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NASSAU COUNTY LEGISLATURE

PETER SCHMITT,  
Presiding Officer

HEALTH AND SOCIAL SERVICES COMMITTEE  
PUBLIC WORKS COMMITTEE

ROSE MARIE WALKER,  
Chairwoman

1550 Franklin Avenue  
Mineola, New York

Monday, July 9, 2012  
4:10 P.M

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MEMBERS OF HEALTH COMMITTEE:

ROSE MARIE WALKER  
Chairwoman

FRANCIS BECKER  
Vice Chairman

VINCENT MUSCARELLA

NORMA GONSALVES

JUDI BOSWORTH,  
Ranking

DELIA DeRIGGI-WHITTON

ROBERT TROIANO (Not Present)

MEMBERS OF PUBLIC WORKS COMMITTEE:

VINCENT MUSCARELLA,  
Chairman

HOWARD KOPEL,  
Vice Chairman

FRANCIS BECKER

NORMA GONSALVES

DAVID DENENBERG,  
Ranking

JOSEPH SCANNELL

CARRIE SOLAGES

WILLIAM MULLER,  
Clerk of the Legislature

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2 CHAIRWOMAN WALKER: I'll call  
3 the Health and Social Services Committee and  
4 Public Works Committee to order. I would  
5 ask Mr. Muller to take the roll.

6 CLERK MULLER: Legislator  
7 Troiano?

8 (No verbal response.)

9 CLERK MULLER: Legislator  
10 DeRiggi-Whitton?

11 LEGISLATOR DERIGGI-WHITTON:  
12 Here.

13 CLERK MULLER: Ranking Member  
14 Bosworth?

15 LEGISLATOR BOSWORTH: Here.

16 CLERK MULLER: Legislator  
17 Gonsalves?

18 LEGISLATOR GONSALVES: Present.

19 CLERK MULLER: Legislator  
20 Muscarella?

21 LEGISLATOR MUSCARELLA: Here.

22 CLERK MULLER: Vice Chairman  
23 Becker?

24 LEGISLATOR BECKER: Present.

25 CLERK MULLER: Chairwoman Rose

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2 Walker?

3 CHAIRWOMAN WALKER: Here.

4 CLERK MULLER: And also on the  
5 Public Works Committee, Legislator Solages?

6 LEGISLATOR SOLAGES: Here.

7 CLERK MULLER: Legislator

8 Scannell?

9 LEGISLATOR SCANNELL: Here.

10 CLERK MULLER: Ranking Member

11 Denenberg?

12 LEGISLATOR DENENBERG: Here.

13 CLERK MULLER: Vice chairman

14 Kopel?

15 LEGISLATOR KOPEL: Here.

16 CLERK MULLER: And every member  
17 of that committee is here. And Legislator  
18 Bosworth is sitting in as well.

19 CHAIRWOMAN WALKER: Thank you. I  
20 would like to introduce Dr. Eisenstein who  
21 is going to speak to us this afternoon.

22 DR. EISENSTEIN: Good afternoon  
23 and thank you everybody.

24 Legislators, it's my great honor  
25 to be here today to talk about something

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2 that I've probably spoken to you all more  
3 about than every other issue combined, which  
4 is mosquitos and mosquito control.

5           When we spoke last summer when we  
6 were talking about spraying and dealing with  
7 West Nile, we mentioned that we were going  
8 to completely overhaul our mosquito control  
9 plan and present to you what our plan is  
10 going forward and how it's going to affect  
11 your residents.

12           I want to take a moment before we  
13 begin to say, over all winter, the mosquito  
14 experts in the Department of Health and  
15 along with our experts in public works,  
16 collaborated to come together on the very  
17 large document, which I left with Clerk  
18 Muller, everybody should have a copy of  
19 that, as well as the presentation that I'm  
20 going to do briefly.

21           We're going to keep it brief but  
22 try to be thorough at the same time, which  
23 will describe our response to mosquitos  
24 which, right now, we get a lot of  
25 complaints, public works gets a lot of

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2 complaints. Certainly I have interacted  
3 with many of you regarding mosquito control.

4 I want to thank Commissioner  
5 Shah. She's been a wonderful partner as  
6 have her experts, and with us today from  
7 DPW, Anthony Falco and John Gallo. And from  
8 my department, Angela Petinelli has been the  
9 liaison and they've been working around the  
10 clock along with Ken Arnold from DPW to  
11 update and modernize the document that you  
12 have.

13 We have seen new viruses and new  
14 mosquito species come to our area, and it  
15 really does impact life on a daily basis and  
16 certainly can present a health threat which  
17 is why I'm leading this discussion.

18 Following this, the  
19 administration is going to be having forums  
20 throughout the county and a schedule will be  
21 coming out and published where I willing be  
22 going, along with some of the other experts,  
23 to meet the public to answer their questions  
24 and questions.

25 We know up front that mosquito

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2 control spraying and other efforts, it's not  
3 unanimous about how the public feels about  
4 it. We will get two neighbors who one  
5 strongly wants to be sprayed and the other  
6 who doesn't.

7                   The most important thing that I  
8 can tell you is that the document that you  
9 have before you, the control plan that we're  
10 going to be presenting, has been created  
11 with the most modern science that we have  
12 available. We explored what's being done in  
13 other counties that have mosquito issues  
14 throughout the United States.

15                   We have read the documentation of  
16 the CDC, we have the guidance of the New  
17 York State Health Department and the work is  
18 a collaboration of our experts and DPW's  
19 experts to try to present the residents of  
20 Nassau County with the safest, smartest  
21 mosquito control plan.

22                   So, with that, in the first  
23 slide, just take a look at a truck from the  
24 1950s, and mosquito control is something  
25 that has long historical significance.

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2           As a matter of fact, at the turn  
3 of the century, Malaria was one of the  
4 number one killers even here in New York.  
5 And people don't ever think of Malaria as a  
6 disease in the United States, but its  
7 mosquito control efforts that eliminated it.  
8 And Malaria today still kills millions of  
9 people around the world, but I'm happy to  
10 say it's not endemic in the United States  
11 any cases that we do see here which we do  
12 see once in a while are usually brought in  
13 by travelers.

14           We used to spray kerosene on  
15 waterways and it was quite an effective way  
16 of controlling mosquitos, but it was also of  
17 course very toxic. So, over the years, the  
18 chemicals that have been used to treat  
19 mosquitos have changed. I'm glad the  
20 experts John and Anthony are here should you  
21 have any questions on that at the end they  
22 should be able to address that.

23           A mosquito control commission was  
24 created in the 1920s in response to a yellow  
25 fever epidemic that was ravaging the

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2 southern part of the United States, which,  
3 the fear was, it would come up north, and it  
4 really didn't, but Yellow Fever and Malaria  
5 are diseases that do kill millions of people  
6 around the world, were once part of the  
7 United States and they have been in the  
8 history of the United States. So you can  
9 see why it's very important as new viruses  
10 emerge that we address this.

11 In 1948, the county charter wrote  
12 mosquito control into DPW as a control  
13 response, and we have worked when disease  
14 has been part of it as partners.

15 In 1996, a coordinated effort was  
16 made to bring DPW and the health department  
17 together to control mosquito borne diseases  
18 and, in 1999, West Nile Virus made a  
19 reappearance in Nassau that came here very  
20 hard after not being here for a very, very  
21 long time.

22 We are going to be talking about  
23 our surveillance and rehabilitation  
24 measures. The purpose of what we're doing,  
25 well, it's twofold. We've been asked many

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2 times that due to the unusually mild winter,  
3 do we anticipate a large population of  
4 mosquitos? The answer is, it certainly  
5 could be. Other factors do play into it,  
6 but we're being very proactive.

7 We do know, going back to last  
8 year, not only from Hurricane Irene, but if  
9 you remember about two weeks before  
10 Hurricane Irene, a tremendous rainstorm  
11 dumped about ten to 12 inches on the county  
12 which raised the water table, and then this  
13 big windstorm came spreading mosquito  
14 breeding grounds everywhere.

15 We have had basically relentless  
16 numbers of mosquitos last summer and now  
17 this spring we've had the complaints. Early  
18 in the spring we got complaints about  
19 mosquitos, and it turned out to be gnats in  
20 most cases, but I don't deny for a second  
21 that even in my own backyard there's a lot  
22 of mosquitos, and I have small children who  
23 like to play back there.

24 So the purpose is to create a  
25 plan that reduces the large populations of

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2 mosquitos, and we'll show you data that  
3 shows that that should also reduce levels of  
4 disease.

5 We talk about spraying and so we  
6 want residents to be aware of what the truck  
7 might look like. If they see this driving  
8 down the street with Anthony shooting the  
9 gun, it's not a UFO, it's not an alien.  
10 They'll be in a mask. But this is, from the  
11 distance, what the truck might look like. A  
12 close-up of the fogger that dispenses  
13 pesticides when we do ground spraying.

14 Although we have dozens of  
15 mosquitos, there are three main mosquitos.  
16 First is the Culex Pipien. That is the  
17 mosquito that you see that comes out around  
18 dusk. You see it hovering around lights at  
19 night. It is the mosquito that's most known  
20 to transmit West Nile Virus and it's the one  
21 most effectively treated at this point by  
22 spraying.

23 The second kind of mosquito we  
24 call sollicitans. This is the one that, if  
25 you're out at the beach, and around 7

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2 o'clock, all of a sudden a billion mosquitos  
3 attack you out of the blue, this is likely  
4 to be the sollicitans, which is the salt  
5 marsh mosquito. This is known more to be a  
6 nuisance rather than a disease carrying  
7 mosquito, although all mosquitos can carry  
8 disease, but certainly in certain places,  
9 outside of Nassau, there is precedence for  
10 treating this. Suffolk County does this in  
11 Fire Island because it's basically unusable  
12 as a tourist destination without it. So  
13 it's something that we aggressively  
14 larvicide and try to prevent.

15           The third mosquito that I've  
16 listed and the main driver behind the change  
17 in our control plan is the Asian Tiger  
18 Mosquito. The Asian Tiger Mosquito, which  
19 I'm going to show you in a picture in a  
20 slide, you will all recognize it, you've all  
21 seen it. It's been here a few years now.  
22 It's an invasive species which is not  
23 originally from the New York area. We first  
24 noticed it in the United States in Florida,  
25 and it has slowly worked its way up. The

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2 great fear with this is, following on its  
3 heels of arriving in Florida and working its  
4 way north, Dengay Fever has started to  
5 appear in Florida. We have not been -- not  
6 us, the federal officials have not been able  
7 yet to declare that the Dengay Fever that  
8 first appeared in Key West and has now moved  
9 up into main land Florida is because of  
10 this, but temporally it follows. So there  
11 is an epidemiological link that makes it  
12 likely that the Tiger Mosquito is the reason  
13 that Dengay Fever has arrived.

14                   The Tiger Mosquito is a daytime  
15 mosquito. This is why so many people last  
16 year said, right in the middle of the  
17 afternoon, I can't use my backyard. There's  
18 plenty of mosquitos. It was most likely  
19 these Tiger Mosquitos. They're very hearty  
20 and they bite during the day.

21                   I just listed here, you all have  
22 this in a packet that I gave to you, the  
23 three diseases that we really worry about.  
24 West Nile is now considered endemic. We've  
25 had cases going back too many years in a row

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2 for it not to be. I'm going to show you.

3 Dengay Fever which ravages parts  
4 of Central America, Mexico, and other parts  
5 of the world is a very unpleasant virus  
6 that, when it doesn't just cause months of  
7 horrible bone pain and fever, can lead to  
8 death.

9 And the third is Eastern Equine  
10 Encephalitis where horses are the main host.  
11 Once in a while, a human will be an  
12 accidental host. It's about a third of the  
13 percentage of time fatal when it is in  
14 humans. Horses most of the time are  
15 vaccinated. We do have a large equine  
16 community in the north shore, polo clubs and  
17 areas where there's a lot of horses.

18 We haven't had this in Nassau  
19 County, thankfully, but upstate counties did  
20 have it last summer and the summer before,  
21 small numbers of cases, but it brings home  
22 the point that we have to be proactive about  
23 mosquito control.

24 We have 42 traps located in  
25 secure places where they remain secure so

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2 that the public or any other interest can  
3 not get to them. I make sure I don't know  
4 the locations. But we have them spread out  
5 along the grid throughout the county. The  
6 dots represent the areas where they are and  
7 the red dots show traps that did test  
8 positive for West Nile mosquitos during the  
9 last year. As you can see, the pattern kind  
10 of makes it so it's all around the county.  
11 Yes?

12 LEGISLATOR BOSWORTH: I actually  
13 have a number of questions. We've had such  
14 a rainy --

15 DR. EISENSTEIN: I will be  
16 willing to stay as long as you want  
17 answering questions. Thank you.

18 Going to the next slide, we're  
19 showing the total number of mosquitos  
20 trapped. There really isn't a pattern, per  
21 se, there's mosquitos all around the county.

22 The next slide shows you, if  
23 anybody recognizes this, is the Tiger  
24 Mosquito, you cannot miss those stripes on  
25 the legs. Even my kids recognize it. This

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2 is the daytime biter that three or four  
3 years ago was not here in Nassau County. It  
4 is now here in numbers that makes it to  
5 remain endemic. The fact that it's a  
6 daytime mosquito makes it very difficult,  
7 because spraying during the day, A, is not  
8 nearly as effective at night because the sun  
9 can deactivate it, but you also can't drive  
10 down the street while kids are playing on a  
11 summer afternoon and spray, so controlling  
12 this mosquito is difficult.

13 Furthermore, this mosquito  
14 requires very very little water compared to  
15 others to reproduce, to lay its eggs. This  
16 is a mosquito that if there's a little soda  
17 bottle, water bottle cap that has a  
18 millimeter of water in it, it can breed many  
19 babies. It also does not need water to  
20 live. So on a dry night, these mosquitos  
21 are not out at night, they will gather  
22 around bushes and little trees, in gutters,  
23 and they live until water comes when they  
24 breed. So this is really important that we  
25 control this.

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2                   These are the traps that had at  
3     least 25 or more Tiger Mosquitos at a time  
4     during the summer last year. As you can  
5     see, there is kind of a band across the  
6     south shore of the county, but no area is  
7     not going to have the Tiger Mosquito. And  
8     the black dots don't mean there was no Tiger  
9     Mosquitos, it means there wasn't enough to  
10    trigger at least 25 in a trap at a time, but  
11    we expect Tiger Mosquito to be everywhere in  
12    the county.

13                   There's a total number of  
14    mosquitos trapped through the years 2005 and  
15    2011, and a lot of last year being the  
16    highest due to the tremendous amount of rain  
17    and the storm that we had which created  
18    mosquito breeding grounds.

19                   When trees are knocked over and  
20    the wet leaves lie, and in bushes, it  
21    creates a tremendous amount of mosquito  
22    breeding grounds, and that happens after we  
23    work all year to maintain the sumps and  
24    sites where mosquitos can breed.

25                   You know, sewers get backed up

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2 and we work as best we can to clear it. I  
3 know DPW can comment more on those efforts  
4 if you have a question for them after, but  
5 last year we trapped the most amount of  
6 mosquitos that we have.

7 We also had last year, the next  
8 slide, is the number of complaints. Last  
9 year is 60 percent more than any year before  
10 that. Most of it came when the storms came  
11 at the end of the summer.

12 The next slide shows a little bit  
13 of a relationship, pretty clear that the  
14 year we have the most complaints is the year  
15 we trap the most mosquitos. The people that  
16 are complaining are not crazy. There are  
17 more mosquitos. That's why it's difficult.

18 Next, this is a really important  
19 slide which shows the number of positive  
20 pools from West Nile Virus from 2005 to  
21 2011. The reason I say it's important is,  
22 there is no years between 2005 and 2011  
23 where there were no West Nile mosquitos.  
24 West Nile is now considered endemic by us  
25 meaning it's a virus that's part of our life

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2 and we have to control it.

3 In the beginning when West Nile  
4 appeared in 1999, it was a year that we had  
5 some, a year that we didn't, but now we know  
6 that it's here. And what's really  
7 important, I'm going to go through this  
8 slide on to the next, this is the  
9 correlation between positive traps of West  
10 Nile and human cases of West Nile. The top  
11 graph shows positive pools, the bottom graph  
12 shows human cases.

13 If you notice, especially with  
14 2010 and 2011, the overlap is remarkable.  
15 When we trap large amounts of mosquitos  
16 carrying West Nile, we know that humans are  
17 going to catch the disease. The data is  
18 pretty impressive here.

19 So everybody says, what is going  
20 to cause it to be a good or bad West Nile  
21 year, and the fact is, scientists are just  
22 learning this, but we do know that birds are  
23 the natural host for the disease. Humans  
24 are an accidental host. When birds are not  
25 well, they're more likely to become infected

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2 and they're also easier for mosquitos to  
3 bite. So anything that stresses birds is  
4 typically what makes a West Nile year bad.  
5 So, yes, having large numbers of mosquitos  
6 due to rain is part of the factor, but  
7 they're more likely to be infected  
8 mosquitos, for example, in 2010, when we  
9 showed you in the slide before, was the  
10 biggest year, but it didn't rain for about  
11 three months straight. That stresses the  
12 birds. The birds have to fly long distances  
13 to find watering holes. The heat hurts the  
14 birds and weakens them, and they are easy  
15 for the mosquitos to get to.

16 So it's not only that the  
17 rainiest season is going to be the most  
18 dangerous season regarding mosquitos,  
19 certainly we are going to have more  
20 mosquitos most likely in a rainy season, but  
21 this is a very multi-factorial thing trying  
22 to determine what's going to cause mosquito  
23 borne illness.

24 We've looked at various factors  
25 that impact the population. We know, and

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2 this is a very important point for you to  
3 take back to your constituents, we know that  
4 mosquitos don't fly more than two to 300  
5 feet. The really hearty ones with a breeze  
6 may make it 350 feet. The point of knowing  
7 this is that the mosquitos on somebody's  
8 property are their mosquitos. They're  
9 yours. They're your pets. Any mosquito  
10 that bites you in your backyard most likely  
11 hatched in your property.

12 Now, in some parts of the county  
13 where the houses may be closer together,  
14 maybe one property overlaps another. But  
15 the mosquitos that are getting my kids in my  
16 backyard are not coming from a different  
17 legislative district.

18 And so the role that people take  
19 in protecting their property from mosquitos  
20 is really important. When I speak with the  
21 public, one of the number one messages is,  
22 your mosquitos are your mosquitos, so please  
23 protect your property. We're going to show  
24 you a picture later of all the places around  
25 the property that people don't even think

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2 that we see on a daily basis harboring  
3 mosquitos.

4 The numbers on the bottom of this  
5 slide refer to CDC week. They're not dates,  
6 but, as you see, West Nile positive  
7 mosquitos generally come later in the summer  
8 and that probably correlates with extended  
9 periods of high heat and when birds get  
10 stressed. So we haven't sprayed in May and  
11 June even though there may be some mosquitos  
12 because, traditionally, there hasn't been  
13 virus at that time. That's just what this  
14 slide is aiming to show you temporally.

15 Now, what are we doing about it?  
16 We are being very proactive because I don't  
17 want to wait for a case of Dengay Fever.  
18 There is debate in the science as to whether  
19 Dengay Fever can even survive in this  
20 climate. It's a horrible disease that we're  
21 not waiting to find out.

22 So, before you is a summary of  
23 the very long control plan document that you  
24 have. It says draft on it, just because  
25 there are little typos on it and a couple of

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2 little things that we're going to tighten up  
3 and then send you the finalized copy, but  
4 the main pieces of the plan are in place  
5 now.

6 We've divided the plan into  
7 various seasons. This first side shows what  
8 we do in the off season, or what we call  
9 winter. What are we doing at the end of  
10 fall, after the mosquitos? By the way,  
11 mosquitos will be active, it's considered,  
12 until two nights consecutive of freezing  
13 temperatures. Here, that could happen late  
14 in October. So that's about when the  
15 off-season begin.

16 Larval surveillance and control  
17 is something done by DPW. Adult  
18 surveillance and control, we still keep  
19 looking evaluating the data. Public  
20 education is a huge part of this. All this  
21 is going to be on our website, by the way,  
22 the Department of Health website.

23 The next slide shows early  
24 season. Early season, end of winter, early  
25 spring, and I'm not going to read all of

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2 this to you, but you can go through it if  
3 you have any questions, we'll be glad to  
4 discuss it.

5 This is a very summarized version  
6 of a very long document but I want you to  
7 have it.

8 Peak season, where we are just  
9 approaching. Talk a little bit about this.  
10 Larval surveillance and control continues,  
11 adult surveillance and control continues,  
12 particularly monitoring human cases. Not  
13 every county in New York State does it.  
14 About 10 or 12 of them do. We always seem  
15 to be one of the leaders in cases of West  
16 Nile, so we are -- we work very hard at our  
17 monitoring.

18 Late season towards the end, and  
19 the slide that I really want to get to is  
20 this one. Our proactive role in response to  
21 constituent complaints. Many of you have  
22 called me, have written me letters about  
23 constituent complaints. They're perfectly  
24 fair.

25 The first point I want to make.

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2 Sometimes -- the majority of time, they  
3 don't call you, they call either us or DPW.  
4 I think DPW got the majority of complaints  
5 last year. Every single complaint that  
6 comes in, whether it's to you or to us or to  
7 DPW is evaluated. Every single complaint.  
8 And a site evaluation is performed. We look  
9 to see, is it mosquitos, is there a source  
10 of mosquitos, is it just routine mosquitos  
11 that are normally there, or is there a risk  
12 factor that can be mitigated by DPW, the  
13 health department, the resident, or none at  
14 all.

15 We look at the point-to-point  
16 source. Let's say you give us an address.  
17 We will look to see, are there pools with  
18 stagnant water, fish ponds, artificial  
19 containers, children's toys harboring water,  
20 flower pots that have an inch of water that  
21 just sits there for weeks. This is what the  
22 experts on this do.

23 We identify the problem. If it's  
24 larval, meaning it comes from -- if we want  
25 to do larval control, it's a sump or a site

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2 where we can prevent the mosquitos from  
3 hatching in the first place, which DPW works  
4 year round at that, then we do that.

5 Is it a neighborhood complaint?  
6 Did we find that, well, I've got 30  
7 different residents within three square  
8 blocks in two days who are going nuts. We  
9 will evaluate the neighborhood. First  
10 identify the species, that helps us  
11 determine health risks. Determine breeding  
12 sites. Apply appropriate larval control.

13 When it gets to an entire  
14 community, we are looking for the species,  
15 we are looking for the sites. We have our  
16 trap data within the community, and then the  
17 key point, which is fifth down in the  
18 widespread column, refer to the mosquito  
19 control decision matrix. This is brand new  
20 for Nassau County and it's something that I  
21 felt very strongly about.

22 I want you all to have our  
23 algorithm now as to when we're going to  
24 spray. I've gotten a lot of calls over the  
25 years, why haven't you sprayed me? Why

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2 haven't you sprayed me? Now we have an  
3 algorithm that triggers spraying. So when  
4 we do our investigation, and we see the  
5 number of cases reaches where it should,  
6 we're going to spray. It can't be  
7 arbitrary. It can't just be, well, a few  
8 people over there feel like there is a lot  
9 of mosquitos, let's spray. Spraying carries  
10 a lot with it. We have to make sure we're  
11 doing the right thing by a community so  
12 we're not creating more of a health hazard  
13 than we're preventing. There is always a  
14 risk benefit reward making medical  
15 decisions. So that's how this algorithm is  
16 based, on the most modern science regarding  
17 risk benefit ratio and mosquito spraying.

18 So the next two slides with the  
19 blue and orange lines talk about how many  
20 mosquitos need to be in a trap to trigger  
21 spraying, whether there's complaints or not.  
22 And then, when there are complaints, how  
23 many mosquitos do we need to see, how many  
24 infected mosquitos.

25 So you can look that over. To

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2 get to one of my favorite slides, the house.  
3 This is in a flyer that I will be giving out  
4 when I go do the rounds for the evening  
5 events that's open to any of our residents.  
6 I don't know if you can see the light  
7 colored circles, but we really want to  
8 emphasize to people that mosquitos are  
9 breeding on their own property for the most  
10 part. Sure, if they have a water front  
11 house, if they have high tide, it will  
12 create a lot of mosquitos.

13 But, for the most part, we've  
14 circled the swimming pool, the child's toy  
15 in the back, gutters is probably considered  
16 number one. People leave leaves in their  
17 gutters. All it takes is a little rain, a  
18 two moist leaves stick together and  
19 mosquitos can reproduce from that all year  
20 essentially. So cleaning out gutters,  
21 making sure there are no stoppage points in  
22 gutters where a little puddle hangs out that  
23 you don't see.

24 Bushes is really important,  
25 garbage pails, people throw, when it's not

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2 their garbage day, they put their garbage  
3 pail, it rains, it collects, the cover sits  
4 upside down with an inch of water in it may  
5 be for a week. People really have to work  
6 at clearing their own home for mosquitos.

7 We're going to do our part, but  
8 the residents have to help us too. One of  
9 the analogies I use is, most people don't  
10 call the health department and we're not  
11 going to be able to come spray their  
12 countertop for ants, it's a nuisance.

13 So here it is too with the added  
14 burden of disease, but people can spray  
15 their backyards via exterminators or  
16 whatever. I know before I have my  
17 daughter's birthday party in my backyard,  
18 I'm going to spray my bushes and make sure I  
19 can do what I can on my own property while  
20 the county will do what it can to help.

21 But it's got to be a public  
22 partnership with us, the health department  
23 and DPW to make this work. There always  
24 will be some mosquitos. Mosquitos were here  
25 before we were.

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2                   So we're going to do our best to  
3     limit disease. We're going to be monitoring  
4     year round. You all know that I call you  
5     the second week at that first West Nile  
6     mosquito thing, and thankfully I haven't  
7     made that call to anybody yet this year.  
8     But it will be here. We know it's in  
9     Suffolk and New York City.

10                   So this is a brief summary of the  
11    plan. I know there's going to be a lot of  
12    questions. I have flyers. The next two  
13    slides show the flyer that's going to be  
14    going out. And certainly, again, I want to  
15    thank Commissioner Shah and her team and the  
16    people from my team who have really worked  
17    all winter.

18                   Just to tell you where I hope  
19    this is going. I spoke to Ed Eisenstein,  
20    the IT commissioner. Each year, after the  
21    season ends, we're going to evaluate the  
22    plan. This plan is going to go up on our  
23    website. I hope that we get to a point  
24    where in the future people can type in our  
25    website their address and it will let them

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2 know if it's sprayed, if it's going to be  
3 sprayed.

4 There's so much we can do for  
5 this to be friendly and responsive to the  
6 constituents and it is a top priority for  
7 us.

8 That's a summary of a very large  
9 document and now I'm here with Commissioner  
10 Shah and her team and Angela Petinelli from  
11 my department to answer any questions that  
12 you might have.

13 CHAIRWOMAN WALKER: Judi had the  
14 first question, so go ahead.

15 LEGISLATOR BOSWORTH: Thank you.  
16 First of all, Dr. Eisenstein, thank you so  
17 much.

18 DR. EISENSTEIN: Thank you.

19 LEGISLATOR BOSWORTH: And  
20 certainly I think we all are very grateful  
21 for the wonderful job that the Department of  
22 Health does, that DPW does, and Commissioner  
23 Shah does so much -- there's so much  
24 coordination and concern and terrific  
25 attention given to this.

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2 DR. EISENSTEIN: Thank you.

3 LEGISLATOR BOSWORTH: It's very  
4 appreciated by everybody. So just a few  
5 questions. We have unprecedented heat now  
6 and a very mild winter with very few days of  
7 extreme cold. Do you believe that will  
8 affect the number of mosquitos that we're  
9 going to see this season?

10 DR. EISENSTEIN: I believe it has  
11 the potential to affect it, but the weather  
12 patterns that we have going forward I think  
13 are going to play a bigger role. The fact  
14 that we've had these thunderstorms every few  
15 days, that generally sets up for very large  
16 numbers of mosquitos.

17 Interestingly, it doesn't  
18 necessarily set up for large numbers of  
19 disease because it spreads the birds out and  
20 keeps the birds healthy in a sense, but I  
21 think that being realistic, and based on how  
22 last year finished and the fact that we  
23 didn't have a horrible frozen winter to kill  
24 off a lot of the mosquito larvae, I think we  
25 potentially can have large numbers of

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2 mosquitos.

3           Our trap data is showing large  
4 numbers of mosquitos but we haven't  
5 triggered a spray response yet. So it all  
6 depends on what the weather pattern is. And  
7 what is interesting is, there is nothing in  
8 the scientific literature. We've searched  
9 and searched for the answer to that  
10 question. We are all hypothesizing based on  
11 anecdotally what we see. And that kind of  
12 makes this a little bit challenging.

13           We are using the best science  
14 available which isn't perfect on this, but,  
15 to answer the question, I think it's likely,  
16 especially if this weather pattern of  
17 thunderstorms and high heat every few days  
18 continues.

19           The other thing that happens when  
20 you get high heat is that people water their  
21 lawns more. That creates breeding grounds  
22 too. I'm guilty of that myself.

23           So we are prepared for a very  
24 large number-wise mosquito season.

25           LEGISLATOR BOSWORTH: The other

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2 thing that I find of tremendous concern is,  
3 it once was, you can say to people, don't be  
4 out at dusk, that's when the mosquitos are  
5 really out, but you're talking about this  
6 Tiger Mosquito that's out all during the  
7 day.

8 So how do we help residents  
9 protect themselves from getting and their  
10 children from getting bitten if this kind of  
11 mosquito is around all the time?

12 DR. EISENSTEIN: It's a very  
13 difficult question that health departments  
14 that all around the United States are  
15 grappling with. A couple of counties around  
16 the United States have come up with plans.  
17 We used some of what's been done before and  
18 come up with our own ideas.

19 This is where a couple of things  
20 have to happen. Number one, people have to  
21 take care of their own property. The good  
22 thing about the mosquito, the type of  
23 mosquitos, we don't see it necessarily in  
24 numbers like you do around dusk. You'll see  
25 a few of them hovering around, but

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2 definitely they have those new little Off  
3 clips that clip on to their waistband and  
4 give off a slight mist of mosquito spray.  
5 We want people to use mosquito spray safety  
6 when they can. We want people to make sure  
7 that toys are not left outside with a little  
8 bit of water in them.

9           Really, people need to maintain  
10 their property in order to use them. It  
11 wasn't always like that. You're right.  
12 It's frustrating that it's here. So it's a  
13 challenge. There is no other way to put it.  
14 It is a challenge to work with the public to  
15 try to protect their own property. That's  
16 the way to do it and to protect their  
17 children.

18           Certainly they need to keep their  
19 bushes trimmed, keeping their gutters  
20 cleaned, dumping any standing water, some  
21 people have little bird feeders. That's not  
22 a good idea. We're telling people not to do  
23 that. I've taken all the bushes out of my  
24 backyard. It's just grass and river rock  
25 because I know that's a risk factor.

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2                   LEGISLATOR BOSWORTH: This is the  
3 last question. We know that because of the  
4 fiscal challenges that really every  
5 municipal government is facing, there's been  
6 cutbacks in departments everywhere. Is that  
7 going to affect how we are monitoring the  
8 traps or how we're dispensing whatever  
9 services need to be serviced?

10                   DR. EISENSTEIN: Absolutely not.  
11 We have changed nothing from how we've been  
12 monitoring the traps. To this point,  
13 mosquito control -- first of all, it's  
14 mandated and it's a priority that I think  
15 really, certainly, in my opinion, and the  
16 support I've received from the  
17 administration is such that this is of  
18 utmost importance and, if anything, and I  
19 think Commissioner Shah can comment on it,  
20 we've actually I think grown in our mosquito  
21 control response, and their number of  
22 drivers, trucks, et cetera. But I don't  
23 want to speak for her.

24                   But to answer your question, from  
25 my perspective, our efforts are stronger

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2 than ever.

3 COMMISSIONER SHAH: Sheila Shah  
4 from DPW. Yes, we have increased our staff  
5 that has certified the Category 8  
6 certification from what we had initially in  
7 2010 to only a few actually went down to  
8 one. Now we're back at 12. So at one point  
9 we needed help from other municipalities,  
10 that's not going to occur anymore. We have  
11 sent our people for training, and they have  
12 taken the exam. We have plenty of staff who  
13 are available and certified to apply the  
14 needed chemicals.

15 CHAIRWOMAN WALKER: Legislator  
16 Gonsalves.

17 LEGISLATOR GONSALVES: Yes, Dr.  
18 Eisenstein, you said that the breeding  
19 ground is usually your own property,  
20 however, if you're adjacent to a homeowner  
21 who have large containers that have  
22 accumulated water over the past several  
23 months, wouldn't they be breeding on grounds  
24 for mosquitos that can come on to your  
25 property, in spite of the fact that you have

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2 done everything that you could?

3 DR. EISENSTEIN: Yes, we  
4 certainly respond to those complaints, and  
5 the way we would any other -- if you had  
6 called us about a neighbor who has a lot of  
7 rats on their property because they had  
8 garbage in the backyard, our inspectors  
9 would go and educate them and cite them if  
10 necessary, do whatever has to be.

11 We're going to do the same thing  
12 as far as if someone gives us a complaint  
13 that there's standing water because their  
14 number has ten gallon drums that are open  
15 and there's just billions of mosquitos.  
16 That's exactly what I meant when we said we  
17 respond to every complaint. That's a  
18 complaint that we will send somebody out to  
19 investigate.

20 LEGISLATOR GONSALVES: Last year  
21 I had that situation next door where they  
22 were doing construction. There were wheel  
23 barrels, big drums, and I know that they did  
24 contain water. I did call DPW and they  
25 responded and found that they had to remove

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2 the water and alerted the contractor, so  
3 that they should be doing the same thing  
4 from time to time.

5 I don't know. There are people  
6 that still have pools that have not been  
7 treated. So how do we get the message out  
8 to people, if these are your neighbors and  
9 you know that these are breeding grounds for  
10 the mosquitos, that they should call?

11 DR. EISENSTEIN: Well, we're  
12 going to do everything we can to have a  
13 major educational campaign all throughout  
14 the summer. We have new flyers showing what  
15 type of mosquito everybody recognizes. I'm  
16 going to be meeting with the public multiple  
17 nights this summer all throughout the  
18 county.

19 At every fair that we have, we  
20 give out the flyers. At every event that we  
21 attend, we have the flyers. There is no  
22 magic to this with the water. Little  
23 things, swimming pools, for example, just  
24 keeping the water moving is so much less  
25 risk than if the water is stagnant.

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2                   But we are going to try  
3    everything. We are going to be putting --  
4    our press officer is going to be asking the  
5    cable channel TV station news if they can  
6    put a little public service announcement  
7    out. We are going to be trying everything  
8    we can to get the message out. But,  
9    ultimately, it is going to be up to people  
10   to participate as our partners in this.  
11   There is no magic.

12                   LEGISLATOR GONSALVES: How will  
13   the need for spraying be assessed and when?

14                   DR. EISENSTEIN: The algorithm  
15   that we have, not the one that I just  
16   presented to you, I also passed out a draft  
17   of the actual control plan. The algorithm  
18   is in there regarding how many mosquitos  
19   versus how many diseased mosquitos versus  
20   how many complaints in an area will trigger  
21   spraying. That's based on the best  
22   scientific data. I don't know the exact  
23   number off the top of my head in a trap  
24   before we would spray.

25                   Certainly the presence of disease

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2 very quickly triggers spraying. We want to  
3 quell that right away. We want to make a  
4 difference in the quality of life. We want  
5 children to be able to play in their  
6 backyards and people to enjoy the beach.  
7 It's a big part of the summer here on Long  
8 Island. But preventing disease has got to  
9 be the number one thing that we look to do.

10 But we have the resources to  
11 spray where we need, when we need to. We  
12 just, quite frankly, haven't come close yet  
13 to trigger where that's a productive move.

14 LEGISLATOR GONSALVES: I'm going  
15 to go to the fact that if we spray our  
16 shrubs, I have hate to tell you, I must have  
17 sprayed our shrubs three times with a  
18 so-called organic solution, and every time  
19 we did it, guess what, it rained. So I  
20 think our efforts were in vein. Only the  
21 last time that we did it were we fortunate  
22 for about three or four days not to have any  
23 rain. But that is a problem. The fact is,  
24 you try to do the right thing, but, at the  
25 same time, Mother Nature just doesn't

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2 cooperate.

3 DR. EISENSTEIN: I agree, but the  
4 example that I always use is Disney World.  
5 Disney World is on a swamp in the most  
6 mosquito ridden land that there is in the  
7 world, yet you never get a mosquito bite in  
8 Disney World, and that's because they spray  
9 their property as soon as everybody leaves  
10 after the fireworks and I think that's why  
11 it is.

12 The fact is, they take care of  
13 their property and the mosquito breeding  
14 sites are eliminated. That's such a key  
15 component of this.

16 LEGISLATOR GONSALVES: I live  
17 around the corner from a residence where the  
18 elderly gentleman succumbed to West Nile.  
19 They treated him. I believe there is a sump  
20 behind his home. And even though he's no  
21 longer here, do they continually treat that  
22 particular property since there was a  
23 fatality?

24 DR. EISENSTEIN: West Nile is all  
25 around the county. The fact that there was

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2 a fatality in a certain location doesn't  
3 mean that that person picked up that disease  
4 at that location. He could have picked it  
5 up anywhere in the county. The presence of  
6 disease being everywhere doesn't mean that  
7 there's more risk where that gentleman  
8 succumbed. He was one of the unlucky  
9 victims. West Nile is fatal in about one  
10 percent, two percent of cases that get it.  
11 There are various factors, I guess immune  
12 factors that are involved. So the answer  
13 is, I wouldn't say that that area is any  
14 higher risk than any other West Nile area  
15 just because somebody there perished.

16 If you look at the deaths that  
17 we've had for West Nile over the past  
18 decade, they're really balanced throughout  
19 the county, kind of similar to the trap  
20 data.

21 LEGISLATOR GONSALVES: I know I  
22 have neighbors who complain all the time  
23 regarding mosquitos and their question to me  
24 is, when is the county going to spray, and  
25 your answer is?

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2 DR. EISENSTEIN: My answer is,  
3 when we trigger our spraying response, when  
4 the mosquito problem reaches a point where  
5 we verify disease or a number of mosquitos  
6 that are likely to produce disease, then  
7 we'll spray. It's really very funny. I'll  
8 get one call from someone saying, how come  
9 you haven't sprayed me, and the very next  
10 call will be that person's next door  
11 neighbor who will say, don't you dare spray  
12 my property, I don't want that chemical  
13 sprayed on me.

14 We do have to remember, although  
15 it's very low risk and there's been no  
16 evidence of human disease, spraying spray  
17 over large amounts of property is certainly  
18 not something that we want to do lightly.  
19 We do it when there's risk, when we need to  
20 do it, controlling mosquitos and improving  
21 the quality of life, lowering disease. The  
22 disease is a very important factor in this  
23 that really allows us to do this.

24 So, unfortunately, when somebody  
25 says, when are you going to spray in my

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2 area, there's not an easy answer to that.  
3 The answer is, when the mosquito problem is  
4 so bad in your area we can justify spraying.  
5 Spraying is something that we have to  
6 justify. We don't have the right to just go  
7 and spray. Every time we spray, we have to  
8 get it approved by New York State DEC.

9 Certainly the people who live  
10 near freshwater wetlands are really at risk  
11 because we're not allowed to spray on New  
12 York State wetlands. We have them  
13 interspersed throughout our county.

14 So we can't just decide, you  
15 know, we're spraying this area. Every time  
16 before we spray, we have to be approved for  
17 it. We have partners that the DPW team has  
18 made great partnerships with some of the DEC  
19 leaders and they've gotten to know our  
20 terrain and where we need to and where we  
21 don't.

22 But spraying is a difficult  
23 decision. It's an uncomfortable decision  
24 sometimes. We are ready to do it. It's a  
25 responsibility that I feel we have, but, you

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2 know, I can't go anywhere without somebody  
3 saying, when are you spraying me? I go to  
4 my kid's graduation at school and 15 people  
5 line up. I live on this street, make sure  
6 you spray me. It's not that easy. We try.  
7 Certainly when disease is involved, we run.  
8 There is no surefire answers as to when are  
9 you going to spray.

10 LEGISLATOR GONSALVES: Thank you  
11 very much, Dr. Eisenstein.

12 CHAIRWOMAN WALKER: Legislator  
13 Solages.

14 LEGISLATOR SOLAGES: Thank you  
15 very much, Ms. Walker. Doctor and  
16 Commissioner Shah, thank you very much for  
17 this excellent presentation. It was a very  
18 thorough presentation. I learned a lot  
19 today. Thank you.

20 DR. EISENSTEIN: Thank you.

21 LEGISLATOR SOLAGES: I see  
22 according to Table C1 and other trap areas,  
23 one location that hasn't been identified and  
24 I have received knowledge from constituents  
25 in my district as being an area of concern

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2 is the Devcote (phonetic) Way Sports Complex  
3 located near the intersection of Dutch  
4 Broadway and Elmont Road. I understand that  
5 you must pay attention to your algorithm and  
6 you cannot respond to me by spraying, but I  
7 ask you to please look into any complaints  
8 or concerns regarding that area. This, as  
9 you may know, is a large field that has  
10 remained fallow, whether it's a sump, and,  
11 of course, has retained its purpose as a  
12 sump retaining water, however, many  
13 neighbors have complained that many  
14 neighbors have complained that many  
15 mosquitos are now breeding.

16 To my understanding, there have  
17 been some capital funds, at least \$500,000  
18 designated to, whether it's a soccer field  
19 or a cricket field, to my understanding, I  
20 would like to know what is the progress of  
21 that, because I understand you have to work  
22 with the town on that project, and that may  
23 have an effect upon the mosquito population.  
24 Can you please shed some light on that?

25 DR. EISENSTEIN: Sure. I just

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2 want to say, while Commissioner Shah comes  
3 up, I just want to be clear. There are  
4 areas without traps. That doesn't mean they  
5 don't get sprayed. So when we get a  
6 complaint or you ask us to look into it, we  
7 will investigate. If community-wide we find  
8 that there is a mosquito problem there,  
9 whether it triggers our algorithm or not,  
10 they will qualify for spraying.

11 As Legislator Denenberg can tell  
12 you, I live in Bellmore. There is no trap  
13 in Bellmore. There is one on either side of  
14 Bellmore, but that doesn't mean that we're  
15 never going to be sprayed. Certainly when  
16 the complaints come in, whether there's  
17 traps or not, there is a place in the  
18 algorithm for spraying as a result of  
19 complaints. I will now let Commissioner  
20 Shah answer.

21 LEGISLATOR SOLAGES: Thank you.

22 COMMISSIONER SHAH: Yes. If we  
23 have received complaints about that area,  
24 our staff will definitely be out there, or  
25 they have been out there. We have to check

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2 the records to see what they found while  
3 they were there and the activity that took  
4 place as a result of what they found. So  
5 we'll check our records and go ahead and  
6 address that area one more time. As far as  
7 the Dutch Broadway project, the complex, I'm  
8 going to have to look into it and call you  
9 back but I do understand it's part of the  
10 Environmental Bond Act projects that we are  
11 conducting at the county.

12 As far as the status of that  
13 goes, I will have to call you back on that.

14 CHAIRWOMAN WALKER: Legislator  
15 Denenberg.

16 LEGISLATOR DENENBERG: Since I  
17 have both of you up and you live in my  
18 district, you certainly know first hand what  
19 happens in Wantagh, Bellmore, Merrick every  
20 summer, and the last two summers in  
21 particularly, or last summer, I haven't seen  
22 it yet this summer, although the season  
23 seemed to have started earlier, around  
24 Memorial Day both years, where I started  
25 getting complaints from our neighbors who

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2 were getting a number of barbecues or just  
3 being outside even during the afternoon  
4 where parties had to be brought inside or  
5 children had to brought inside.

6 What is the reason why we felt a  
7 heightened population earlier in the season  
8 last year and this year in terms of -- I'm  
9 going by complaints, as you said usually  
10 people are complaining because they really  
11 are getting bitten?

12 DR. EISENSTEIN: Yes. You know,  
13 it's funny. Our trap data isn't showing  
14 tremendous differences from prior years. I  
15 think that part of it is because of the warm  
16 winter. There was talk in February, oh,  
17 it's going to be a horrible mosquito season.  
18 So I think there's a little bit of people --

19 LEGISLATOR DENENBERG: Although  
20 last winter was much harsher, we had all  
21 that snow in January and yet it seemed to  
22 hit early too.

23 DR. EISENSTEIN: Well, you know  
24 what's funny though, last year our data,  
25 although the complaints came in early, our

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2 data showed that big rain storm that we had  
3 late summer really was when the mosquito  
4 populations took off.

5 We don't have the data -- we  
6 don't have the objective data that  
7 corroborates the early season being  
8 terrible. I'll tell you this. I know that  
9 we had some investigators check a couple of  
10 different sites along the water of the south  
11 shore this year, even in my own area, just  
12 from going out fishing at Jones Beach.

13 Earlier this year there was a  
14 tremendous gnat population that bit people  
15 and there were tons of bites, and the bites  
16 look like mosquito bites. A couple of  
17 complaints that I'm aware of that my people  
18 -- my team went to evaluate ended up being  
19 what was gnats, not mosquitos.

20 But for people, when they wake up  
21 with red itchy bumps, they don't know the  
22 difference. So the complaints don't always  
23 corroborate, but sometimes they do. So  
24 that's why we get the complaints. Every  
25 single one we go and evaluate. When we see

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2 an area where multiple complaints are, in  
3 fact, corroborative then we have an  
4 indication to take action.

5 LEGISLATOR DENENBERG: Your  
6 Section 8 in this report is adult control,  
7 if I'm reading that correct, adult control,  
8 which is chemical control spraying, and/or  
9 hand spraying or aerial application or some  
10 type of spraying application, and that  
11 relies upon West Nile Virus being present.

12 DR. EISENSTEIN: One of the  
13 indicators.

14 LEGISLATOR DENENBERG: Before we  
15 get to eight with adult control, seven,  
16 larval control, and I guess this is more for  
17 Commissioner Shah, larval control,  
18 particularly if you look at the map, really  
19 concentrates on the south shore, the barrier  
20 beaches, and some of -- it looks like  
21 preserves, Massapequa Preserve, Mill Pond  
22 Preserve.

23 So have we changed our larval  
24 control at all? Have we increased it or  
25 decreased it or is this --

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2                   COMMISSIONER SHAH: No. We  
3 respond to the normal complaints that we  
4 always get, whether they're -- whether the  
5 product we use is specifically for issues  
6 related to ponds or swimming pools versus  
7 other areas like storm water basins which  
8 require a little more long lasting type of  
9 control. We're addressing them similarly as  
10 we have done in the past. We monitor our  
11 salt water marshes and we do spray there as  
12 needed. We have twice this year, I believe,  
13 sprayed there this year so far, to try to  
14 keep the mosquito population under control  
15 in those areas.

16                   LEGISLATOR DENENBERG: Wait a  
17 second. Just to be sure. We have the  
18 ditches. Those are more of a natural --  
19 once ditches are in place, we maintain  
20 those, and the ditches work on their own, is  
21 there application there, or is that just  
22 feeding fish that eat the larvicides?

23                   COMMISSIONER SHAH: I was talking  
24 about the salt water marshes. That's where  
25 we had the helicopter spraying.

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2 LEGISLATOR DENENBERG: So that's  
3 what we've done twice this year?

4 COMMISSIONER SHAH: Yes, twice  
5 this year.

6 LEGISLATOR DENENBERG: What about  
7 hand application?

8 COMMISSIONER SHAH: Hand  
9 application has been going on for a while.  
10 As the complaints come in, our staff goes  
11 out and they take a look at what the  
12 possible problems could be, whether it's  
13 standing water due to a pool, pool cover,  
14 ponds, catch basin issues that we might  
15 have, any kind of standing water that might  
16 be on the property, we address those areas  
17 and we give out material to explain to the  
18 homeowners or the property owners of what  
19 the possible issues might be and how to  
20 control it.

21 LEGISLATOR DENENBERG: Last year  
22 we did the hand and aerial as well, or was  
23 it less?

24 COMMISSIONER SHAH: Last year we  
25 addressed complaints in the same manner,

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2 yes.

3 LEGISLATOR DENENBERG: Was there  
4 aerial larvicide application last year?

5 COMMISSIONER SHAH: At the salt  
6 marshes, I don't believe so. Not at the  
7 salt marshes.

8 LEGISLATOR DENENBERG: Was there  
9 a reason for that?

10 COMMISSIONER SHAH: Well, we  
11 conduct tests over there, dipping tests, and  
12 based on the results of those dipping tests,  
13 we conduct the spraying. This year the  
14 tests indicated that there was a need for  
15 it.

16 LEGISLATOR DENENBERG: We just  
17 see what the population is in the marshes?

18 COMMISSIONER SHAH: Yes. You see  
19 what the population in the larvae is, and  
20 based on that you make a determine to spray.

21 LEGISLATOR DENENBERG: So that  
22 will do throughout the season?

23 COMMISSIONER SHAH: Yes, we will  
24 continue to monitor that.

25 LEGISLATOR DENENBERG: Then adult

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2 control, what are the factors we look at  
3 before we can get the spraying?

4 COMMISSIONER SHAH: Adult  
5 control, basically is a matter of taking the  
6 traps that are out there, testing the  
7 mosquitos, and determining the disease that  
8 those mosquitos have.

9 LEGISLATOR DENENBERG: Then it  
10 could be by spray truck, hand or aerial  
11 depending on the need?

12 COMMISSIONER SHAH: That's not by  
13 hand, that's spray struck. That's by  
14 aerial.

15 LEGISLATOR DENENBERG: Okay. It  
16 says right here, adult sites are not applied  
17 by hand. So this year what we've seen so  
18 far, there is no need for adultciding as of  
19 yet?

20 DR. EISENSTEIN: Not yet. But  
21 the numbers of mosquitos are high. They're  
22 getting to where I'm sure at some point  
23 we're going to reach the point, based on  
24 what happens with the weather going forward,  
25 we don't have West Nile yet, in 2010, which

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2 was the worst West Nile year, we had deaths  
3 in June. So now we are in July with zero  
4 cases.

5 LEGISLATOR DENENBERG: Last year  
6 it was like that too.

7 DR. EISENSTEIN: We find the  
8 mosquito seasons evolved, quite frankly, in  
9 the data last year, until that big rainstorm  
10 late in the summer, we had a very light year  
11 West Nile-wise and then, all of a sudden,  
12 between that and the hurricane, August and  
13 September and October even were complete and  
14 total mosquito crazy, the amount of numbers.

15 So it is a process in fluctuation  
16 which also makes it difficult, but we are  
17 not there yet, but probably not far.

18 LEGISLATOR DENENBERG: Have we  
19 stepped up larval control because of high  
20 populations?

21 COMMISSIONER SHAH: We treat for  
22 any kind of complaints that come in. So our  
23 treatment is based on, right now, at this  
24 point, mostly based on the complaints, and  
25 then we go ahead and treat storm water

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2 basins and monitor the salt water marshes  
3 and things like that.

4 LEGISLATOR DENENBERG: Like you  
5 said, the aerial applications that I was  
6 familiar with and the salt marshes that so  
7 far you indicated twice this year?

8 DR. EISENSTEIN: We are going to  
9 evaluate this process yearly and certainly  
10 as new data becomes available and proof on  
11 it. But I think the framework document that  
12 you have is really important for us all to  
13 have.

14 LEGISLATOR DENENBERG: And going  
15 around as you both plan on doing, letting  
16 people know in each district is important?

17 DR. EISENSTEIN: Yes.

18 LEGISLATOR DENENBERG:  
19 Particularly those districts where all those  
20 dots are located like mine and so are other  
21 south shore districts. Thank you.

22 DR. EISENSTEIN: Thank you.

23 CHAIRWOMAN WALKER: Legislator  
24 DeRiggi-Whitton.

25 LEGISLATOR DeRIGGI-WHITTON: Thank

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2 you. I just wanted to ask you, no where in  
3 here do I see it addressed as to what could  
4 possibly be related to the spraying as far  
5 as a negative impact on health of kids and  
6 things like that.

7 Now, I understand the risk of  
8 these diseases would possibly outweigh  
9 those. But what are they? I do get  
10 questions regarding that.

11 DR. EISENSTEIN: I'll give from a  
12 medical perspective and then maybe Sheila or  
13 DPW guys might want to comment. The fact  
14 is, we haven't proven any risk based on the  
15 spraying. The dose that we're spraying is  
16 so minute that we have not shown  
17 scientifically that there is any harm that  
18 comes to human beings. I get asked about  
19 pets, dogs, cats.

20 Certainly, though, we are  
21 spraying a pesticide into the air in a very,  
22 very minute dose, that goes out about 15  
23 feet up and then settles down to the ground.  
24 As it falls to the ground where it catches  
25 the mosquitos that are hatching.

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2 We don't have evidence that this  
3 causes human disease. It's 'a really  
4 important point. It would be much more  
5 difficult to spray if there was evidence  
6 that this causes human disease.

7 Even people say, what about the  
8 bird life? Even that seems to be very, very  
9 low likelihood of effect. Certainly more  
10 birds die from West Nile mosquito bites than  
11 from the spray.

12 So the medical stance is, common  
13 sense is, when you're spraying a pesticide  
14 in the air, it's not good for your health,  
15 but there's no evidence that in the doses  
16 that we're spraying, I wouldn't recommend  
17 running right behind the truck. But in the  
18 doses that we're spraying, we have no  
19 evidence.

20 As a matter of fact, people  
21 always call the call center when we spray  
22 and say, I left my children's toys out back,  
23 what should I do. By the morning it's been  
24 deactivated and dissipated anyway after a  
25 short amount of time, so the truth is, I

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2 don't have to do anything but we say, all  
3 right, if you're uncomfortable, either  
4 spray it down. And in the sunlight, the  
5 pesticide is deactivated and broken down.

6 There are people that worry about  
7 this and there are people who feel it hurts  
8 the environment. The fact is that we don't  
9 have evidence of human disease as a result  
10 of it and we feel that the benefit of doing  
11 it certainly outweighs the potential risks  
12 and side effects.

13 COMMISSIONER SHAH: And certainly  
14 we take precaution when we do this, we give  
15 out the proper notification, whether it's  
16 through our website, through the  
17 legislature, through the county exec's  
18 office. We have proper notification. And  
19 we also pick a time that there will be the  
20 least amount of pedestrian activity. So  
21 those two factors will limit people right in  
22 the midst of our spraying.

23 LEGISLATOR DeRIGGI-WHITTON: I  
24 just wanted to follow-up with what Norma  
25 said. Is there a difference with the

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2 organic, or if you were going to do your own  
3 bushes, do you notice a difference in the  
4 efficiency of the organic versus chemicals?

5 DR. EISENSTEIN: I hire a  
6 professional. I'm going to ask the mosquito  
7 guys what the answer is. Anthony, want to  
8 come up?

9 MR. FALCO: Anthony Falco,  
10 mosquito control. Some people, they do call  
11 us back and they recommend the Cutter bug  
12 free instead of the organic. They say it  
13 works better. That's what I'm getting from  
14 the constituents, something like that.

15 DR. EISENSTEIN: As this becomes  
16 more and more of a hot topic, I think you're  
17 going to see more products coming out and  
18 information about the products on the market  
19 because, like I said, people are going to  
20 have to maintain their own properties  
21 mosquito free if they're going to be able to  
22 enjoy their property.

23 CHAIRWOMAN WALKER: Legislator  
24 Becker.

25 LEGISLATOR BECKER: I would guess

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2 that the household items that you have in  
3 your house could have more of a health  
4 detrimental effect, like in some of the  
5 things that we use, aerosols and whatever  
6 else, I'll bet they have more of a chance of  
7 causing us harm, that's probably a  
8 statement. Do you agree with that? You  
9 agree with that.

10 The other thing too is, I know  
11 that we work very hard, and maybe this is  
12 not something that can be evaluated, maybe  
13 you partially answered it, we try to  
14 encourage through our newsletters and others  
15 and even the newspaper, I know you do it as  
16 well, to avoid freestanding water, for  
17 example, if you have a tire tube and it has  
18 some water in it, or whatever else, does  
19 that in fact actually help do you think in  
20 the long run?

21 DR. EISENSTEIN: It's the number  
22 one proven technique for decreasing the  
23 number of mosquitos on a property.

24 The fact is, without standing  
25 water, the mosquitos can't breed.

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2 Unfortunately, there's so many places in  
3 that little picture of the house, and it  
4 shows that nobody thinks of standing water.  
5 Nobody thinks of their roof or their gutters  
6 or things like that, but we know that  
7 places, when we see that drum of water in  
8 the neighbor's backyard, we know that  
9 creates a mosquito hazard.

10 So, the answer is yes, absolutely  
11 I think it helps. And if I could just  
12 comment on the household products, I think  
13 one of the concerns that I have is just  
14 that, I don't know that the products are any  
15 more dangerous, it's just that the people  
16 using them may not be using them correctly.

17 Certainly they are being exposed  
18 to different concentrations than the truck  
19 which gives this appropriate amount of spray  
20 at a very low dose.

21 LEGISLATOR BECKER: That's good.  
22 I'm glad that you confirmed that that's  
23 number one, so we will continue to use that  
24 on our various newsletters. In fact, people  
25 will call my legislative office and say, my

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2 neighbor has got this thing in the back.  
3 I'm going to call the health department. I  
4 want him to remove it. I get quite a bit of  
5 those calls during the year where people  
6 want to stop their neighbors.

7                   Would you send out a letter if we  
8 got a complaint from somebody saying that  
9 you have some freestanding water, or  
10 whatever it may be, and would you please  
11 abide by the county's --

12                   DR. EISENSTEIN: They'll get a  
13 visit.

14                   LEGISLATOR BECKER: Even better.  
15 Would the commissioners show up themselves?

16                   DR. EISENSTEIN: If I needed to.

17                   COMMISSIONER SHAH: Legislator  
18 Becker, you also have to worry about things  
19 that you dispose of into your recycling  
20 basket. People tend to throw out bottles  
21 that are still half full, or not even half  
22 full is necessary. You can have a capful to  
23 be able to breed mosquitos.

24                   LEGISLATOR BECKER: That's a  
25 great suggestion.

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2 COMMISSIONER SHAH: This is one  
3 of the big culprits.

4 LEGISLATOR BECKER: People often  
5 have their recycle bins outside and you're  
6 absolutely correct, a can can fill up with  
7 water or something like that from the rain,  
8 but I am taking my notes to let my  
9 constituents know, but thank you. I  
10 appreciate that.

11 DR. EISENSTEIN: The key point  
12 also, as Commission Shah said, which is  
13 absolutely correct is, when we say standing  
14 water, people get an image of a pool or a  
15 giant bird bath. The fact is, we are  
16 talking about a little bottle cap. That's  
17 all it takes that you don't even see on your  
18 property. That's enough standing water  
19 especially for the new type of mosquito to  
20 breed.

21 LEGISLATOR BECKER: Thank you for  
22 all the information.

23 CHAIRWOMAN WALKER: I just had a  
24 few comments before we close. One was  
25 definitely before we would do any spraying

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2 in any area, there would be phone calls made  
3 to the constituents, all the constituents in  
4 that area, so that is a definite that would  
5 take place.

6 DR. EISENSTEIN: Yes. That's the  
7 law.

8 CHAIRWOMAN WALKER: And the other  
9 was, I know you said you have flyers and  
10 anything that you go to that you give them  
11 out. Are those flyers going to be mailed  
12 out to all the residents or just given out  
13 at events or whatever?

14 DR. EISENSTEIN: We haven't  
15 mailed them to everybody. Certainly we have  
16 a few thousand of them that we print at a  
17 time to do the different events. But I'm  
18 not opposed to giving anybody a copy of the  
19 flyer to do whatever you like with.

20 CHAIRWOMAN WALKER: Or even  
21 certainly if we let every legislator know  
22 that any events that they might be having in  
23 their communities, that they could have  
24 those flyers to give out.

25 DR. EISENSTEIN: And MaryEllen

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2 Lorraine, who you all know as a  
3 representative to the legislature, does a  
4 lot of the educational events. And she,  
5 besides being here, she's our director of  
6 public health education. So she's at the  
7 events with the flyers. So if you ever want  
8 a stack of them, and you see her here, or  
9 reach out to me directly, we'll get it to  
10 you.

11 LEGISLATOR DENENBERG: When she's  
12 not on the news talking about beach  
13 closings.

14 DR. EISENSTEIN: People forget  
15 something as simple as, you know when you  
16 get a full moon and you get that little bit  
17 of extra high tide and the water comes up  
18 and creates new puddles and activates new  
19 larval sites, some of it, beyond all of our  
20 events, nature rises the tide and there's  
21 little puddles and standing water created.  
22 This is a battle, us against the mosquitos.  
23 It's consuming.

24 Certainly it's the busiest part  
25 of my job as the health commissioner during

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2 the summer. It's a huge percentage of what  
3 we do. I think that our plan is going to  
4 bring us to the cutting edge in response to  
5 this.

6 CHAIRWOMAN WALKER: I just would  
7 like to thank you, Commissioner Eisenstein  
8 and Commissioner Shah, and everyone who has  
9 worked along with you.

10 Thank you for this presentation  
11 and for all the work you've done to get us  
12 to this point. You certainly were very  
13 educating to us here at the table, and  
14 certainly things we don't even think about  
15 like you said the recycling bucket, you  
16 rinse out the bottles and you throw them in  
17 the bucket quick.

18 LEGISLATOR GONSALVES: If it  
19 rains tonight, and the little buckets  
20 outside gather the rain, how long do we have  
21 before we empty those buckets?

22 DR. EISENSTEIN: Good question.  
23 And this is why people can take care of  
24 their property. It's estimated about seven  
25 days of standing water before mosquitos can

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2 breed in it. About seven days. Different  
3 species might be off by a day or so. But  
4 that means that if it rains tonight and you  
5 go out tomorrow and dump all the standing  
6 water, including the little bottle cap that  
7 somebody dumped on your front lawn when they  
8 just littered, you can really make a big  
9 dent in the mosquito population.

10 LEGISLATOR GONSALVES: Good.  
11 Thank you so much.

12 DR. EISENSTEIN: So you don't  
13 have to run out. You can take your time.

14 CHAIRWOMAN WALKER: And certainly  
15 not that you're advertising any specific  
16 products, but if we were unsure and we ask  
17 and you gave us some ideas that would be  
18 wonderful. And, certainly, even when you  
19 said, even make sure about the kids having  
20 the little clip-ons that they sell now.  
21 They even sell little stick-ems, they look  
22 like a dolphin or whatever. And even on  
23 some of their toys that could be outside,  
24 little playhouses or whatever that, like you  
25 said, we don't necessarily think about that.

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2 Even a small amount of water sitting  
3 someplace.

4 I just can't thank you enough for  
5 this presentation today. I think we all  
6 have our work cut out for us too and we will  
7 continue to work together to help to make  
8 this problem less of a problem.

9 DR. EISENSTEIN: Thank you.

10 CHAIRWOMAN WALKER: With that,  
11 our hearing is closed. Motion to adjourn.

12 LEGISLATOR MUSCARELLA: So moved.

13 LEGISLATOR GONSALVES: Second.

14 CHAIRWOMAN WALKER: Moved by  
15 Legislator Muscarella, seconded by  
16 Legislator Gonsalves. All those in favor?

17 (Aye.)

18 Any opposed?

19 (No verbal response.)

20 I thank the Public Works  
21 Committee and also the Health Committee for  
22 being here today and all those others.

23 (Whereupon, the Health Committee  
24 and Public Works Committee adjourned at 5:14  
25 p.m.)



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C E R T I F I C A T E

I, FRANK GRAY, a Shorthand Reporter and Notary Public in and for the State of New York, do hereby stated:

THAT I attended at the time and place above mentioned and took stenographic record of the proceedings in the above-entitled matter;

THAT the foregoing transcript is a true and accurate transcript of the same and the whole thereof, according to the best of my ability and belief.

IN WITNESS WHEREOF, I have hereunto set my hand this 24th day of July, 2012.

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FRANK GRAY