for now is okay. But if temperatures warming, there may be -- is there going to be an offset to that? And is that going to send other things out of whack? So, you know, it's very much of a concern and very much something we need to be looking at.

LEG. ANKER:
I think it just shows how sensitive our ecosystem is. And, you know, you may think it's just algae but it's a very important part of the whole system.

One last question: What can residents do to help with this? I know you said nitrogen. Maybe perhaps reducing the lawn chemicals or, you know, what is produced with storm runoff that gets in our water areas. But what can the residents do and what can, you know, the County and government agencies do to help with the situation?

MS. SCHLENK:
Well, I think one of the things we would like to do with the proposal is to create an action plan. I think what's been happening is that a lot of efforts been going forward, certainly problems persistent and everyone recognizes it. As soon as the alga blooms start blooming, you see it in Newsday, you see reports about it. So one of the things that we would really like to do is to be able to try to coordinate our efforts so that we have an approach that is coordinated towards monitoring. As Walter described, we want to maximize what we can do with the dollars that we have; develop a mitigation or management plan now bringing all of this information together and experts from the outside. We've got Dr. Gobler here in New York. He does excellent work, but it's helpful to have other perspectives, too. So the role that Sea Grant would play is to bring outside people here to New York to help us look at our question again and bring that information to stakeholders and form a consensus about what we might do as far as a management plan. And that would also include what we can do for -- going forward for monitoring most efficiently; and also what research gaps there still are; where is there information; what's the most critical information that we need to be able to move forward.

LEG. ANKER:
Just in related to what you just said, do you see it as a global issue? In other words do you see areas around the country with the same type of issue? Or does it seem to be just here, you know, in our area?

MS. SCHLENK:
Harmful algal blooms are a global issue. There are many parts of the world that are even worse off than we are, parts of Asia and others. There are harmful algal blooms across the United States. Unfortunately the Pacific Northwest has significant problems. The Gulf has major problems. So there are a lot of people out there looking at these questions. And we're hoping to bring some of that expertise to New York. And if we can develop a good plan here, maybe our plan can then be used as a model for other areas.

LEG. ANKER:
Thank you.

CHAIRWOMAN HAHN:
Presiding Officer Gregory.

P.O. GREGORY:
Thank you, Madam Chair. Thank you all for coming here today. This discussion came up in our

last General Meeting. And Legislator D'Amaro who isn't here had some very -- he's listening I'm sure -- had some very pointed questions about supporting the funding -- the continued support of funding for these studies. And I'm going try to ask -- or get to the heart of some of his questions. The money's 100 thousand -- $100,000. And I think -- I'm sorry, what is your name again?

MS. SCHLENK:
Cornelia Schlenk.

P.O. GREGORY:
Okay, Miss Schlenk. I think part of the money goes to experts from outside the area. And you just referred to that. What is the -- I mean, I was sitting and going through my mail, but I was listening to the presentation at the same time. And it seems like we've identified the problem. We know how to at least reduce the problem to whatever extent we can. I don't know how -- necessarily how effective we've been so I guess it begs the question what else is there to do? I mean why do we have to keep funding something where we, you know, are looking to identify a problem that we've already identified and we know how to address it. Why are we continuing to fund this program, I guess, is the question?

MR. DAWYDIAK:
Legislator Gregory and Madam Chair, can I go through the next three or four slides which will give a little more background about our specific proposal, which might help shed some light on that very question. The Harmful Algal Bloom Action Plan is really an effort to collect, synthesize and galvanize information in a way that's never been done before. Back when the Brown Tide hit in the mid-1980s, there were algal blooms in other places but the perception in our area was this was more intensive, long-lasting with a much greater local impact that most things that were happening in other places.

The EPA didn't want to take the Peconic Estuary Program under its wing as part of the NEP, but it was the bay scallops and that intense bloom that really sold that program and got it all the support that it got. And I respectfully differ with the assessment that we haven't done an awful lot about this. All of our wastewater treatment plants were upgraded from primary to secondary; and then secondary to tertiary. And there's just been a tremendous amount of other resource restoration effort. Much of it failed. Some of it has been succeeding. I mean that's just the nature of the business.

What's been happening lately over the past ten years is it sort of feels like Brown Tide all over again. We sort of felt like, well, we got this lingering Brown Tide here; then there's Cyano, Alexandrium, C. Poly, Dinophysis. These things are starting to pile up at high concentrations in more places. And it feels to us here in Suffolk County like this is becoming an incubator issue and we're being affected by more different blooms with more localized impacts than other places. And we're going to have to bring the experts together to validate that. I know that there are other intense blooms in other places that happen in the Country. I'm hard pressed to think of a map of this tight in area with this many blooms that are affecting so many places that we have in Suffolk County. And what we really want to do is galvanize not only our efforts to make sure we're all looking in the right places and times and doing the right things, but leverage State and Federal support that we've done in the past.

So what we want to do is update our actual plan by bringing together all of these local and national experts as well as agencies and immediately come up with a public document which tells people "here's what's happening. We don't want to be alarmists. I mean our waters are still safe. They're monitored where there's problems. We're on top of them. Nobody has gotten sick to our knowledge. We still have high quality beaches and a wonderful environment, but there's an HAB problem brewing out there and we need to face it"; so a public information document talking about what these things are, where and how they bloom, what the impacts or, what the causal mechanisms are and what we can do about it early on.

So that's the immediate product. It would happen this Summer into the Fall after we get all the experts together. And Sea Grant goes back with its team. It's got a working group and expert staff to come up with the synthesis of all of the information that's out there for these blooms and how they work together. We're going to have a monitoring strategy talking about what the Federal Government, the State, the County and the locals are doing. The idea, again, is to make sure we don't miss any gaps, that we're looking at the right things and that we leverage our resources to be most efficient about it; where are the information gaps where we need to know more about these organisms; and most importantly, where do we control pollution and restore resources?

Again, if we have consensus, the South Shore, just as an example, is a priority area where the major concern is Brown Tide right now. Brown Tide appears to be caused by organic nitrogen. The major source is unsewered development. And the shellfish are gone from the top down filtering pressure. A two-part approach of nitrogen reduction and shellfish restoration would be documented and supported in a consensus matter to build off of. So, again, this is something that's going to guide future programs, not only of the County but at the State and Federal level. And all of these things are working together. We have this Comprehensive Water Resources Management Plan that Economic Development and Planning is helping the Health Department spearhead. It was just a Drinking Water Study. Now it's an integrated study that looks at the ecosystem, not just dissolved oxygen, the wetlands, the shellfish, the eelgrass beds, the coastal resiliency. It's all connected. And the most common thread that connects this is the nitrogen.

So this Harmful Algal Bloom Action Plan is going to take place over this Summer until next Spring, if it's funded. It's going to give us the pieces of information that we need to move forward on addressing these algal blooms. And it's going to work in cooperation with the wastewater plant, where the County is looking at a program to look at which parcels are priorities for sewering, which ones can be used for clustered decentralized treatment and which ones need the individual on-site systems. Again, about 360,000 parcels in the County are not sewered. Most of them are substandard in size predating any sanitary code requirements. This is the heart of the nitrogen problem at this point. We've done a great job on the point sources. It's a significant part of the load. Now we gotta do something about these non-point sources. So all these people fit together. All these pieces fit together. And they fit together to come up with the coherent strategy in the next 18 months or so. And this is sort of bull's eye showing how wastewater and nitrogen are in the middle of all of this. They affect the water quality. They affect the harmful algal blooms, the shellfish, the wetlands and the eelgrass. These things are all tied together. You can't pull one thread without affecting something else in the overlap.

And this is kind of a segue to the last piece of our presentation, which is how the Peconic Aquaculture Lease Monitoring Program fits into the Harmful Algal Bloom Plan. Unless there's questions at this time.

CHAIRWOMAN HAHN:
Presiding Officer Gregory, I think you still have the floor.

P.O. GREGORY:
Thank you. I didn't mean to say that nothing's been done, but if you had listened to the commentary, it seems like nothing's been done. But, you know, part of the presentation was we identify what the problem is, and we know how to remediate it, so obviously something's been done. So I think part of what Legislator D'Amaro's inquiry was, "well, why are we still funding travel?" Because a significant portion of the money goes for travel for experts. And I'm kind of confused because when -- Schlenk -- I'm sorry --

MS. SCHLENK:
That's correct.

P.O. GREGORY:

Okay. She had made reference to developing an Action Plan. Your slide say that you are updating an action plan. And I'm sure if Legislator D'Amaro was here, and I'm sure he's cringing in his seat if he's listening that I'm speaking for him, but I think the logical question would be, we funded this program for "X" amount of years and we're just coming up with an Action Plan? Yeah, like what do we -- I mean, what's -- you know, it seems like we should be farther along the process than either developing an Action Plan or updating an Action Plan.

MR. DAWYDIAK:
Legislator Gregory, to clarify that point about the prior plan, what was done for harmful algal blooms at the time in 2001 was a Brown Tide Plan, which, again, dealt with research, monitoring, resource restoration and pollution control as it relates to Brown Tide. At that time none of these other algal blooms were in existence. They're all relatively recent, relatively intense and very, very significant. As to why nobody's put their arms around the whole thing, it's just a very, very multi-jurisdictional problem. We in the Health Department are very concerned with cyanobacteria because it's a human health bathing beach issue. So that's kind of where we put most of our focus. The DEC is looking at shellfish sanitation. Dr. Gobler is looking at other research level issues as to how things like Dinophysis are moving. As of now Dinophysis has not shown up in open shellfish beds. So it hasn't really caught DEC's attention as much as it maybe could have. Somebody needs to get their arms around this in a coordinated effort. And our proposal is that we do it in cooperation with Sea Grant and the Federal and State agencies via this County Quarter Percent project.

P.O. GREGORY:
So the next logical question would be, I guess, will be why and now we're just thinking about coordinating our efforts after funding this program for five, ten years, whatever it's been.

MR. DAWYDIAK:
The Brown Tide capital was in excess of ten years. And this one is in excess of ten years. The short answer is that this program provides -- this is a Quarter Percent project. So this a one-shot deal with Quarter Percent monies. Prior to that it was Capital. Capital is primarily designed to address a Health Department's operating needs. We buy boats, motors, trailers, vehicles. A significant portion of that money is for durable items that we need to conduct our monitoring programs. Some of it is spent on resource restoration, planning and management; others is spent on monitoring and research in support of early planning. And this program evolves. Every couple of years something changes. There's a new harmful algal bloom to look into that we need to start addressing at a County level. Because if not us, maybe no one.

P.O. GREGORY:
And there was reference to the -- you know, this problem is an international problem. And I'm by far no expert in this area. And I lean on you guys for the -- for your expertise. But I guess the question would have to be asked, you know, there are different ways to address it. You know, if we look at a study in San Diego, California, I mean where they have algal blooms issue, we look at their -- their strategies, is their strategy going to be much different than our strategy? Or are there various ways to address algal blooms? You had mentioned -- referenced shellfish are obviously part of the solution, understanding that there may be different causes, I guess, right? But are the remedies the same?

MR. DAWYDIAK:
A lot of the remedies overlap, but I have a two-part answer to the question. The first is that every ecosystem is inherently different. They're really hard to monitor and manage. Drinking water is easy. You have a bright line, one number. You meet it or you don't. Ecosystem base standards are generally specific to a water body. And here in Suffolk County we're blessed with multiple different diverse ecosystems from the Sound and its embayments, the Peconics, the South Shore and the oceanic areas. What poses major challenge is the different considerations apply to each one of those because they're all very different in terms of physical, chemical and biological composition.

The other thing to emphasize about Suffolk County is that we're not like any other place in the world in that you have this many people that are unsewered, roughly 74% of our population or 1.1 million people are discharging not only nitrogen but pharmaceuticals, personal care products, volatile organic compounds into the aquifer. And that works out to about 1,000 drinking water wells through a little sand filter. All this stuff flows into our bays and our harbors. There is no other place. We just finished a four-state septic tour from Maryland to New Jersey to Massachusetts to Rhode Island. Those numbers don't approach ours in terms of water magnitude of the pre-existing unsewered program -- pre-existing unsewered development in priority program areas that are affecting surface waters. We're bigger than most states. We're certainly bigger than most other priority areas for upgrades. So the solution needs to be tailored specifically to an area in terms of what we can do to fix this.

P.O. GREGORY:
Last question. All right. So we fund the program another year. When can we have some benchmark as to "this is what the updated Action Plan's going to be and this is what can be the anticipated results, you know, three, five, you know, seven years from now." When do we get that?

MR. DAWYDIAK:
This particular proposal is strictly a one-shot deal. It's not a recurring Capital Project. It's a Quarter Percent. And within roughly a year we would have a report. The idea is that this is going to be integrated with our other studies, including the Wastewater Plan and the Comprehensive Resources Management Plan. The goal is to come up with an annual report on progress of implementation, not only in terms of outputs in terms of what we do to address a pollution problem, but outcomes, what's happening to water quality. And every three to five years the plan gets adaptively managed and updated based on how things changed and what we've learned since then. So that's the game plan right now.

P.O. GREGORY:
Okay. I look forward to supporting it.

MR. DAWYDIAK:
Thank you, Legislator Gregory.

CHAIRWOMAN HAHN:
Legislator Krupski.

LEG. KRUPSKI:
Thank you, Madam Chair. So you're telling us the sky is falling, but then with the study now you're going to tell us how fast. And I agree with your -- with the way you say it's going to take -- it's going to take a while to look at this and I know that people have been looking at the Brown Tide for decades. But it takes decades -- when you implement land use change, it takes decades to get that water quality to improve. And I think that's one thing that's important for people to know. And I was wondering is any part of this study going to take into account the MS4 work to try to coordinate with all the different Towns and the County and the State on its MS4? Because looking at the different drainage codes throughout the County, I know that has -- the surface -- and the surface water runoff was just mentioned -- just touched on here, but I know that does have a great contribution to water quality. So that's -- well, that's one question, if you're going to look at the MS4 comprehensively throughout the County?

MR. DAWYDIAK:
It's a little difficult to presage a degree to which every class of pollution is going to be dealt with, because we haven't had a scientist come to consensus on this yet. I can tell you with a great deal of certainty that nitrogen and wastewater and secondarily fertilizers are going to receive an awful lot of attention because where, when and how is really, really important. To the extent that metals or organics or other toxics that may be related to stormwater, may be having an impact to this, the

scientists are going to give us their best conclusions. And it's our job as a resource manager to connect that with programs and make them better. And the Peconic Intermunicipal Agreement dealing with management of stormwater runoff on a regional basis is one good model example of how one estuary program is trying to come to terms with better managing that pollution source.

LEG. KRUPSKI:
The other question I had was, as you look at the waste stream, whether it's surface or groundwater, are you going to look at anything besides nitrogen that would make these other algal blooms more competitive with the beneficial ones?

MS. SCHLENK:
I think nitrogen has been identified as a key component. Inorganic and the ratio with inorganic and organic nitrogen, but there are other components, too. Carbon is important. {Silica}, you know, even in trying to determine what types of phytoplankton are going to be present in our waters. So, yes, I think the analysis is going to look at a number of different water quality factors besides just nitrogen.

LEG. KRUPSKI:
Thank you.

MS. SCHLENK:
It's important.

LEG. KRUPSKI:
Thank you.

CHAIRWOMAN HAHN:
Any other questions? Okay, good. DeWitt.

MR. DAVIES:
Good morning. My name is DeWitt Davies. I work for the Division of Planning and Environment in the County Department of Economic Development and Planning. Excuse me? Okay, here we go again. What I'd like to do here, I sense that there is time constraints here, but I'd like to give you a little brief overview of the Peconic Aquaculture Lease Program that we have had underway since this program was adopted back in 2009 by the Legislature. There's a small component of this project that Walt talked about that relates to this program. And that is the Peconic Aquaculture Lease monitoring segment of the work.

Reiterating: This Aquaculture Lease Program was adopted by the County back in 2009. It's been codified in the County Charter and the Code. And we have all sorts of information for those who are interested in finding out about the program, the documentation that was used to prepare it and the history with respect to how it has been implemented regarding issuance of leases. The website for all of that information is listed on the slide.

The County secured title to over 110,000 acres of underwater land due to the passage of this program and its implementation back in 2010 when the first leases were issued by the County. We were instructed to define an area within which leases could be issued. And that is shown there on the slide in the green area, the so called Shellfish Cultivation Zone. It's about 30,000 out of the 110,000 acres.

There were further limitations placed on the program back then because the County wanted to proceed in an orderly, regular fashion in a moderate sense of lease issuance over the first decade of the program. And roughly 3,000 acres were deemed to be suitable for lease during that first decade.

Where are we now? We're about in the fifth year of implementation. We have executed 41 leases out of a total of 635 acres out in Peconic and Gardiner's Bays. They're typically ten acres in size. We have 12 leases pending execution in the 2013/2014 lease cycle. And indeed the Aquaculture Lease Board meets on Wednesday of this week to determine whether the sites that have been applied for are eligible for lease. Once that occurs, we can then proceed with the execution of more leases. And in this case we have a total of 12 involving 120 acres.

We're in the midpoint sort of the program right now where we have to look at whether or not we should make some adjustments to the shellfish cultivation zone. And over the next four or five years determine what the program should look at with respect to how it should be implemented beyond year ten. There is no guidance at this point in time what happens after the 2015/2019 period within which we have an additional 300 acres available for lease. Okay. Thirty more leases after the current cycle is completed.

People have asked what is the economic impact of this program? We put together this summary here because we wanted to use the word "projected." We looked at the average value of shellfish production performed based on a survey of 1200 shellfish farms on the Atlantic Coast from Maine to Florida. They typically have operations that are valued about $100,000 per year and employ, you know, several people. If we look at that particular ratio here, on 41 leases we could expect about $4 million per year production when they're up and running. There is some delay with respect to starting programs. We have to issue a lease. They have to get permits. Once that's done, they have to get equipment, they have to gear up, they have to grow shellfish and then harvest them. There is a delay with respect to how quickly returns come back to the grower and the County over time.

You know, typical economic impacts: 4.5 a multiplier here, if you look at that you end up with $18 million per year from these 41 leases. And this is tracking how that sale of product relates to others who participate with various ways, for example, restaurants, retailers, boat dealers, gear distributors who are set up throughout the economy. What happens after ten years? If we have another 30 leases issued, and assuming we have about 71 leases issued at a time, you can project out about $32 million per year on the regional economy. That's our goal. I'm not saying we're doing that at the moment, but that is the goal. How far are we along on the goal of getting the leases issued? We are right on target. And in fact the demand for leases has exceed that which we can issue in any particular year. So we are right on target there.

Part of the program authorization required a -- what we call a Peconic Aquaculture Lease Monitoring Program where we would look at what the impacts are of typical shellfish farm operations on the environment and Peconic and Gardiners Bays. It also indicated that we should seek the cooperation and assistance of the Department of Health Services in this effort. And certainly we'll capitalize on all of the work that Walt's group has done.

Peconic Aquaculture Lease Monitoring: What is it? Well, we will look at what we should do in terms of what types of measurements should be made, what constituents should be looked at, how it should be done, etcetera to determine what a -- for example, a typical case culture oyster cultivation operation would imply. Now our leases are not focused in any one particular in Peconic, Gardiners Bays. They tend to be spread out in different locations. They have different depths, they have different circulation issues, etcetera. For the most part we think that they have a very positive effect on the environment. The New York State DEC tends to differ with respect to one item and that is how they could possibly impact finfish. The Peconic Estuary is essential fish habitat for major species of interest here. And we do want to consider what that potential impact could be. Again, we're looking at a small scale activity in a large ecosystem.

We want to see how we can improve management of this program. In not only the second decade, that's where we're really looking at here, if we can improve the criteria within which we operate, that would be an added advantage. And that refers to where within the zone leases should be issued.

We'll obviously work with the Department of Health services. And, in fact, Walt's operation will be the primary mode within which we can get some results here as we move forward with this program.

Again, the results of the program will help us in terms of providing guidance with respect to how the program should be operated after year ten. At this point in time we have no guidance with respect to what happens at that point.

I'll end it with that slide, Walt. That's just the summary here of how the two components of this particular project relate to the total budget.

CHAIRWOMAN HAHN:
Thank you. Questions? Legislator Krupski.

LEG. KRUPSKI:
Thank you, Madam Chair. So when you take a look at the -- when you do the review of the program, are you going to take a look at the productivity of the current leases and make -- you think in the future make some adjustments towards future leases based on certain areas?

MR. DAVIES:
Yeah, there has been -- let me just explain a little bit about what we do with respect to monitoring operations. Each lessee has to submit an annual report which describes what they have done the previous year in terms of what they planted, how much they planted, what type of gear to use and various other types of information. This is in addition to their submittal of the lease fee on an annual basis. This information in isolation is not releasable but we plan on looking at -- collecting that information and looking at it as a whole. Okay.

The specific impacts of a typical oyster aquaculture operation depend on many factors. Shellfish in among themselves create a positive feedback relationship to the environment in which they are living. I often say at meetings that the more shellfish in a system, the better that system will be. I have never heard anyone ever say that shellfish are bad for an estuary, a lagoon or whatever. The concept here is that we are -- we are adding shellfish in each of these farms. And some of them may have upward of 250,000 oysters, more perhaps. They do influence water quality through their filtering activity. But they also influence water quality by what they do and how they influence the different aspects of the phytoplankton population which they feed upon. They create conditions, a positive feedback whereby they actually improve the conditions for their survival. If you take them away, things, as Walt mentioned before, the top down approach here, it does have a problem.

We are going to look at what those impacts are in terms of how the shellfish impact water quality, but also look at what they may do with respect to waste products, for example, from the oysters themselves. There is a mechanical situation where cages are picked up, moved on the site, etcetera. We have taken pains, however, to craft the cultivation zone such that we've avoided many of the environmental situations that are sensitive: Eelgrass, shallow water, conflicts with other uses of the environment, etcetera. So we have tried to minimize that situation. And hopefully we will be able to document, perhaps, if there's a positive impact, a neutral impact or a negative impact. I think this will -- I have a feeling for where this will end up in terms of my own mind, but this is going to be an objective look. And hopefully there'll be some guidance here that if we do find anything that we can improve upon, we can use that information and move forward.

LEG. KRUPSKI:
Thank you. What I was getting at more so was that from the grower's perspective, I put -- I put seed in the water on my site, but, you know, like everybody -- everybody watches everybody else. And I'm watching Tom's site and I know his seed is growing faster and he's harvesting products sooner than me. That's what I'm talking about. Are you going to make adjustments based on the productivity of the specific years and say -- so when the review comes up, I'm asking to be put closer to Tom's site, next to his site because it's better growing conditions.

MR. DAVIES:
I would say that that's a very site-specific question with respect to, you know, localities within the Peconic, Gardiners Bay system. I think you are right because some places appear to be better than others. And we do hear reports whereby a grower says, "I had really rotten growth this year." And some people have even asked us to transfer their sites to a different location. It is happening to some degree. I think that it depends on how far we can be really site specific. And I think that is a problem here with the scope of what we can accomplish.

There are better areas. I think the growers will find them out because they're the ones that are out there. We certainly don't have that much of a site -- precise clue as to about that, we don't. We hopefully will learn from that.

The other -- one of the more serious impacts came as a result of Super Sandy and I'm sure -- I know you're aware of this, Legislator Krupski, some of the growers experienced disruption with their cages. They silted in. Some of the growers really got -- really got hammered by that and they lost thousands of dollars. So that's the question of siltation. That's another factor here that is important to them. But we will use the information that we have to supplement the information that the Sea Grant Program can pull together from around the country. And Cornelia Schlenk and people from SOMAS, School of Atmosphere and Marine Sciences at Stony Brook, are very familiar with our program. They participated in the advisory committee that actually formulated this during a two-and-a-half year period a longtime ago. So we're not really starting from scratch here, but we will be trying to get that experience. There are many aspects of monitoring. We will talk to the growers and use that when we -- when we participate in this program, we'll bring our side into it, too. It's not just looking at the scientific community. We have a lot of management questions and issues. We will be participating in a major way. And the vehicle that Walt's project presented here provides a really good opportunity for us with respect to, you know, getting something done that we need to do.

LEG. KRUPSKI:
One more question. You mentioned there was a species of finfish that the DEC was concerned about. What is that?

MR. DAVIES:
The New York State Department of Environmental Conservation has an extensive set of juvenile finfish data that was collected over many, many, many years. Access to this data has been problematic. It hasn't been really made available in a public sense. They're trying to improve what they have do with that information at the current time, but they have used it to prepare comments in the past on the program. And, in essence, it is a problem for us because of the fact that they wanted to eliminate 41% of our cultivation zone from leasing. We don't agree with that. I think the construct that they used was not properly vetted in a public sense. Director Lansdale was in a meeting a year and a half ago or so on that project. And we all came away wondering why didn't they bring this up when the program was being developed? Why did they wait? And it presented a big problem.

In essence they said "you go ahead and lease, but we're not going to issue a permit for it." The New York State DEC has regulatory authority for permitting. The County owns the property for this particular purpose and has the authority to lease it. We are the first step. Without access, you can't go anywhere. We issue a lease. They get access to conduct shellfish culture; however then they got to go to the State to get a permit. If the State doesn't permit it, it doesn't go anywhere.

So there is a very, very important issue here with respect to finfish and the species; some are flounder, for example -- excuse me. Winter flounder. Winter flounder. We have to look at that in a critical way. We have said in the past that this program has a lot of benefits to the system. And in terms of when we did the vetting in a Generic Impact Statement, we spent a lot of money on this, we spent a lot of time and a lot of outreach. And looking through the information at that point, this

was not something that was causing problems at the scale which we eventually decided upon in terms of how it should be implemented so -- but we will be taking a look at that.

LEG. KRUPSKI:
Thank you. And I do appreciate the work that went into the original set up of the program. And I know it was very comprehensive and well thought out. And I also do appreciate the way the program's being run. I think it's run in a very thoughtful manner that isn't -- there's no knee-jerk reactions there to situations that come up. And I really appreciate the way it's run. And certainly the review of it's very important and I will support that.

MR. DAVIES:
Thank you.

CHAIRWOMAN HAHN:
Legislator Anker.

LEG. ANKER:
I have a question regarding -- I think one of the slides had mentioned, I believe there's a $30 million effect with the economic impact, $32 million per year. So that's over ten years with the 71 leases. Now that's just the leases. Also -- and again, you know, we're spending $133,000 this year. We've invested in prior years as far as the County's contribution to understanding the algal blooms here. But what about also the impact? Say you weren't here. Say there was no such program. What would be the health impact of that?

MR. DAVIES:
If there was not a program?

LEG. ANKER:
Yes.

MR. DAVIES:
The health impact -- I suspect that, you know, come back to, again, more shellfish is better for the environment. I think we go back to that. It's a simple thing to me. When I look at this and say those millions and millions and millions of filter feeders that are on the bottoms in these cages exert a very strong influence on water quality with respect to what the phytoplankton population ends up being.

So in that sense, in terms of -- I know those are numbers that relate to dollars. But I suspect that, and I can't prove it, but it's a feeling that I have, it's an insight that the real value of this program is an environmental value because of what those shellfish do with respect to their own environment. And they help themselves.

The other side of the question is, what would happen if you didn't have them? In this case when people grow shellfish for commercial purposes, millions of shellfish are going to be planted on those sites. There is an ancillary value to that because they do spawn. Some of that becomes part of the natural situation at a site. However, millions and millions and millions of shellfish are on the bottom at no cost to the public. And I think that's another advantage of this program.

LEG. ANKER:
Right. And I'm thinking about if this program wasn't -- wasn't available and, you know, as far as the Health Department, how many more people would be ill, how many people -- you know, in other words, you know, if we didn't do the research and understanding the health effects, how many people would have to -- have to experience those health effects if we didn't understand what was happening? Just a -- what's your thoughts on that?

MR. DAVIES:
I really can't -- I don't know. I really can't answer that. It's -- health effects in the Peconic system, you know, relate to bacteria levels also. MS4 was mentioned before. And that's one of the programs that the County's involved with implementing and programs to deal with runoff and pollution, etcetera. Pipe's Cove is an example where some open space acquisitions occurred, etcetera. If there's a reduction in the chloroform loading to the adjacent waterway, that is very advantageous to our program. Because our lease sites cannot be located in an area that is closed to shellfishing. The shellfish that are grown and sold are certified -- come from certified areas. If there is an expansion of closed areas, that will hurt our program because that eliminates the site -- if one of our lease sites, for example, if it became such that they had to close it because of chloroform concentration, that guy's out of business. We have to move him. And, you know, that causes a problem with respect to the future of this program. If the pollution control programs aren't implemented, it's going to affect overall water quality and that's a problem for us if it's negative.

LEG. ANKER:
I hear the DEC is remapping the entire north cost or coastal areas. Does that also affect what you're working on right now?

MR. DAVIES:
We have -- we have a -- we coordinate our activities with them. They have access to all our maps. There's a lot of research done on benthic mapping, some of which Sea Grant has supported in the past. We are closely working with the Peconic Estuary Program, Alison Bronco's office there and making sure that if there are activities that are underway, we will capture them. Sea Grant does, in my estimation, an extremely professional job in looking at things in the scientific literature and providing an objective interpretation of the results. And, you know, they will get the people if they need them to provide what those answers are. And that's difficult for people from our world in some cases to accomplish.

LEG. ANKER:
Again, my concern is that the -- when the DEC, when the State comes and, you know, projects whatever it is they're putting on their maps, is there the issue of them taking away some of those leasing areas that the County has, you know, is using right now or providing those that are using it for leasing?

MR. DAVIES:
You know, again, I think we have to wait to see what happens here. That wouldn't be automatic no. Again, you know, the scale and scope of this program is -- it's not large. It was designed to be that way to avoid any of those situations that could occur. That's why in terms of new leases 600 acres over the first ten years, not accounting for leases on grants and temporary assignments, which were there before. We're talking about 600 acres of new leases over this period of time. The system is 110,000 acres.

So the point being, though, the experience gained during this period will contribute to how the program should be implemented beyond ten years. Should it be bigger? Should there be any limits in terms of the number of leases that could be issued in a given year? These are really good questions which we have -- don't have answers to now. This particular project will provide guidance on that.

So there is -- that could have an effect, you know, people could say, "well, there's enough leasing, we don't want anymore." I'm not sure if that's going to happen. Alls I can tell you up to the present time the demand has exceeded supply because we have more people who want to get leases than we can provide on a yearly basis.

But after the 2019 period, that ends. And what happens after that, we don't know. These leases

have ten-year terms with an option to renew. So there'll be some moving into the -- into future years. We'll have a lease, for example, that's issued in 2018 and goes to 2028. There will be leases there but will there be more leases? We don't know at this point.

LEG. ANKER:
Thank you. Again, thank you for all the professional work that you all have done. I feel that you're basically one of the top professionals in the business. And we really appreciate all your time and effort.

CHAIRWOMAN HAHN:
Anyone else? Okay. Thank you so very much. I appreciate you being here to explain this in detail to us. It's possible we'll need some of this also at our General Meeting. I think that's probably a good idea to plan for that. I continue to be 100% in support, you know, of this comprehensive review of the research that we've done so far: The consensus building, identifying the research gaps in this area and actually getting to, you know, a scientific-based action plan that we can update annually. But it also hurt some of what -- Walt, what you brought up. How many sanitarians do we have that are equipped with kits and know what they're looking for when they inspect our 190 bathing beaches?

MR. DAWYDIAK:
It would be the Summer beach sanitarian staff which would be on the order of a half dozen; it could go up and down depending on the needs of the given cycle.

CHAIRWOMAN HAHN:
So how often do they get to -- I know we have beach closings all the time. We see alerts all throughout the Summer. And we have beaches that close all the time. How often do these sanitarians, the Summer staff, get to each beach?

MR. DAWYDIAK:
It depends on the beach. We have a tiered risk protocol whereby the cleanest ocean beaches are sampled a little less frequently because their history is such that they're so clean. The goal, I think, is to get five -- five log mean samples in a 30-day period. So the hope would be to get to the beaches that are riskier at least once a week.

CHAIRWOMAN HAHN:
Five samples. Say that again, five what samples?

MR. DAWYDIAK:
The procedure is to get five samples over a 30-day period, as I recall. And it's been a little while since I've worked at the beaches so don't hold me to the numbers but --

CHAIRWOMAN HAHN:
Does that sound right, Craig?

MR. FREAS:
I trust Walt.

CHAIRWOMAN HAHN:
So the riskiest beaches, you're saying, we get to once a week. And do we get to them right after the storms? I know that right after a big rain event, we often have a number of beach closings. How do we -- the priority beaches that don't have the same flushing as the ocean beaches, you know, how do we make sure that after a rain event, a significant rain event, we're at all the ones that need it that next day?

MR. DAWYDIAK:
The highest risk beaches are typically closed on a precautionary advisory model based on historic data whereby we know that there's likely to be elevated bacterial levels. And that'll be for a couple of tidal cycles until they're flushed out. We do make an effort to go back and resample after a major storm event at the riskiest beaches also.

CHAIRWOMAN HAHN:
How many beaches of the 190 are in our high risk tier?

MR. DAWYDIAK:
I can't answer that number with precision on the spot.

CHAIRWOMAN HAHN:
Okay.

MR. DAWYDIAK:
I do have a beach {ag} one pager with all this information that I'd be happy to e-mail you.

CHAIRWOMAN HAHN:
Thank you.

MR. DAWYDIAK:
It's on the order of dozens. That 190 includes some homeowner associations as well as what we can consider public beaches anybody can go to at any time. So out of the 150 beaches that are generally accessible to the public, it would be on the order of a couple dozen that are typically in a more poorly flushed inner areas. And, again, we take several thousand samples a year over the course of a beach cycle. And most of them are focused at the more vulnerable beaches.

CHAIRWOMAN HAHN:
And remind me what we're testing for. I mean all the different HABs that we mentioned, but there's other elements.

MR. DAWYDIAK:
When we're looking at beaches, the primary contaminant of concern is chloroform bacteria as an indicator. Now EPA has revolved the -- revised the standard for enterococcus, which is similar bacteria at marine beaches. So it's a simple bacteria logical sample primarily. When we're looking at water quality more holistically as part of our Marine Monitoring Program, we're looking at a full suite of biological, physical and chemical parameters, the dissolved in particulate nutrient series, nitrogen, phosphorous, all of its sub-species. We'll take volatile organic and pesticide samples at point sources, tributaries and creeks as well to look at other sources of contaminants. So our full suite of contaminants is about 330 which is the ceiling for what we kind of analyze for. We don't do that number for every sample, but we do look at a lot of different contaminants.

And as to your question as to cyanobacteria, I think that the heart of it is how and where do we monitor for that? That's typically been an occurrence at either freshwater -- or brackish bacteria. So we have a relatively limited number of those beaches. But when we go there, our staff are equipped to look for and identify this.

The other thing is lifeguard training. All lifeguards are trained as to the current state-of-the-art of what to look for and how to look for it and report back to us. A lot of these sitings are actually reported by facility operators rather than on a random inspection when we're looking at water quality.

The other piece of the puzzle is, Dr. Gobler's been under contract to do surveys at our freshwaters. Some of these areas like Agawam Lake and Mill Pond are areas with potential public access that are

not necessarily a bathing beach. And the approach there is to work with the property owner typically, a county or municipal government to post an advisory sign if there is blue/green water. The family's out for a picnic. It's foreseeable that somebody might go out there and wade in the water. And children aren't always equipped to know that blue/green waters aren't necessarily good for you. So we made an effort to provide reasonable public notice. Again, not to be an alarmist, but if it's a public health nuisance or potential hazard that's out there and it's a public access point, we want to make reasonable measures to educate people as to what's out there.

CHAIRWOMAN HAHN:
Thank you. Any more questions? Legislator Krupski.

LEG. KRUPSKI:
Thank you. So when you're doing the beach testing and you're testing for primarily for chloroform bacteria, where does the testing take place? And does the DEC, will they take any of your analysis and use that as far as shellfish closures; their official shellfish closures go? And that kind of relates to, you know, recreational or commercial shellfishing, but also to the leasing program.

MR. DAWYDIAK:
Testing is done by our public and environmental health lab that again is primarily enterococcus and the marine water is chloroform. It's still acceptable for the freshwaters. And we coordinate data with DEC routinely but it's a different set of protocols, timings and locations that they use for their shellfish sanitation program. So they're aware of our data and vice versa but it needs to be collected in different ways and times for the given purpose.

LEG. KRUPSKI:
Is there any way to coordinate that testing? Because I know there is a number of underwater land on the East End they'd like to open to shellfishing because it'll improve water quality. Because the DEC is unable to do the testing -- the Towns can do the sampling, but they're unable to do the testing, then it becomes problematic for them to open the areas. And is there any way to coordinate what the County does to have the State use those samples in order to open up additional underwater lands to shellfishing?

MR. DAWYDIAK:
Yeah, absolutely. We've done that from time to time in the past. If we're on a marine monitoring run and there's an approximate location where we can grab samples to help the DEC out and vice versa, we've done that routinely. Our frequency isn't necessarily enough to give them a dispositive answer in all instances. But if the information can be helpful, we'll certainly do it.

LEG. KRUPSKI:
Thank you. Does anybody else have any other questions?

MR. DAWYDIAK:
Legislator Krupski, if I can just put one other thing on the record, I think Legislator Gregory had a question that I failed to answer and it also came up with the full Legislature. It had to do with the budget and what we're spending the money on and where is it actually going. It's a $100,000 project with almost $44,000 in match for Sea Grant. And I believe the budget should have been part of the legislative package. If it wasn't, I apologize. But the lion's share of the money is for staff for Sea Grant. Between the two projects, it looks like about $85,000, which is defraying expenses from Sea Grant -- for Sea Grant staff, which again is substantially matched.

The workshop, the thing about travel costs, there's going to be at least five harmful algal bloom experts that are going to be probably flown in as needed or drive in from different areas of the country. It's a pretty arcane field with a few national experts. We need all the wisdom we can get to tackle this. So we have $10,000 budgeted as the ceiling for that. It may wind up being less. And there's a few other incidentals. But the lion's share of that budget is that $85,000 for Sea

Grant staff. And again, there's going to be a couple of deliverables, the early public summary, early symposium results and then the full action plan based on the literature review.

LEG. KRUPSKI:
Thank you. And I think it's important for us to realize how complicated this problem is and how there's so many different moving parts over time and how difficult it is to get the right people in the same room together to try to look at it.

CHAIRWOMAN HAHN:
Anyone else? Okay. Thank you so very much for your time.

INTRODUCTORY RESOLUTIONS

Moving onto resolutions, I would like to take 1393 out of order. So I'm going to make a motion.

LEG. KRUPSKI:
Second.
CHAIRWOMAN HAHN:
Seconded by Legislator Krupski. All those in favor? Opposed? Abstentions? 1393 is before us. **Introductory Resolution 1393, appointing a member of the Long Island Commission on Aquifer Protection, Michael White. (Pres. Off.)** And I'll make a motion to approve; seconded by Legislator Anker. On the motion, Mr. White, if you'd like to come forward. I believe one of those microphones you just have to press once. And once the green button's on, you don't have to hold the button down. But just make sure that the green light is on when you're talking. Thank you.

If you can tell us a little bit about yourself and why you'd like to serve on this Committee.

MR. WHITE:
Sure. First let me thank you for inviting me. And I feel very privileged to have the honor to have the opportunity to serve on this Committee.

CHAIRWOMAN HAHN:
Sorry we had to wait so long before we took your --

MR. WHITE:
I am very interested in that other topic.

CHAIRWOMAN HAHN:
I figured.

MR. WHITE:
By way of disclosure I'm also on the Board of Governors of the New York State Sea Grant Program. So I'm very familiar with the work and that whole effort.

But my experience -- and I know you have a resume and a bio, many of you know me; I've worked with you in the past before. My most recent work with the Government was as the Executive Director of the Long Island Regional Planning Council. I have now returned to private industry, private practice.

My career started out as a research scientist. In fact, working at what was then Marine Sciences at Stony Brook, which is now SOMAS, I came to work with the County when the County was constructing the Southwest Sewer District. And I performed the monitoring program for the Great South Bay during the construction of the outfall. I've worked at a Town level. I went to law school combining my scientific efforts and a law degree and I have practiced Environmental Law for about

21 years now, I believe.

But this Commission gives me the opportunity. And, again, I'm privileged to have this opportunity. LICAP, Long Island Commission and Aquifer Protection, in my mind, has the ability to perform such an important function. What I appreciate is that the County, the Legislators, the Counties have recognized that this job is not getting done. And that this legislation, both in Suffolk County and Nassau County recognizes that we are on one aquifer here in -- on Long Island.

The important part about the message I wanted to provide today, and hopefully you will support my appointment, I am looking forward to getting back into -- into the fight, I would say, it really is, is that this Commission cannot just be another tier of study, another commission. We cannot just see the continuing talk, talk and watch the ticking time go by. Frankly, although the legislation is fairly aggressive in what it intends to do, I'm not sure we have the one to three years to provide a plan and a report. We really need to see this commission working with the members of the commission and the County Government, the State Government and the Federal Government to start to take action. So respectfully what I'm going to say is, is that we need to get moving right away. You know, we've had the first meeting of the Commission while the Commission is still in formation. I understand there may not be another meeting of the Commission until sometime the end of June or early July. Frankly, with all due respect to the leadership, we need to be more aggressive about that.

So I'm going to go through 7 points that I think are important to this mission and what I look to bring forward to participating on the Commission.

The first is when we look at the term aquifer protection, we have to be very clear in my mind that we're talking about drinking water, our groundwater, and we're talking about groundwater affecting coastal bays. There are two pieces to the aquifer on Long Island. And so from the first part of the sole source aquifer, and that's our drinking water, we've been on that for a while. And we still seem to be on -- on the idea that we're trying to protect it, but we're recognizing we're not doing the job. The most recent work from the Suffolk County Comprehensive Water Plan recognizes something that, frankly, scientists like myself told the County in the late 70s that underflow is an issue. Underflow is an issue with respect to water quality. We get that now. Nitrogen is coming from groundwater into bays. All our rivers and streams are groundwater fed to the coastal waters. So that's a good thing. My point here is that this Commission has to recognize both pieces of that. And what I could see at the first meeting, that's exactly what direction we're taking.

The other thing is, that's very important, is that the Commission itself needs leadership. So the approach is that we're going to have some of really -- the initial roles by the water purveyors. And I think that makes a lot of sense. Because under the Safe Drinking Water Act, they are ultimately responsible, but you know they have other jobs to do during the day as well. And so I think what we have to look at is set up even a governing system on the Commission to make it work and get the work done. Again, so it's not just another commission reporting sometime down the road.

The other elements that I think are extremely important are good science. I mentioned earlier, and you can see by my experience, I started out my career as a research scientist. And so what we recognize, even after all of these years of study, we don't have enough good science to work with. And what we recognize is that we're now seeing things that provide new scientific questions. Really how fast does the groundwater go? Where are the pharmaceuticals coming from and going to? How many pesticides are down there? Are the standards correct? How much of the nitrogen from groundwater is really reaching the coastal waters? And what can we really do to affect better on-site wastewater treatment? Because this County's not going to sewer the entire County. That's never going to happen.

So that's scientific needs. And by the way, the Commission sets us up, I think, fairly well. The Groundwater Institute at Stony Brook will be involved. We will have the USGS. We will have the

DEC. And, of course, we have the great resources of the Counties themselves. And, frankly, all the consultants that had worked on these projects over the years.

The other thing I think is really important in terms of looking at a future goal of what this Commission needs to report out is the governance question. You know, many of you know me from the work most recently with the Long Island Regional Planning Council. Governance is key. If you ask anybody in this field, in the Government, in private practice in engineering, who's in charge of the groundwater? Who's in charge of the drinking water? Okay. Everybody's trying. Everybody has a piece, but the governance issue of putting somebody under that one call, sort of *who you going to call* about the problem, that needs to be put forward and resolved.

Conduct: Legislator Anker made some great comments at the first Commission meeting. We talked about the conduct issue. And so that's going to ultimately make the difference. It's going to be everything from personal conduct so that awareness needs to be raised and the personal conduct so we're not flushing pharmaceuticals down the drain as an example. Okay? But it also needs to be conduct that's translated into the Government's conduct on what systems they approve and what systems are out there, as an example, for on-site systems. And that's in the works. And then it has to be that kind of conduct that translates to engineers and builders and developers. So that conduct issue is a big one.

And finally, and last but never least, is the idea of funding. Okay. This project of working on, not only the report, but an Action Plan that says we're too -- we're a little bit late but we're going to do it right this time, says we need to put some money into this. And then part of this Commission needs to be looking at where that money is going to come from.

I had the opportunity to attend a meeting on April 10th with Regional Director of Region Two of the EPA Judith Enck. I've known Judith for quite some time. She's a tremendous professional. And I had the opportunity to ask the question that I sort of asked at the first meeting of this Commission. So the EPA in 1978 grants us this privilege of being designated the sole source aquifer, but basically they invited everybody to the party and never came. And so the point of that story is, is that while Judith's very professional response was "well, I understand your question, but understand we're not going to be making a big check to the Counties because the Federal Government also doesn't have any money"; frankly, one of my ideas would be to at least, and I made this suggestion at the meeting, is perhaps the EPA should provide some initial funding to the LICAP itself. That would give some ground funding to the work that I think has been left behind since 1978.

So, anyway, that's my little message. That's some of the things that I intend to bring to the Commission and hopefully the Commission will move with. And I look for your support to be able to serve. Thank you.

CHAIRWOMAN HAHN:
Legislator Barraga? Okay, I'm sorry. I'm sorry. All right. We have a motion and a second. All those in favor?

LEG. KRUPSKI:
On the motion.

CHAIRWOMAN HAHN:
Okay, on the motion Legislator Krupski.

LEG. KRUPSKI:
Thank you, Madam Chair. So you talked about the structure of the Commission and the length of the Commission and everything. Do you plan on making the type of recommendations for land use, planning, set backs, drainage, buffers those sort of mechanical improvements? I worked hard to get a representative from Suffolk County Soil and Water on the Commission. Because if you look at

the -- I don't know how you'd say it -- kind of the mechanical aspects of water quality, if you're looking at inputs into the aquifer, plus the quantity of water that goes in, we just had a nice rainfall, depending on where you were on the Island last week, between five -- two-and-a-half and five inches, I mean it's so important to capture that rainfall to recharge the aquifer and capture it in a fashion that's clean water recharging the aquifer. But I didn't -- unfortunately, and I'm going to put a resolution in, unfortunately the member from Soil and Water is not a voting member, which is kind of unfortunate because this is someone who has the experience in water quality improvements.

So is that the kind of recommendations you hope to make from this? And are you going to work strictly from a water vendor standpoint? Or are you going to reach out to the different municipalities who actually have at their discretion the ability to make changes in their codes to require some of these things?

MR. WHITE:
The answer is is that you're exactly right. The Commission has to look at all of those options, all what we would call the tools. And they're going to be non-structural in term of land use issues and then they're going to be structural or engineering controls. So you can't -- it's as if when Walt and Cornelia were talking about these sort of ecosystem base management approach and comprehensive water management, this effort has to be all through those disciplines. And so, yes, the land use -- and, by the way, that's going to be another issue of translating this information to the Towns. Because we all know the Towns have control over land use. So if we start to see some recommendations coming to this Commission, quite frankly there's going to be a time when that intervention needs to happen.

LEG. KRUPSKI:
And I think you should also look out to -- reach out to some of the Towns during the course of your deliberations because some of the Towns do have a good grasp of land use. And you might be able to translate that to other areas.

MR. WHITE:
I absolutely agree. And we have also Towns that are in control of Water Districts as well. So they do have a clear role, absolutely, I would agree.

LEG. KRUPSKI:
Thank you.

CHAIRWOMAN HAHN:
Okay. We have a motion and a second. All those in favor? Opposed? Abstentions? It is approved. **(VOTE: 5-0-0-0)** And you do not need to attend our General Meeting on Tuesday.

MR. WHITE:
Okay. Thank you very much.

CHAIRWOMAN HAHN:
Thank you. Congratulations. Look forward to hearing from you.

TABLED RESOLUTIONS

All right. To Tabled Resolutions. **Introductory Resolution 1034, Authorizing appraisal of land under the Suffolk County Drinking Water Protection Program, as amended by Local Law No. 24-2007, Farmer property Town of Brookhaven (SCTM No. 0209-027.00-02.00-031.000). (Browning)** I'm going to make a motion to table; seconded by Legislator Anker. All those in favor? Opposed? Abstentions? **1034 is tabled. (VOTE: 5-0-0-0)**

Introductory Resolution 1311, Authorizing Suffolk County to enter into an Intermunicipal Agreement thereby creating the Peconic Estuary Protection Committee. (Co. Exec.) I see Tom Vaughn here. Tom, I'm going to make a motion for the purposes of discussion to approve.

LEG. KRUPSKI:
Second.

CHAIRWOMAN HAHN:
Seconded by Legislator Krupski. On the motion, Mr. Vaughn.

MR. VAUGHN:
While we appreciate the support of that, we would ask you to unfortunately please make a motion to table. We had a change in staff down in the County Attorney's Office, the attorney who was working primarily on this. That has delayed this a little bit.

CHAIRWOMAN HAHN:
I remember the e-mail. I got that.

MR. VAUGHN:
Yeah, we have no doubt that we're going to be able to get it back on track; it's just delayed momentarily and we think that it should be good to go probably by the next cycle.

CHAIRWOMAN HAHN:
Well, I withdraw my motion to approve and replace that with a motion to table.

LEG. BARRAGA:
Second.

CHAIRWOMAN HAHN:
Seconded by Legislator Barraga.

LEG. KRUPSKI:
On the withdrawn motion.

CHAIRWOMAN HAHN:
Legislator Krupski.

LEG. KRUPSKI:
Is there anyway -- because I have been attending some of the meetings on the PEP IMA and working with some of the Towns. Is there any way to reach out -- that the Administration could reach out to the Towns for that information? Because they are looking to the County for guidance and looking to the County, you know, for the structure to help pull this together. And I think it would -- it would be helpful to their different organizations and Town Boards if they -- if they had that reassurance from the County that this is, in fact, only a mechanical problem and not a philosophical one.

CHAIRWOMAN HAHN:
Yes, I agree with Legislator Krupski. I think that we need to make sure everyone knows that this -- we intend to move forward on this. I really don't think we should delay past the next EPA Committee. So hopefully we can get everything in time for that.

MR. VAUGHN:
We never have a problem with communications. And if you have a list of people that you'd like us to reach out to, we'd be more than happy to. Or if there's somebody that you feel that I should know who to reach out to, but we can make sure that you the proper people are notified.

LEG. KRUPSKI:
You don't personally have to pay them all a visit, but it would just be -- all the people who represent the various Towns on the inter-municipal agreement.

MR. VAUGHN:
Well, if the offices are located on the East End, I heard that you have some fantastic barbecue out there and we can plan a field trip.

LEG. KRUPSKI:
You definitely have to go then.

CHAIRWOMAN HAHN:
On that, however, Mr. Vaughn, what kind of timeline do you have?

MR. VAUGHN:
To the best of my knowledge, there's not a -- there's not a significant problem. This was a -- this was a -- we had a staffer working on it. They -- we now have a new staffer who needs to get up-to-date on it. I don't think that there's any -- that there's any major holdup here. It's just that the work needs to be done and we need to make sure that all the i's are dotted and the t's are crossed.

CHAIRWOMAN HAHN:
Okay. We'll look forward to approving it at the next EPA meeting hopefully. Thank you. With that we have a motion to table and a second. All those in favor? Opposed? Abstentions?
Introductory resolution 1311 is tabled. (VOTE: 5-0-0-0)

INTRODUCTORY RESOLUTIONS

Onto new Introductory Resolutions. **IR 1328, Resolution to enhance the transparency of the "Triple A Program" (D'Amaro)** by Legislator D'Amaro.

LEG. MURATORE:
Motion.

CHAIRWOMAN HAHN:
Motion by Legislator Muratore.

LEG. BARRAGA:
Second, with an explanation. I would like to get an explanation.

CHAIRWOMAN HAHN:
Second by Legislator Barraga. And to Counsel.

MR. NOLAN:
Legislator D'Amaro's resolution seeks to amend the Triple A Program, the Land Acquisition Program. I think to address what happened at our last General Meeting where the EPA Committee had made priorities for land acquisitions, there was a procedural resolution prepared and then the body -- the entire body had questions about the acquisitions and the process and so forth. So I think it's really designed to get information out to the entire Legislature leading up to that procedural resolution.

So, for example, when the Department of Planning prepares a report with the appraisals and the scoring and the recommendations, that wouldn't just go to the EPA Committee, that'd be disseminated to all Legislators.

Secondly, all Legislators will get notice on the EPA agendas when the Committee is going to be

setting those priorities so Legislators can come to those meetings and they're entitled to come to the Executive Session as well.

And, thirdly, the procedural resolution that has the priority acquisitions, the Clerk is directed to disseminate that to all Legislators at least two days before the meeting where they're going to be considered. So that hopefully we can head off that situation where it's 11 o'clock at night, the procedural resolution comes before the full body and everybody has questions. The idea is to get the information out to everybody so nobody is surprised and maybe it works better.

CHAIRWOMAN HAHN:
Legislator Barraga.

LEG. BARRAGA:
Wasn't there some discussion with reference to highest price offers and making that publically known? Wouldn't that be the case? I mean if you take the Environmental Trust Review Board and they notify every Legislator in terms of the parcels involved and the prices that are going to be offered, that's a matter of public record and everybody really knows. I think the system we had, if I recall correctly, we -- that was sort of like an executive kind of decision we came out with the parcels that we were interested in, the prices, but the others we didn't really make it publicly known in terms of the prices.

MR. NOLAN:
I still don't think that is something that is going to be made public even though each Legislator will be apprised of what the highest value was assigned by the ETRB. The idea would be Legislators should not be releasing that, that if somebody --

LEG. BARRAGA:
Well, realistically you're going to send this out to 18 different members and hope it's not released by -- at some point somewhere?

MR. NOLAN:
It may happen, but I think Legislator D'Amaro intends for that information not to be released. Even though it was discussed at the last General Meeting, there was a discussion and it was decided when he was preparing this resolution, we were not going to direct that the values be made public.

LEG. BARRAGA:
I know what he intends but the reality is, you know, you put that information out there, it's like public information.

MR. NOLAN:
Well, five Legislators are getting it now. And I don't think it's been released to anybody so you're really --

LEG. BARRAGA:
But I think the Chairperson at the time made it very clear to the members of the Committee, that, you know, we shouldn't do that. You're dealing with four or five people as opposed to 18 individuals, many of whom are not even on the Environmental Committee.

MR. NOLAN:
Well, but -- I'm not advocating but --

LEG. BARRAGA:
Well, let's say the information gets out there. What's the negative effect? What's the ramifications associated with that? The individuals now know what we're willing to pay for their property and can they negotiate higher prices? Or they regard that as a minimum? I mean, where does this all go?

MR. NOLAN:
I think that was the discussion at the General Meeting. And this is the highest price we're going to offer. This is what our practice is now. This is what we do offer. So I don't know exactly what the negative ramifications would be if a high value got out, but I do know that the Division of Real Estate did not want those numbers to be released. They thought there was a downside to it.

LEG. BARRAGA:
Realistically they will be released. Those numbers will get out there.

MR. NOLAN:
Myself, I don't think that's necessarily so. I think, you know, if you tell Legislators do not release the highest values, I trust that most -- I trust that all Legislators will not release that information.

LEG. BARRAGA:
It's good to be a believer in trust.

MR. NOLAN:
I believe.

CHAIRWOMAN HAHN:
Legislator Krupski.

LEG. KRUPSKI:
I did read the bill over. And I understand what Legislator D'Amaro's concerns are. And I don't -- I don't have a problem with the bill as it's written. It's got to be made very clear to the individual Legislators that this is a private transaction between a private property owner and the County; and that the County's done a lot of work at ETRB and the County's done Environmental Assessments; and the County's done the appraisals. And that it's a -- as such it's a private document and it can't be released to the public because it could affect the value. It could also affect, after the County does all the work, the transaction. So you don't want that -- if that information gets out, there's a lot of moving pieces in a real estate transaction. And if the County's done all that work, the County should be in control of that transaction with the private property owner, period.

So I don't have a problem with that as long as we find mechanically how to disseminate that information fairly to everyone without it getting out. And if there's a problem, it might come down to a real localized dissemination of the information. You might have to come here or come to planning, take a look at the information and then go home without a copy. And I know that in my experience when you look at different appraisals and you compare notes and you look at the different scenarios and different properties, at the end of it all, the information's collected and put back in the file and nobody leaves with anything. And that's a very good way of keeping things confidential. So I know it's possible. It might not be possible electronically. I'm not an expert in that, but you might have to have people actually physically who are interested either come here or come to Planning to review all the information.

CHAIRWOMAN HAHN:
Does this bill require that the report is shared electronically?

MR. NOLAN:
It doesn't say electronically, no, but that the report has to be provided to each Legislator.

CHAIRWOMAN HAHN:
To the Director, have you had a chance to review this bill? And do you have thoughts that you'd like to share with us from Real Estate Division or -- okay. Or Tom?

MR. VAUGHN:
We have had our Director of Real Estate Jill Rosen-Nikoloff review the bill and thinks that in its current form, it's completely workable. I think that the thing to remember with the whole Triple A process is that we had -- we had a process for purchasing land that went back certainly I think -- probably before I was here. We had planning steps; and then we bought. And the desire -- the whole reason that we went back -- that we looked to do -- make the revisions under the Triple A Program was to really try and tighten up a process. And I think that whenever you go and you start changing something that's been established for a longtime, you're going -- you're not going to have the final form the first time out of the box. And I think that this is a revisionist process that we're going through right now.

If we find that we have problems with information leaking out such as Legislator Barraga has explained or has concerns about, then we'll have to figure out what's the next change that we have to do. But as this bill is written right now, we like the idea -- we like the idea as put forward and then we'd like the ideas of being able to share the information and Real Estate's comfortable with it.

CHAIRWOMAN HAHN:
Okay. I, too, agree, you know. I think we knew we had -- hit some bumps in this process. I think we discussed that on the record when we passed the Triple A Program. We said we would look to make fixes to make people feel comfortable because we made -- I think we took a huge step forward with the Triple A -- with the new Triple A process. And I'm, you know, perfectly willing to discuss these.

I'm -- I am concerned about an e-mail broadcast of the information. If it does not specify -- I'm just wondering if the -- the sponsor might be willing to, you know, rule out the e-mail; or at least if the Administration would be willing to rule out an e-mail broadcast of this data as the method of transmission, because that does concern me. It just makes it so much easier. It could be accidental, you know, how things are forwarded on to people. And I would prefer that there not be -- that this information is not shared in that manner.

MR. VAUGHN:
I certainly understand that concern. Without -- the only -- I certainly understand the concerns about the e-mail and I understand the desires to make sure that the -- as far as the information is concerned. At this exact moment standing up here in front of all of you, the only other method that I can think of is providing a hard copy to each member of the Legislature. And then when you're talking about doing that, we would be either getting into a timing issue of trying to make sure that it was mailed out to all of the offices appropriately or hand-delivered to all the offices via courier appropriately. That being said, I think that that's a tough thing for me to commit to right here on the record right now unless Miss Lansdale has a thought on that.

CHAIRWOMAN HAHN:
Is there anything wrong with a fax?

MR. VAUGHN:
I had completely forgotten about faxes, quite honestly. I'm completely serious.

LEG. KRUPSKI:
He's too young.

MR. VAUGHN:
I really hate fax machines to be quite honest with you, but I had completely forgotten that we still use them.

LAUGHTER

DIRECTOR LANSDALE:
There may be a way where we could talk with IT and see if the e-mails could -- once they're sent could not be printed and could not be forwarded.

CHAIRWOMAN HAHN:
Okay.

MR. VAUGHN:
Or we can try faxing.

CHAIRWOMAN HAHN:
Okay. I do -- you know, I do -- I see that it says any member of the Legislature may attend the Environment Committee meeting. I think that that exists already. I don't want there to be a feeling out there that anyone is not allowed to attend the Environment Committee or would have been turned away, you know. We've only done this once in our process. And we will be -- I've been told we will be having the next review at our next EPA Committee meeting.

DIRECTOR LANSDALE:
That's right.

CHAIRWOMAN HAHN:
So we will find a way to notify all 18 Legislators of that, although I believe all 18 do get the agenda. And it's always listed on our agenda, but maybe we'll make a special note of that in a separate e-mail. And obviously when this comes up for discussion at our General Meeting, we'll let all 18 know as well. Okay. Any other questions? Legislator Anker.

LEG. ANKER:
I also have a concern though as far as the confidentiality of the bidding process. And it just seems like this is going to create more issues in this legislation; like Legislator Hahn had said, you know, the Committee meetings are already opened to the other Legislators. It just -- I don't know. Sarah, what's your thoughts as far as the process? Will this hold up the process or infringe on the process as far as trying to acquire land?

DIRECTOR LANSDALE:
I think this bill improves upon the Triple A process as previously stated by Tom Vaughn.

LEG. ANKER:
And as far as trying to get that information out there for just the Legislators in e-mail, fax, whatever, which I'm thinking maybe an envelope that would be, you know, labeled confidential and something like circulated by the, you know, the inter-mail-offices.

DIRECTOR LANSDALE:
That's a good idea. We'll explore all of those.

CHAIRWOMAN HAHN:
But do we have -- can you, you know -- can you please somehow tell us that you won't be e-mailing it out? Was that made clear to us?

MR. VAUGHN:
No, I did not make that clear.

CHAIRWOMAN HAHN:
On purpose?

MR. VAUGHN:
Do I want to make that clear?

CHAIRWOMAN HAHN:
We'd like you to.

MR. VAUGHN:
What if I go with we will make every effort not to e-mail it out? Will that provide the proper level of comfort? Look, the -- the only reason that I'm hesitant to commit to it right now is I don't want to find out that -- I don't want to go back over across the street and find out that this is going to involve us either having to push that timetable back further leading to a time crunch -- because I know the whole reason that we wanted to do it in a procedural motion was to make the process flow smoothly. So I don't want to go back across the street and find out that if I stick it in an interoffice envelope it's going to get there a week later which will be far -- which will interrupt the entire process. And I also don't want to find out that it's going to -- mean that I'm going to have to commit an individual to driving to all 18 offices one day. Because I have driven to at least 9 offices in one day and that makes for quite an interesting trip. Although if you plan it out, you can start -- you can start on the South Shore and then work your way up, kind of like in a hook, but it is an interesting trip.

So, look, I would just like more opportunity before I commit to you fully that we will not be e-mailing it out -- the opportunity to explore what it would mean not to e-mail it out. But I would be happy to commit to faxing it out for the first time. What if I promise that? We will fax it out for this first round. Well, one of the reasons that we would like to see it adopted today --

CHAIRWOMAN HAHN:
I have information from Legislator D'Amaro that he's going to -- he intends to amend it. The amended deadline is this afternoon. Saying that it can't be e-mailed out. And so with that, knowing that, you know, I would be very comfortable to pass it today. We all agree? Okay. So we have a motion to approve and a second. All those in favor? Opposed?

LEG. BARRAGA:
Opposed.

CHAIRWOMAN HAHN:
Opposed? One opposed. Abstentions? Okay, it is approved. **(VOTE: 4-1-0-0)**

Introductory Resolution 1335, Making a SEQRA determination in connection with the proposed installation of public safety radio communication equipment at Babylon (1st Precinct Monopole), Port Jefferson (Roof of St. Charles Hospital), and Montauk County Park (GATR Site) as part of the Countywide System Enhancements to the 800 MHz Radio Communication System Project (CP 3241). (Pres. Off.) I'll make a motion to approve, seconded by Legislator Muratore. All those in favor? Opposed? Abstentions? **1335 is approved. (VOTE: 5-0-0-0)**

Introductory Resolution 1383, Authorizing the acquisition of land under the New Suffolk County Drinking Water Protection Program (effective December 1, 2007) - open space component for the Sutera property - Mud Creek Town of Brookhaven (SCTM No. 0200-973.60-03.00-013.000). (Co. Exec.) I'll make a motion to approve; seconded by by Legislator Barraga. On the motion, Director Lansdale.

DIRECTOR LANSDALE:
Thank you. This property is 0.11 acres in size. It's surrounded by County-owned land. I'm currently distributing the rating form for your review. And it is surrounded by County-owned land that is located in part of the Mud Creek County Park. There are no structures on the site.

Currently the County owns 105 acres in the Mud Creek County Park north of Montauk Highway, which is contiguous to this property. This assemblage received a rating of 57 points. It received points for size, freshwater wetlands, adjacent protected lands, habitat diversity, and being a contributing area to the surface waters of Patchogue and Great South Bays.

LEG. KRUPSKI:
Does anyone have any questions about this proposed acquisition? Legislator Anker.

LEG. ANKER:
Any luck getting a contribution from the Town of Brookhaven? I know it's a small amount, but it is a Town.

DIRECTOR LANSDALE:
No, not at this point.

LEG. ANKER:
Just curious, did you ask them or has there -- you know, were they part of that process?

DIRECTOR LANSDALE:
I would have to ask the Division of Real Estate if -- if they were asked.

LEG. ANKER:
With that in mind, do we always ask a Town, municipality to partner with us or State when we go -- when we look into land acquisition?

DIRECTOR LANSDALE:
I'll ask Real Estate that question.

LEG. ANKER:
Thank you.

LEG. KRUPSKI:
I'm not familiar with this parcel. Is there development on either side of it adjacent to it?

DIRECTOR LANSDALE:
No, there is no development on either side.

LEG. KRUPSKI:
So it's adjacent to preserved land?

DIRECTOR LANSDALE:
That's right.

LEG. KRUPSKI:
Thank you. Any other questions?

CHAIRWOMAN HAHN:
Do we have a motion to approve? We have a motion and a second. Okay. All those in favor? Opposed? Abstentions? **1383 is approved. (VOTE: 5-0-0-0)**

Introductory Resolution 1392, Amending the 2014 Capital Budget and Program and appropriating funds in connection with the restoration of Canaan Lake (CP 8715) I make a motion to approve; seconded by Legislator Anker. On the motion.

LEG. KRUPSKI:
On the motion.

CHAIRWOMAN HAHN:
Legislator Krupski.

LEG. KRUPSKI:
What's the -- you know, I read through the description, but why would we spend this kind of money to -- this is to restore it. Canaan Lake is a -- as far as I know it's a dammed water body. So wouldn't -- if you restored it, wouldn't you remove the dam?

CHAIRWOMAN HAHN:
Frank? Is the green light on?

MR. CASTELLI:
Sorry, now it's on. Frank Castelli, Suffolk County Economic Development and Planning. To answer Legislator Krupski's question, the Water Quality Protection Restoration Program funded a Feasibility Study a few years ago to determine the most viable ways of clearing the invasive species that have taken over. Basically it was three lakes: It was the two Yaphank, Upper and Lower Lakes, and also Canaan Lake in North Patchogue.

And there was a final report that was issued in 2011 by our contractor Nelson and Pope. And the primary recommendation on the best way to clean up this Lake was to do shallow dredging and followed up by some herbicide treatment to remove the invasives and also to keep them from coming back. And the reason that the restoration of the Lake by removing the invasives is important is that the invasives have pretty much totally taken over the ecological balance of these Lakes including Canaan Lake. And that this -- the plan would be to remove them and to try to keep them from coming back.

The Water Quality Protection Restoration Program funding was completely utilized. There was no additional funding for any restoration work. And Legislator Calarco has put forward this resolution, which is to change the Capital Budget. I guess there was $500,000 in the 2014 Capital Budget that was designated for site improvements. And this resolution is going to move that 500,000 into planning, design and engineering, which would be the next step for this. But before any implementation of this could be done, we need to have a study -- an engineering design -- all that work has to be done including the permitting that would need to be done before any actual construction.

LEG. KRUPSKI:
The -- this was just done in Lower Lake in Yaphank. Was there any -- and I know the Town of Brookhaven borrowed $3.7 million to do this. Is there any correlation between the two projects as far as, you know, the mechanics of it, deposition of the dredge material and the success?

MR. CASTELLI:
The work that was done in Upper Lake -- Upper Yaphank Lake was funded by the Town of Brookhaven. There is a correlation in that the -- the study that was done made recommendations for all three Lakes. And that the -- the basic recommendations were for shallow dredging in all three Lakes and herbicide treatments. So there is a correlation there. But the -- each Lake is different in that -- that's why this additional funding would be needed. We would need the additional funding to do the actual design work. Because when you get right down to the details of the Lakes, they're not the same. There's different pathometry and there are different inputs of nutrients to the Lake so that you would -- that's what this funding would be for, the design work that would -- would be -- you have to come up with a plan that everyone would be comfortable with including the DEC people that would need to permit this.

I know that there is some concern about the effect of the dredging on the Lake. And there was some concerns with the work that was done at Upper Yaphank Lake. And, in fact, they were supposed to -- the Town of Brookhaven was supposed to go on with dredging the Lower Lake in

Yaphank. And this was -- one concern was that there is a lot of excess turbidity that was stirred up by the dredging in Upper Lake that was moving downstream. And they were -- the Department of Environmental Conservation was concerned about that and the effect that that would have. Also that there is a matter of funding -- additional funding that's going to be necessary for the Lower Lake.

But right here where we're talking about, Canaan Lake -- and I know -- I remember going to meetings several years ago. And there was a lot of desire to get this work done by the local residents. And they -- there has been efforts made in the past to remove the invasives in Canaan Lake with some limited success.

LEG. KRUPSKI:
So who owns the underwater land? And why did the people there want it done?

MR. CASTELLI:
The underwater land is -- I think the northern half of Canaan Lake is primarily Town of Brookhaven. And the southern half is primarily Suffolk County. There is some private ownership. There are a couple of privately-owned parcels. They are very limited in size. The reason that the people want the work to be done is to return the ecological balance of the Lake. It's also an aesthetic thing to be able to utilize the Lake to go in there with unmotorized row boats and fishing.

LEG. CALARCO:
If I may?

CHAIRWOMAN HAHN:
Yeah, Legislator Calarco.

LEG. CALARCO:
We've been -- I've been working on this project actually since 2006, is when we first started working with the folks in this neighborhood in the Canaan Lake region of North Patchogue to try to deal with this issue. They want it to be addressed. Because if you ever drive by Canaan Lake in the summertime after -- you know, by mid-June, early July, it looks like a lawn. It doesn't look like a lake because the weeds are so high and they're literally growing out of the water at that point in time. So it's really a very affecting problem to them in terms of their quality of life. There is health issues because the stillness of the Lake creates a -- it becomes an issue for mosquito breeding and other issues as well. And it's just a -- use of the Lake. If you talk to any of the old timers there, they'll tell you about the days when there was a beach and they used to be able to swim in the Lake and everything else. And it's just a very unusable body of water at this point in time.

So to be able to get the invasives cleaned up and to get them out of there, to return the Lake to a usable forum, I don't think it'll ever be a bathing lake again, but they'll -- certainly where they can do boating and fishing and, in fact, the State DEC still stocks the Lake with fish. So it is something that could be utilized.

In terms of the damming, there is a {weir} system, I believe, on the southern end of the Lake that would actually be useful to us in terms of avoiding some of those turbidity issues so that they can clog, you know, dam the Lake while they are dredging this stuff out so that they're not allowing anything to float downstream. There is Patchogue Lake further down, down the stream. This whole Canaan Lake actually feeds into Patchogue Lake which feeds into the Patchogue River. So Patchogue Lake has its own issues that are very similar going on right now. So it's something they'd want to address.

But the Town has been actually very proactive in trying to do their part. When they reconstructed Traction Boulevard, which is the road that runs along the southern edge of the Lake, they installed a fish ladder with the hopes that as we get things improved, we will be able to improve the habitat for

the fish and be able to get the alewife swimming all the way back up to Canaan Lake like they once did.

So there's a lot of moving parts. There's a lot of efforts. I'm sure as we do this planning steps here, we will be able to work out agreements with the Town of Brookhaven to allow for them to accept our dredge spoils at the Town dump. And then also what we were hoping, my plan is that once we are done with this, the County owns a small park on the east side of this Lake already; and that we would be able to make some minor improvements to it. We have -- actually we have a small little dock that goes off into the water that doesn't look like it's gotten attention in probably about 25 years; maybe fix that up and create a place where people can launch it as it is supposed to be now where they could lodge a small boat or a canoe or kayak or something and be able to get out into the Lake and do some fishing.

LEG. KRUPSKI:
I'm familiar with invasives. They're invasive for a reason. If you do the -- if you remove the vegetation, you're not going to get 100%, and you're keeping the nutrient input the same, aren't you going to get a rapid regrowth of the invasives and recolonization of that species or the two species?

LEG. CALARCO:
Well, I think that's why they suggested to do a couple of things. One is dredge it to remove the muck, which is that muddy substance on the bottom. This Lake was originally a sandy bottomed lake. So if you remove that muck, it inhibits the weed growth. And also by cleaning all the weeds out, you start getting a little bit more movement in the water, which will help. These weeds don't like to grow where there is moving water. Obviously we're a -- more of a lake than even the Yaphank Lakes are. So it's going to be somewhat still still. But having it deepened, having it de-sandy is inhibitive to the stuff -- to these weeds in particular of the nymphoid and the cabomba.

And the other issue, as Frank has mentioned, is we're going to want to look at possibly having the use of some herbicides in the future. This is something that was similarly done, I believe, in your district, the Peconic Sportsmens Club. They did a project similar to this that we've looked at as well as different places in Upstate New York. And Nassau County has been doing this quite a bit in some of their smaller lakes and ponds and they've been having some success lately.

LEG. KRUPSKI:
They would apply the herbicides to the surface water?

MR. CASTELLI:
Yeah, the herbicides would be applied to the surface waters. All that would have to be worked out as part of the engineering study and permits would have to be obtained. But that's generally the way it's done.

LEG. CALARCO:
There's a pre-approved product typically called Sonar, if I'm not mistaken, that the DEC has already approved and has been in use for many years in different parts of the State.

LEG. KRUPSKI:
Is it approved for use in areas that drain into tidal wetlands in a marine environment?

LEG. CALARCO:
Yep, absolutely. In fact, they use that -- they use that product in -- at the Sportsmen Club out in Peconic.

MR. CASTELLI:
Just the application of the herbicide on any County property would have to be approved. We would

need to get an exemption from the pesticide CAC because of the ban on pesticide usage on County property. But that would be something that would have to be addressed later on if the desire was there to do the herbicide.

LEG. KRUPSKI:
It just seems to me that we're looking at an almost identical situation in Yaphank Lakes, that you would take a look at Brookhaven's experience before you went ahead and committed this kind of money towards another project. What would the -- this is $500,000 for -- to borrow 500,000 for basically another study. What would --

LEG. CALARCO:
This isn't a study. This is to do the engineering work so we can put a dredge in the ground -- a dredge in the water in the early part of 2015.

LEG. KRUPSKI:
What would the cost of the project be? I mean that's what --

LEG. CALARCO:
The fees --

LEG. KRUPSKI:
Let me finish please. If you're going to authorize borrowing $500,000 to do something, we should know really the cost of the project in total. And really you should have the ability to forecast somewhat the success rate of the project instead of -- I don't know if you got it now, and you've got a great example of what Brookhaven did, at least to take a look at it in this growing season to see how effective their removal was versus it just coming back. Because you didn't reduce the nutrient flow into the water body.

LEG. CALARCO:
My understanding speaking with the Councilwoman who represents the area of the Yaphank Lakes, Upper Yaphank Lake is clear; crystal clear right now. And it's doing very well. In terms of the cost, we had -- the feasibility study did identify the cost of doing this in Canaan Lake of about $927,000. So we have $500,000 in the budget for this year. Obviously we're making some changes because it was in for site improvements. That's the construction end. We need some of that money to go towards the planning phase. And there's another 500,000 that was placed in the Capital Budget for next year, which would be ready to go when we want to go to the dredging. You'd want to dredge this in the wintertime when the plants are dormant.

CHAIRWOMAN HAHN:
All right. We have -- anyone else? Thank you for the indulgence of the Committee in allowing them to discuss this. I think that was important.

LEG. CALARCO:
I appreciate it. Thank you very much.

CHAIRWOMAN HAHN:
We have a motion to approve and a second. All those in favor? Opposed?

LEG. KRUPSKI:
Opposed.

CHAIRWOMAN HAHN:
One opposition. Abstentions? **1392 is approved. (VOTE: 4-1-0-0)**

We passed 1393. We took that out of order.

So we are on 1399 -- **IR 1399, Appropriating funds for the purchase of equipment for groundwater monitoring and well drilling (CP 8226) and approving the purchase of a replacement vehicle in accordance with Section (B)(6) of the Suffolk County Code and in accordance with the County Vehicle Standard Law. (Co. Exec.)** I'll make a motion to approve; seconded by Legislator Anker. All those in favor? Opposed? Abstentions? **1399 is approved. (VOTE: 5-0-0-0)**

Introductory Resolution 1411, Amending the Adopted 2014 Operating Budget to transfer funds from Fund 477 Water Quality Protection, amending the 2014 Capital Budget and Program, and appropriating funds in connection with Orient Decentralized Wastewater Treatment Engineering Report (CP 8710.139). (Co. Exec.) For purposes of discussion, I'll make a motion to approve; seconded by Legislator Anker. On the motion, does someone -- Frank, you're still up here, so.

MR. CASTELLI:
Yes. Yes, this is a resolution to appropriate $60,050 in Water Quality money. This is Quarter Percent money for a report -- an engineering -- well, for an analysis of wastewater treatment specifically in the Orient area. This project was recommended by the Water Quality Protection Restoration Program Review Committee in our December 2013 meeting. The $60,050 will be fully matched by Peconic Green Growth. They are the not-for-profit that will be spearheading this project. This is for the vital area of making improvements to how we treat wastewater; specifically this would be for the area around Orient.

CHAIRWOMAN HAHN:
Legislator Krupski.

LEG. KRUPSKI:
Thank you, Madam Chair. How did you know?

CHAIRWOMAN HAHN:
Could just tell.

LEG. KRUPSKI:
Could you give us a little more detail into what we're going to try to accomplish here?

MR. CASTELLI:
Yes, I think the most appropriate person for that would be Glynis Berry from Peconic Green Growth who is right now to talk about it.

CHAIRWOMAN HAHN:
Okay. Welcome Glynis. State your name and title for the record.

MS. BERRY:
Glynis Berry, Executive Director of Peconic Green Growth. We consider this project to be groundbreaking, in fact, because it would be the first time that the County has looked at clustered decentralized systems for existing neighborhoods. And with that we have to look at how to manage it, how to, you know, change how we evaluate funding it. Because we're trying to reduce the nitrogen. And it's not always an equal situation.

Orient is historic so its densities are existing nonconforming. And people are still on wells. So there are a lot of lots that are 8th of an acre to 1/4 of an acre and they're on wells. So we're also dealing with drinking water standards. It's going into Orient Harbor as well as the Sound so we've got two estuaries of national importance being affected. And Orient actually has a relatively healthy marine environment. Although during, you know, flooding and that, you see the algae growing on the beach. And it's also a site of major shellfish restoration and commercial farming. And there's

also a monitoring station in Orient Harbor. There are only two in the Peconic Estuary. So we'll actually be able to see the impact of any eventual improvements.

And what's interesting is, it's continuous monitoring right now. And in late Summer and early Fall, the conditions are going into the stressful stage. So I think it's a really good demonstration project for both the land use issues and for the water quality issues.

CHAIRWOMAN HAHN:
Refresh my memory. It's been awhile since that meeting. This is for engineering report, meaning to prepare to actually put in the ground some clustered system?

MS. BERRY:
It's not a full design. It's just the initial engineering report, which would evaluate the system. They'd have a schematic with some details. They do a cost estimate. We compare systems. Because we need that information to go out to the public. And then we would go to the next step for a full design once we --

CHAIRWOMAN HAHN:
Remind me, have you chosen the neighborhoods where you're going to try this?

MS. BERRY:
Yes. In fact, I've got two maps here.

CHAIRWOMAN HAHN:
Bill, thank you.

MS. BERRY:
This is the next step on a year-and-a-half's worth of planning exercises. We did a survey of residents on the issue. And Orient had the highest participation rate of any community. A third of the residents submitted. And it's interesting because the involvement has been the highest we've seen of any community. Naturally they're also concerned about water quality both of their aquifer and the surface waters. But the responses were pretty in line with the overall survey. So it's actually going to be a good test community for this because you do have the full range of issues and opinions. But the Orient Association has been a full partner.

What -- the reasons these districts are recommended is we mapped all the conditions of concern that indicate excess loading of nitrogen and came up with these recommended districts. Also they're different sizes so it'll be a good way to kind of test different approaches to solving the issue.

CHAIRWOMAN HAHN:
Okay. Excellent. Does anyone have any questions?

MS. BERRY:
Can I add one more comment?

CHAIRWOMAN HAHN:
Sure.

MS. BERRY:
Currently the only time these clusters are used are for new development where people exceed the densities for Article 6. So this would be, you know, doing it retroactively.

CHAIRWOMAN HAHN:
This is very exciting to be able to pilot a program like this where we're retrofitting our existing -- already existing homes that are un-sewered with a new system in a cluster style, like a

neighborhood at a time. And you're going to also select maybe where you would actually place the systems that'll all be part of this --

MS. BERRY:
We've already -- we had some funding so we already worked with the engineer and identified the ideal locations. But now we have to start working with the property owners.

CHAIRWOMAN HAHN:
Have you taken any property due to tax default in that area; in any of those areas? Have we reviewed that? No, not yet.

DIRECTOR LANSDALE:
Not yet.

CHAIRWOMAN HAHN:
Not yet. Okay, hopefully we'll do that. Right. Okay. I definitely think we need to be considering when we take properties, you know, before we get rid of them, especially in areas where projects like this are going on, obviously those may be candidates to place systems of this nature in the future. And so throughout our priority zones, we should be careful before we either give them away to the Town or put them up for auction.

I think we have a motion and a second. And one more comment from Legislator Krupski.

LEG. KRUPSKI:
Just a comment on what you just said about -- about taking parcels and the County using them. You're absolutely right, that we should look at all the different options when the County does take on property. That could very beneficial in a lot of areas. Just one question for Glynis. What's your timeline on this?

MS. BERRY:
Well, we already did the RFP and we have an engineer. So as soon as you give us the green light, we can go to the next step.

LEG. KRUPSKI:
Not the start but how about the finish?

MS. BERRY:
Oh, the finish? Actually the hard part is probably going to be figuring out how to manage it. So my guess, it would take another year. Once we get the report and sort of get all the parameters, that's what we'll be working on at the same time. So my guess is you need another year for a full design and, you know, getting the Town to figure out how they want to approach this.

LEG. KRUPSKI:
That's not the answer I wanted, but thank you.

MS. BERRY:
Sorry. I would love it to be sooner.

CHAIRWOMAN HAHN:
All right. We have a motion to approve and a second. All those in favor? Opposed? Abstentions? **1411 is approved. (VOTE: 5-0-0-0)**

Introductory Resolution 1427, Amending the Adopted 2014 Operating Budget to transfer funds from Fund 477 Water Quality Protection, amending the 2014 Capital Budget and Program, and appropriating funds in connection with Nitrogen Fertilizer Reduction

Initiative (CP 8710.120). (Co. Exec.) I'm going to make a motion to approve; seconded by Legislator Muratore. On the motion, Frank, this is about signage on pesticide sales?

MR. CASTELLI:
No, not on pesticide sales. This is --

CHAIRWOMAN HAHN:
Fertilizer? Sorry.

MR. CASTELLI:
This is for fertilizer. This is $8,000 in water quality money that was also approved by the Water Quality Committee during December. This is for $8,000 that would be necessary for us as a department to do what we are -- what we are charged with doing in support of Local Law 41-2007 which is the nitrogen reduction fertilizer initiative.

The monies specifically would be to provide courses for landscapers on the Best Management Practices of applying fertilizer. We are bound -- the landscapers need to take this course in order to get a new license or to renew their Home Improvement Contractor's License. And we are obligated to provide these courses to the landscapers.

The Local Law also requires that we place signs, signage and brochures in every retail establishment within the County that sells fertilizer. And we've identified about 350 different fertilizer retailers. So we need -- we need this funding in order to produce the signs and brochures, etcetera, and also to provide the courses.

CHAIRWOMAN HAHN:
I think it's a, you know, an excellent program. I just hate the fact that we're using 477 grant money to do it. Anyone want to talk about it? Legislator Krupski.

LEG. KRUPSKI:
Thank you, Madam Chair. I think it's a good program. I think people need to be educated when they apply fertilizer on their lawns. There's, you know, buffers and setbacks to wetlands and surface water areas next to the road. The fertilizers tend to wash into the roadway and run down into surface water. So I think it's a -- if you educate the applicators, I think -- it'll be money well spent.

CHAIRWOMAN HAHN:
No, no doubt. That's not my -- I think it's an excellent thing we probably should do; spend even more money doing it. But I just -- I hate that we're using the 477 dollars to do it. Anyone else want to comment? Okay, we gotta do it. We have a motion and a second. All those in favor? Opposed? Abstentions? **1427 is approved. (VOTE: 5-0-0-0)**

With no further business, we are adjourned.

THE MEETING CONCLUDED AT 12:34 PM
{ } DENOTES SPELLED PHONETICALLY