

**CAPE COD REGIONAL GOVERNMENT - ASSEMBLY OF DELEGATES
CHAMBER OF THE ASSEMBLY OF DELEGATES
FIRST DISTRICT COURTHOUSE
ROUTE 6A, BARNSTABLE, MA 02630**

APPROVED Journal of Proceedings - July 20, 2016

Speaker BERGSTROM: Good afternoon. Welcome to the Wednesday, July 20th, 2016, session of the Cape Cod Regional Government, Assembly of Delegates.

This meeting is being recorded by others besides our normal recording artist person.

So, I will now call this meeting to order. And we'll begin with a moment of silence to honor our troops who have died in service to our country and all those serving our country in the Armed Forces.

(Moment of silence.)

Speaker BERGSTROM: Thank you.

We will now stand for the Pledge of Allegiance.

(Pledge of Allegiance.)

Speaker BERGSTROM: The Clerk will call the roll.

Roll Call (88.39%): Ronald Bergstrom (2.84% - Chatham), Lilli-Ann Green - (1.27% - Wellfleet), James Killion (9.58% - Sandwich), Marcia King (6.49% - Mashpee), Edward Lewis (4.55% - Brewster), Suzanne McAuliffe (11.02% - Yarmouth), Deborah McCutcheon (0.93% - Truro), Edward McManus (5.67% - Harwich), Brian O'Malley (1.36% - Provincetown), Patrick Princi (20.92% - Barnstable), Julia Taylor (14.61% - Falmouth), Linda Zuern (9.15% - Bourne).

Absent for Roll Call - Arrived Late (2.73%): Christopher Kanaga (2.73% - Orleans @ 4:05 p.m.).

Absent (8.88%): Teresa Martin (2.30% - Eastham), John Ohman (6.58% - Dennis).

NOTE:

Left Meeting Prior to Adjournment (27.41%): Patrick Princi (20.92% - Barnstable @ 5:30 p.m.), Marcia King (6.49% - Mashpee @ 5:30 p.m.).

Clerk O'CONNELL: Mr. Speaker, we have a quorum with 88.39 percent of the Delegates present; 11.61 percent absent.

Speaker BERGSTROM: Thank you.

I'll now need a motion to approve today's Calendar of Business if there are no changes to the calendar.

Ms. MCAULIFFE: So moved.

Ms. KING: Second.

Speaker BERGSTROM: Moved and seconded. All those in favor? Opposed?

(Motion carried.)

Speaker BERGSTROM: Okay. You should have received a copy of the Journal of July 6th, 2016. Are there any additions or corrections to the Journal?

Mr. O'MALLEY: Mr. Speaker, I'll move adoption as approval as distributed.

Mr. LEWIS: Second.

Speaker BERGSTROM: Okay. Moved and seconded. All those in favor? Aye. Opposed?

Ms. ZUERN: One abstention.

Speaker BERGSTROM: One abstention, okay.

Deputy Speaker MCCUTCHEON: Abstention.

Speaker BERGSTROM: Two abstentions. Wow, any more abstentions? Okay.

(Motion carried.)

Speaker BERGSTROM: Well, I don't see the Commissioners here, so we will move beyond that. Did they have a meeting today?

MS. O'CONNELL: They had one. I don't know --

Mr. BOB LAWTON: I think they're in executive session going over some legal matters, Mr. Speaker. They may be late.

Speaker BERGSTROM: Okay.

Mr. BOB LAWTON: We're ready to go.

Communications from Finance Director Mary McIsaac

Speaker BERGSTROM: Well skip over them and we will then move to Number 9 on our agenda, communications from our Finance Director Mary McIsaac. And we have Bob Lawton here also.

Finance Director MCISAAC: Good afternoon, everyone. Good afternoon. Thank you for letting us come before you today with really just some informational material. And I have prepared a short memo for you about the status of capital projects.

And today is really an introduction to you from us of what we're going to do going forward for the Assembly and the Commissioners. We were with the Commissioners earlier, and I explained to them that the good components of a capital plan are the structure of it and the regular meetings and the presentations for deliberation of needed capital improvements and capital repairs and purchases.

So what I see in the history is that we've budgeted up until the last couple of years the capital inside of the operating budget, and we've successfully taken that out and created something separate and apart from that to be able to deal with our infrastructure and our capital needs separately from the operating budget.

And to define what those needs are, prioritize them, and to budget appropriately weighing in on what kinds of funding sources we have and, basically, from year to year the affordability of what's in the plan.

So in that regard, the plan going forward is somewhat of a living

document because it can change. It's not set in stone. And from year to year, the plan can be amended and adjusted. And we'll come before you at budget time with an evaluation of the past projects and what their status and whether the projects were completed successfully or there were other circumstances with respect to each project individually.

But what we'd like to start to do today and what I've attached to this brief memo that I've prepared for you is a chart of the last three fiscal years and what the Assembly and the Commissioners adopted for capital. What kinds of expenditures were set against them if there were expenditures and whether the projects are complete, ongoing, just beginning.

So you could start to get a feel for the kind of information that we're going to bring to you and the discussions that we hope to have about capital. And we summarized that over the last three years that the Commissioners and the Assembly have authorized through borrowing 8.2 almost 8.3 million dollars of projects. And in those last three years, we spent over \$2.7 million on behalf of those projects and lots of them are ongoing.

So, really, it's just literature for you to read, something to start having you become familiar with what we'd like to come before you in terms of capital and talk to you about.

Speaker BERGSTROM: Thank you.

Finance Director MCISAAC: You're welcome.

Speaker BERGSTROM: I'm sure you've all had a chance to review these projects. Any questions? Yes, Ed.

Mr. LEWIS: Just that -- excuse me. Thank you and welcome to -- thank you for coming. Are we borrowing -- as we do a project, are we borrowing that what was authorized to borrow and, therefore, paying interest on the total amount?

Finance Director MCISAAC: Well, the County hasn't borrowed in a long time. So all of the expenditures that you see and the authorizations that you see in the pages that are attached to the memo have not had any bonding. So there have been no bond proceeds for any of that. And those will be incorporated into the bond issue that is targeted for May of 2017.

But directly to answer your specific question about a line; anything that's authorized -- any project that's authorized that has spending, usually when you go to the bond market, you're going with the amount that you actually spent.

And the logic behind that has changed over time. But some time ago, towns would authorize borrowing and the minute they had the authorization, they would go to the market and they would bond that amount.

Well, what happened was towns accumulated all kinds of what we're calling residual bond proceeds which are the leftovers --

Mr. LEWIS: Right.

Finance Director MCISAAC: -- from borrowing an amount that was estimated to be the cost of something and then it didn't cost that. And there were strict limitations on what those residual bond proceeds could be used for.

So the rules about that have changed, and the rules about what you actually go to market to bond have changed. So in today's financial world for

municipal governments, you look at what you've actually spent, and if your project is completed, that's what you borrow.

Also, for the fact that you may have even with all that planning and all that exercise throughout some project, you have residual bond proceeds. The rules have changed about that. There is not a strict limitation as there was in the past.

And what you can do with those residual bond proceeds now is you can move them to a project for which you could have borrowed for a term of at least the same number of years or more.

So, for instance, if you had a project and the term limit under the law for your borrowing was 10 years, you could move that into some other project for which you could also borrow for 10 years or more.

So they've loosened the rules, but they've asked people to borrow what they're spending and not what was authorized.

Mr. LEWIS: Thank you. My concern always is that the forecast with capital expenditures for a fiscal year and find out, as an example, 2014, fiscal year 2014 we appropriated \$3,691,000 to which date we've expended, you know, \$760,000.

Finance Director MCISAAC: Right. Well in that year includes the dredge which the RFP is out for, so that's a big chunk.

Mr. LEWIS: But it would still -- this is two years ago.

Finance Director MCISAAC: Right.

Mr. LEWIS: Or three years ago.

Finance Director MCISAAC: Right.

Mr. LEWIS: And we're still 50 percent of what we said we were going to do we hadn't done and completed.

Finance Director MCISAAC: Yes.

Mr. LEWIS: And that always concerns me.

Finance Director MCISAAC: Sure.

Mr. LEWIS: It concerns me more when it wasn't being borrowed because it's appropriated.

Finance Director MCISAAC: Right.

Mr. LEWIS: And that's money that is out there and is not available for other uses because it's appropriated for a specific capital project.

Finance Director MCISAAC: Well --

Mr. LEWIS: Now it's changed -- you're changing it and that's good.

Finance Director MCISAAC: Right.

Mr. LEWIS: I appreciate that. I'm always concerned that we put out there capital projects for a fiscal year that we may or may not do.

Finance Director MCISAAC: Right.

Mr. LEWIS: And it means I think that we should, when we're authorizing capital expenditures, for argument sake, for fiscal year '17 or '18, we should have a pretty good handle that we're going to do it in '17 or '18.

Finance Director MCISAAC: Sure.

Mr. LEWIS: If we're not, then we should do it whenever we think we should do it.

Finance Director MCISAAC: And certainly that's true, but you would probably want to replace something that you might not be able to achieve with something that has a more immediate need and you would be more successful in accomplishing for sure.

But these authorizations aren't really money in your pocket. It's sort of a credit line because the clock doesn't start ticking on any liability until you've spent that money, really. So if you haven't spent it, we can go and spend on an authorization that's 10 years old and we can still issue tax-exempt bonds for it if we've done that spending, not 10 years ago but today.

Mr. LEWIS: I understand that. But you understand where I'm coming from?

Finance Director MCISAAC: I do, exactly.

Mr. LEWIS: Thank you.

Finance Director MCISAAC: You're welcome.

Speaker BERGSTROM: Anybody else? Walk me through this now because I'm not necessarily a finance guy.

Finance Director MCISAAC: Sure.

Speaker BERGSTROM: Let's say we have an authorization to borrow \$2 million for a dredge which we sorely need, as Ed mentioned.

Finance Director MCISAAC: Yes.

Speaker BERGSTROM: The other one, its primary purpose is to be not functional for long periods of time. So, you know, we go and the next thing you know Sears has this special on dredges, \$2 million, and we want to buy it. Where does that \$2 million come from? In other words, when we cut the check, we have the appropriation but you say we don't borrow until we actually spend.

Finance Director MCISAAC: Right.

Speaker BERGSTROM: So we have to put the money up front.

Finance Director MCISAAC: Right.

Speaker BERGSTROM: Where does that money come from?

Finance Director MCISAAC: So there are two places that the temporary funding source can be. You can pay for something in advance out of available funds and that's allowed and permitted by law. Or you can issue bond anticipation notes, which are easily issued with the Commissioners' signature and vote.

So those, you know, from the day that you know that you need the funds until the day that those proceeds of that bond anticipation note are in your bank account could be two weeks.

Speaker BERGSTROM: Yes, I'm familiar with bond anticipation notes as Bob will tell you.

Finance Director MCISAAC: Right.

Mr. BOB LAWTON: Right.

Speaker BERGSTROM: We operated the RT -- Regional Transit Authority on them for many years.

Mr. BOB LAWTON: Right.

Speaker BERGSTROM: So what about a project that where you basically estimate the cost? Let's say you were going to replace a building or

something and you get -- the contracts come in for a certain amount of money but there's no guarantee.

Finance Director MCISAAC: Right.

Speaker BERGSTROM: So you basically do the same thing. You pay for it out of available funds but you don't know -- I mean do you -- if you put a revenue anticipation note out there but you really don't have a handle on what the ultimate cost will be. So do you wait until all the bills come in and then you do that?

Finance Director MCISAAC: You don't have to. For the larger projects, you phase in your funding so you would -- you could issue three bands. You could issue a band every six months to cover what you spent or what you've budgeted as long as what you're spending is close to your timeline for your spending.

Speaker BERGSTROM: Okay. And, Mary, have you done any kind of -- do you have any kind of a handle on how much bond authorization the County or any municipality or any -- should have as a function of its total budget? In other words, we have a budget of, what, \$30 million.

Finance Director MCISAAC: Right.

Speaker BERGSTROM: We have several millions of authorizations out there and stuff. Is there any kind of formula that the state looks at?

Finance Director MCISAAC: There's a limitation for cities and towns but there's not a limitation with respect to the County in the same framework as the cities and towns.

Speaker BERGSTROM: Oh good. So we can keep borrowing. Well, we'll probably have to look at that. All right. Anybody have any more on this?

Well, thank you, very much. Do you have anything to add as far as how these projects are going to be, you know, are we looking at spending pretty soon or?

Finance Director MCISAAC: With respect to the projects that there hasn't been spending, a lot of them are relative to facilities and the complex, the questions on the complex redesign and the future of the buildings and the complex.

So the spending is really on hold until there is a plan and it's been decided upon because, obviously, we don't want to have -- allow spending for something that might have to be redone. That would be a waste of the County's funds.

So with respect to all of that, there's varying reasons that those kinds of authorizations are on hold and those projects are not done.

There's also other projects in the courthouse that, first of all, if we're being reimbursed because they're trial court occupied, courthouses or other buildings, you would need DCAM's approval that you're going to get the reimbursement. And there's limitation on how much spending they'll reimburse in one year.

Right now, we have a situation in Superior where there are mandated expenditures. So those expenditures count towards our limitation. So we don't want to enter into any projects that we'll spend money for that in another day we

get reimbursed. But because the state has mandated certain spending and we reached the limit, the state won't reimburse us. So they're on hold until those dollars are freed up. So we'll get the maximum reimbursement from the state for whatever building, you know, the repairs occur in.

Speaker BERGSTROM: Deborah, did you have a question?

Deputy Speaker MCCUTCHEON: Yes, I have a question. I do think this is a real good step in the right direction. It's been very confusing in the past to look at how these capital expenditures are handled.

I'm wondering if it would be possible to put some timeline information in here like the "date" and "project was first approved." I know some of them are carried from year to year.

Finance Director MCISAAC: Right.

Deputy Speaker MCCUTCHEON: And perhaps the "estimated date of completion" that was assigned to the project when it was first -- because that kind of gives us a handle on how --

Finance Director MCISAAC: Sure.

Deputy Speaker MCCUTCHEON: -- effectively we're running on our capital improvements.

Finance Director MCISAAC: Right. And when I talked about when we come before you in the budget season and we're deliberating the budget for the capital plan, the progress report that comes to you at that time will give you all of that information. It will be more of a progress report.

This is really an introductory piece of material so you start to see what we have in front of us, where it is today. Not really in terms of progress but the dollars that are either spent or unspent and what the items look like. You know, what is in front of us is something that during a budget season was appropriated because it needed to be done.

Deputy Speaker MCCUTCHEON: Well, I do think it's very helpful. I just think that the timeliness --

Finance Director MCISAAC: Sure.

Deputy Speaker MCCUTCHEON: -- timeline of it would be also great. Interesting.

Finance Director MCISAAC: Yes.

Deputy Speaker MCCUTCHEON: Thanks.

Deputy Speaker MCCUTCHEON: You're welcome.

Speaker BERGSTROM: Is there anyone else? Well, Bob, did you have something to add?

Mr. BOB LAWTON: Just one quick thing since I'm closing my time with the County, almost done except for two projects that Jack had. And I just wanted to take the opportunity to thank you for your patience and understanding especially in the first budget I did, which came in fine but we had a lot of false-starts, shall we say.

But Janice was very helpful as was John Ohman, and I just appreciate all of the help that you gave to me and understanding.

I may see you in another life but maybe not here with the finance department but thank you.

Speaker BERGSTROM: Well, we certainly appreciate your coming out of retirement as you have several times already in helping us out because it made a big difference. And we're all improved from where we were when you first arrived.

Mr. BOB LAWTON: Well, hopefully I did some things -- some things maybe not so much, but I've appreciated all of your help; I wanted to say that.

Speaker BERGSTROM: Yes, Ed.

Mr. MCMANUS: And, Bob, for your past service in Harwich and here.

Mr. BOB LAWTON: Right.

Mr. MCMANUS: And your service to a neophyte Assembly member explaining the complexities and the confusion.

Mr. BOB LAWTON: Yes.

Mr. MCMANUS: I can't tell you how much I appreciate it. Thank you.

Mr. BOB LAWTON: Thanks for that.

Speaker BERGSTROM: All right. Thank you, very much.

Finance Director MCISAAC: Thank you.

Communications and Presentation from Cooperative Extension and Health Department

Speaker BERGSTROM: All right. We'll now move on to the communications and a presentation from the Cooperative Extension, Health Department, and Mosquito Control regarding gypsy moths, Zika virus, Powassan virus, and tick-borne diseases in the region.

Mr. MICHAEL MAGUIRE: I come bearing good news. Hi, all. It's good to see you. I also wanted just to make sure that you all knew Marnie, who's the person behind the camera -- I don't know if you all had a chance to hear that story, but Marnie's doing a documentary on Larry's job because it's so interesting.

Marnie's a local documentary maker from Wellfleet. So I know it's unusual to have someone -- another camera in here so I just wanted to make sure you knew what was going on there.

Ms. MARNIE CRAWFORD SAMUELSON: Thank you, very much.

Mr. MICHAEL MAGUIRE: So I'm Mike Maguire, the Cape Cod Cooperative Extension Director. So many of you probably saw on the front page of the paper we're having a discussion about Powassan virus that was found on the Cape due to the research that my department did with -- in cooperation with Steve Rich, Dr. Steve Rich, out of UMass Amherst, the Lab of Medical Entomology.

So Steve's been a collaborator with our department for a long time, and many of you know are familiar with the Lyme disease research that we've done and the tick research that we've done and brought in a bunch of money from the Environmental Protection Agency and did those 4-poster deer studies, and you've heard talks about those.

So last fall when we were working with Steve, he had some graduate students come down and we worked with them. They did a quick survey and found this presence of Powassan in a couple samples that he took on the Cape.

And during the winter, Steve and -- Dr. Rich and Larry and I had a long talk about what we should do with that information because Powassan is a very serious illness. If you contract it, you have a 1 in 10 chance of dying. And we've started to see a few more cases pop up across the state.

So we agreed to spend some County funds on doing a research project with Dr. Rich and his graduate students. And Larry's going to be here today to talk to you about Powassan and the implications of what we found.

We also have Deirdre Arvidson and George is here too, great, both from County Health to talk about the public health implication of this. So if you have public health questions, they'll be here to answer them.

And Gabrielle from Mosquito Control is here and she's going to also be available to talk to you about any mosquito-borne illnesses and what her program does.

And I wanted to make sure that you get the chance to see all three of us together communicating in front of you because this is what we do on a daily basis behind the scenes.

So I also have to leave a little after 4:30, but Larry should be able to answer any of the questions that you have or please follow up and email me.

But with that, I'm going to turn it over to Larry. And Larry's also going to present on the gypsy moth outbreak here. I think his phone's about to catch on fire from people calling. You know, it is a serious issue and Larry's got some great data to share with you about that as well.

Speaker BERGSTROM: All right. Just before you leave, how much -- as far as outreach to the community on all these issues, I know you have a website; do you have any printed material to be distributed?

Mr. MICHAEL MAGUIRE: We do. We have a lot of printed material. And to be frank, we're shifting to try to do a lot more electronic outreach.

Speaker BERGSTROM: Okay.

Mr. MICHAEL MAGUIRE: The Powassan issue, it's going to be on -- it was on Boston news last night. It's going to be on Boston news tonight. There's going to be a lot of people -- it's a big splash media-wise. So there's going to be a lot of people calling and asking us, and, certainly, Larry and our front office staff will be answering questions. But there's also an electronic component where they can get answers on our website and then we're posting through our Facebook page and

other --

Speaker BERGSTROM: So if people go to the Barnstable County website and click on the "Extension Service," they can get some of the information you're giving us today.

Mr. MICHAEL MAGUIRE: Absolutely. Or you can call Larry and make his phone catch fire.

Speaker BERGSTROM: Well, I'm not interested in me, personally. I've met people who are concerned about these things.

Mr. MICHAEL MAGUIRE: Yes.

Speaker BERGSTROM: Doc. Before you leave -- but first we've got a question.

Mr. O'MALLEY: Is looking for Powassan now routine in the tick samples that are going out to Steve Rich's lab?

Mr. MICHAEL MAGUIRE: Larry's going to address that. You can request that it's a relatively new test. There's a lot of extra labor involved and its \$99 extra to do it but at least its there. It's available to you. You really have to want to know it, but, yes, that is available.

Mr. O'MALLEY: Okay. So I take that answer as no. It's not being routinely tested for in the specimens that are being submitted.

Mr. MICHAEL MAGUIRE: No, but I -- Larry can elaborate on that.

Mr. O'MALLEY: Thank you.

Mr. MICHAEL MAGUIRE: That's part -- we would hope that that's going to happen in the future. There's a lot of valuable information that would happen -- we'd be able to collect if that happened so.

Speaker BERGSTROM: Okay. Well, thank you. You're up.

Mr. LEWIS: The tick man.

Mr. LARRY DAPSIS: Well, good afternoon. I can't think of a better way to spend a beautiful afternoon than have a robust discussion of infectious disease; is that right? So thank you for the opportunity to spend some time with you on a couple what I think are timely and pertinent issues between tick-borne diseases and, of course, gypsy month, what's been going on.

So we'll start off today with Powassan. When I send out or had sent out your pre-read materials, I anticipated your first question might be what the heck is Powassan; okay? And it's not so much a what. Ian, we need some help here.

IAN: Oh, it's not working. It's off.

Mr. LARRY DAPSIS: Oh, that's why we have IT support. It's not so much a what but a where. It's actually a real place, Powassan, Ontario. Powassan virus, as a disease, was first described in Powassan, Ontario in 1958. Okay. So it's been diagnosed and known for some time.

So here's a map of Powassan distribution. But Powassan, Ontario is right about up here, okay. So for a while most of the cases were really confined to the upper central mid-West, principally Wisconsin and Minnesota.

But in the last 15-20 years, it did pop up on the East Coast particularly in New York, in eastern New York, the Hudson River Valley area, and we've seen a steady increase in reported cases over the last 10 years. So as we've been aware of this, we've been kind of watching over our left shoulder wondering when and if it was going to make its presence known in New England and particularly here on the Cape.

All right. Powassan is actually two different organisms, okay; they're related strains of the virus. The true Powassan is associated with the woodchuck tick, okay. It's around but it's a tick that people don't really come into contact with very often. It remains in the borrow areas of woodchucks.

One of the things that distinguishes this from our other tick-borne diseases like Lyme is transmission time. For Lyme, Babesiosis, Anaplasmosis and relapsing fever, we basically have a 24-hour rule of thumb. If it's on you for more than 24 hours, the risk of transmission increases. Well, Powassan has a transmission time of 15 minutes. So that's a little bit of a game-changer off the

start.

This is something similar to like West Nile virus, people can be exposed to this and absolutely not come down sick. And this has been documented that people in New York have been shown to have a lot of exposure but very few cases. So it's quite rare but a lot of people bump into it.

When it does present itself as -- in its neuroinvasive form, it is very severe. Typically, the clinical presentation is encephalitis and meningoencephalitis, so brain swelling and spinal tissue swelling.

The related species is deer tick virus, okay, and this is known in the medical world as Powassan Lineage II. So they're very closely related. And this one is associated with our friend the deer tick, and it basically has the same clinical presentation as Powassan type I, Lineage I. So for all intents and purposes, Mass. Department of Public Health just calls it Powassan.

All right. What was brought to our attention last November was the fact that we've actually had nine cases in the last few years in Massachusetts. And in talking with Katie Brown at DPH, they think the reason that they were finding this in the last few years, there's more awareness in people looking at people for West Nile virus. And so if it didn't become West Nile virus diagnosed, people started to consider other things and they fell upon Powassan.

These nine cases actually reside in four different counties, including Barnstable County, okay. So it is clinically here and present on Cape Cod.

One of the things before we receive this data, Mass. Department of Public Health wanted to verify that this was due to exposure of tick bites in Massachusetts that it wasn't people traveling to eastern New York and coming back and getting sick but now they know.

The onset of disease, May-June, so it shows that these nymph-stage deer ticks are capable of transmitting this virus as well as the adult-stage ticks that start showing up in September and October.

In every single case here, they all showed symptoms of encephalitis. This thing will land you in the hospital, sometimes for extended periods. I'm aware of one particular case where the guy was in the hospital for six months.

On average with a severe presentation, it's fatal in about 10 percent of the cases. Those people that survive this actually often have permanent neurological damage. So it's bad news all the way around. In this case, there were no fatalities with these nine cases. All right.

Let me introduce you to my research colleagues at the Laboratory of Medical Zoology at UMass Amherst. This is Dr. Steve Rich. He's the Director of Laboratory. This is his right hand, Dr. Guang Xu. He is basically master Yoda of this PCR Analytical Technique. He is infallible. And this is one of Steve's student's, Emily.

So we have forged a solid partnership with this group. We've done a lot of good things. We've got some things that are going into press now for publication. So it's been a great two-way collaboration. All right.

When this was first made aware to us that we actually had cases in the state, Steve and I talked about let's do a quick survey. We thought, okay, we're looking for a needle in a haystack. Again, we're looking through this through

the lens of West Nile virus. Gaby collects tons of mosquitoes and she'll occasionally get a hit here and there. So we went out and took a peek.

And in two locations, Falmouth and Brewster, the pools of ticks showed positive detects for Powassan. So we thought, okay, we found two needles in the haystack. This is worth investigating.

So what we did was make a more robust plan for the spring where we identified six locations on the Cape ranging from Falmouth all the way out to Truro. So we wanted to go for a full geographic spread. And so Steve sent down students over a period of four weekends to these six locations to collect ticks.

And when we analyzed them, we found Powassan-infected ticks at four out of our six sites; okay. And the infection rates ranged from 2-1/2 percent all the way up to almost 10-1/2 percent out in Truro. So this actually surprised us at the level of infection of the ticks that we're finding.

The other thing that's notable here is that if you look at the geographic distribution, excuse me, I've been talking a lot today. As Mike said, my phone is about to burn out. But finding this from Falmouth all the way out to Truro, this strongly suggests that this thing did not arrive yesterday or the day before yesterday or last year. This has been on the Cape for some time. We know the creatures this virus resides in, things like raccoons and skunks and possums and mice. Those things don't move very long distances. So this thing has probably been, and we don't know, but it may have been here for 5-10 years, who knows. It was just flying under the medical radar screen.

Steve also, while his students were here, he sent them out to the islands. And this kind of reinforces our thoughts about how long it's been here. On the Vineyard, it was a detecting 1 out of 6 sites, but it was 9 percent infection rate and 1 out of 1 on Nantucket. So, again, it shows that this thing's been around for some time.

All right. The next steps we want to engage on this is a retrospective surveillance. And what I mean by that is that when we have ticks tested and they extract DNA, that extract goes into the deep freeze. So that as we learn things about new diseases, we can go back into this archive of genetic material and see how far back can we find this. We did this exact same thing with relapsing fever, *Borrelia Miyamotoi*, and when we went back into our archives, we were finding it in ticks going back to 2014. So it basically is a way that we can kind of map in time what is going on.

We did share these data with Katie Brown at DPH, and Steve and myself and Katie had a conference call to kind of talk about the data, what we see, what they think about it. And this triggered, actually, some discussion that DPH is actually having discussions about conducting broader range surveillance for the Powassan virus, which would be a great thing to kind of drag them into and get some skin in this game.

What we're proposing is expanded surveillance on Cape Cod, okay. I just received a request for proposals from Cape Cod Healthcare, their Community Benefits Grant Program. We have received funding for the last three years for different projects, and we have to meet a deadline for July 26,

which easily we'll meet.

But our intention after talking to Steve yesterday, we are going to ask for funding to do full-scale surveillance across the Cape, all towns, multiple locations. We want to develop a high-resolution map of where this thing is and what levels. Okay. So that is our next steps.

It doesn't change really the landscape for our current recommendations. It's nothing that we'd want to create a panic about. It means that we've gone from four tick-borne illnesses down to five, okay. But the game plan remains exactly the same.

We, again, preach our three-point mantra: protect yourself, protect your yard, and protect your pets. So in terms of self-protection, certainly tick checks are in order. And I recommend and I preach strongly use of Permethrin-treated clothing and footwear. In my experience in five years, this is the most effective tool in the box and the word is getting out. I've been told by one of the major garden centers on the Cape that as we roll -- as we get traction on our outreach program, they have seen their product sales double.

The same with yard protection. There's one company on the Cape that does a lot of this work, and as we roll this out, they contacted me, brought me in to do a workshop for their employees, make sure they were doing things correctly. They actually added another truck and a person and they're still not keeping up with demand. So I think our program is really taking hold, which is a good, good thing.

I think that's the last slide. So we can break here for questions that you may have.

Speaker BERGSTROM: Do you have any questions now on this virus? Yes, Ed.

Mr. LEWIS: As the Brewster representative, just one quick question because that was in this morning's paper as well.

You had Brewster 1 and Brewster 2 up there.

Mr. LARRY DAPSIS: Yes.

Mr. LEWIS: Do you know where Brewster 1 is where they found the ticks?

Mr. LARRY DAPSIS: Yes.

Mr. LEWIS: Do you want to tell me?

Mr. LARRY DAPSIS: I chose to not give exact geographic coordinates because it would be misleading. I don't want to say we found it here and have people just, well, I need to avoid going to that place. We only sampled, you know, there are 11 towns we didn't sample, so I think it's premature to say we found it exactly here. But I chose to not put that in there by design.

Mr. LEWIS: Okay. I'm just curious in Brewster. The other 11 towns, they could go ahead and ask that question. But you choose not to tell people where in Brewster.

Mr. LARRY DAPSIS: Not precisely but the fact that we found it in Brewster, I think, is of note.

Mr. LEWIS: Yes, I just -- I'd like to know where not to walk my dog.

Mr. LARRY DAPSIS: That's why I'm not telling you because I would be

-- I might be leading you to an area that's even hotter.

Mr. LEWIS: I walk where I haven't had a tick yet.

I know another area where I used to walk and I'd come home and pick off three or four. So I choose not to walk there and where I walk now.

Mr. LARRY DAPSIS: In terms of tick populations, the town of Brewster is actually tick nirvana. That is the highest place year on year in our surveillance.

Mr. LEWIS: I'm so happy to hear that.

Mr. LARRY DAPSIS: But you should be reassured that we have a game plan.

Mr. LEWIS: Oh, that's good.

Mr. LARRY DAPSIS: In fact, we covered that game plan at length with Gaby at your Brewster Conservation Day. We talked to a lot of people.

Mr. LEWIS: Yes, they did a great job on that.

Mr. LARRY DAPSIS: It was a phenomenal event. Every town should be doing that.

Mr. LEWIS: Yes, that was a great job. Peter Johnson and Al do that. Great. Thank you.

Speaker BERGSTROM: Okay. Pat and then we'll go to Suzanne.

Mr. PRINCI: Just a quick question. It will possibly maybe answer the gypsy moth question as well, even though we haven't gotten there. As far as the perimeter yard spraying and the spraying that's currently being done all over for the gypsy moth spraying, I can remember in the 80s when we had that outbreak.

My brothers and I dressed up as gypsy moths in the parade down here.

Mr. LARRY DAPSIS: I would like to see a picture of that.

Mr. PRINCI: We were all just -- not only the gypsy moths were getting sprayed but entire neighborhoods and people were getting sprayed.

Now the chemicals that they used back then I would think are different from what they're using now.

Mr. LARRY DAPSIS: Yes.

Mr. PRINCI: Can you tell me a little bit about the types of chemicals that they're using now for the perimeter sprays?

Mr. LARRY DAPSIS: Probably the primary chemical and the chemicals for gypsy moth are not the same as for tick control.

Mr. PRINCI: Okay.

Mr. LARRY DAPSIS: Two very different animals.

Mr. PRINCI: But in tick control, what are the primary elements of that?

Mr. LARRY DAPSIS: The industry standard of choice is a product called Talstar. It contains Bifenthrin, which is something that's related to Permethrin, so it's part of the Pyrethroid family. And the product of choice I think that's mostly being used for gypsy moth control, same as winter moth, is Delliad (phonetic), which contains the active ingredient Spinosad.

Speaker BERGSTROM: Okay. Suzanne.

Ms. MCAULIFFE: In terms of toxicity for children, I know it's important to balance the downside of the viruses and the bacteria. I think people are very concerned about when you spray and the Permethrin on clothes and

everything, do you have any comments or recommendations about if someone's going to spray their yard if it -- is there -- is it a children-friendly thing? Do you have to keep your kids out of the yard? How does that work?

Mr. LARRY DAPSIS: I have some very in depth discussions with soccer moms and soccer dads on that very point. In my workshops, I have a slide on Permethrin toxicity; I call it my elephant in the room slide because I'm telling you to put your kids in clothing treated with a synthetic pesticide.

And the reasons for that, and I push it hard, is that if you look at the demographic distribution on case of Lyme disease, kids age 5 to 9 are the highest incidence rate of Lyme in the state. So everything we've been doing up until this point in time is not working. It's time to come up with a better plan for protecting our kids.

So to that end, I spend a lot of time talking to people about Permethrin toxicity. And there is a lot that I draw upon. EPA has the position where the use of Permethrin-treated clothing poses no harm to infants, children, pregnant women, or nursing mothers, okay. And the reason for that is that Permethrin has very low dermal absorption, unlike some other pesticides. And whatever's absorbed is metabolized very quickly.

National Academy of Sciences, which is not a lightweight organization, was wondering about the long-term exposure effects. And they made -- they did a study where they assumed people were in Permethrin-treated everything 18 hours a day for 10 years. And when they ruled that that aggregate exposure, they saw absolutely no reason to expect an adverse effect.

So when I look at what I consider to be relatively low-risk of using this product and I balance that against the consequences of one of these tick-borne diseases, for me that is really easy math.

Ms. MCAULIFFE: Great.

Mr. LARRY DAPSIS: And so I've been able to bring people a long way through this.

Ms. MCAULIFFE: Thank you.

Speaker BERGSTROM: Has the medical community, or maybe Doc knows something about this; have they caught up with this virus? I mean have they, you know, looked at treatments, looked at possible vaccines and stuff, or is this something that's sort of off the radar screen?

Mr. LARRY DAPSIS: There's no vaccine for it. There's no treatment.

Mr. O'MALLEY: There's no vaccine or treatment. That's exactly right.

Speaker BERGSTROM: Is that because -- I mean is it basically that's because nobody's come up with one yet or it's part --

Mr. O'MALLEY: It's largely because it's a viral disorder and most viral things we have a pretty tough time with. This is related to the neurotrophic viruses that are largely seen in the Far East. Asian encephalitides and meningitis and, basically, CARE is really pretty supportive when it happens. So a vaccine is possible but it's somewhere down the line.

And vaccines, of course, depend upon there being enough commercial equitability that the manufacturer's going to make big bucks. That's not true with this disease yet. So I wouldn't hold my breath.

Speaker BERGSTROM: Well, if they come up with a vaccine, they can always charge us \$100,000 a shot to make a few bucks.

Mr. LARRY DAPSIS: Well, what we tell people is that you want to prevent the tick bite in the first place at all cost. Treat this like hand-to-hand combat basically.

But to your question, we did have a press release prepared with this information, and one of the points of distribution today was with Robin Lord, who's the Director of Communications at Cape Cod Healthcare, so she is pushing this out through their network.

Speaker BERGSTROM: Okay. If there's no more questions -- oh, Deborah.

Deputy Speaker MCCUTCHEON: I have a couple of questions. I, too, am a dog walker and I spend a lot of time in the forest and I'm in Truro. So I really have some interest in your discussion there.

Can you tell me -- a lot of people think that walking along the beaches and the near shore is a much safer place to walk than the forest. Is there any real logic to that?

Mr. LARRY DAPSIS: Beaches are perfectly safe. That's not tick habitat at all.

Deputy Speaker MCCUTCHEON: So it's not a tick habitat. Okay. That's kind of both helpful and not because --

Mr. LARRY DAPSIS: Well, if you look at optimal tick habitat, its shade, leaf litter, high humidity; those are the environmental requirements for ticks to make their living.

Deputy Speaker MCCUTCHEON: Right. Now how about some of the measures that people use for their yards, like the treated cotton for keep the mice from getting deer ticks.

Mr. LARRY DAPSIS: The Damminix Tick Tubes; that's in my Hall of Fame of serpentology. It is the biggest waste of money that I can think of. And because there were two very good independent studies done on that product and they both demonstrated that those tick tubes have absolutely no impact on deer tick populations at all.

Deputy Speaker MCCUTCHEON: Well it's a great marketing idea though.

Mr. LARRY DAPSIS: It's about marketing; isn't it?

Deputy Speaker MCCUTCHEON: Mice are all comfortable in their little nests with no bugs.

Mr. LARRY DAPSIS: Needless to say, the manufacturer, EcoHealth, has taken me off their holiday greeting card list.

Deputy Speaker MCCUTCHEON: Well, you know, it's interesting though because right now in Truro, there's a dispute going on between the dog walkers and the Audubon over the piping plovers and the least terns. And the dog walkers are of the opinion that they are much safer from all of these tick-borne illnesses if they're walking, for example, at Corn Hill or either of the beaches.

And the Audubon is not so happy with that because they're out there

putting up their fences and trying to protect the plovers.

And there is a view among the public that the plovers might not be quite so important as dying from a tick-borne illness. So I guess you don't want to comment on that.

Mr. LARRY DAPSIS: Well, I've had this conversation with the people at Sandy Neck Beach Park, which is a neighborhood I work for. That's where with the help of Gaby and her people we discovered the first established population Lone Star tick on the Massachusetts mainland and that new tick now kind of owns that real estate.

Deputy Speaker MCCUTCHEON: Right. Yes, I noticed this presentation had nothing to do with the Lone Star tick. Are we not concerned about them anymore now that we have this other disease?

Mr. LARRY DAPSIS: We are concerned. Depending on how much time you have; I can sit here for a day and a half and talk to you about a lot of things.

Deputy Speaker MCCUTCHEON: Oh, okay. But that --

Mr. LARRY DAPSIS: But we can do an update on Lone Star at some point in time because we are trying to gather evidence about where this is spreading outside of Sandy Neck and it is significant in a number of different ways.

Deputy Speaker MCCUTCHEON: Well I appreciate it, and I thank you for your work. I hope you're wearing a Permethrin-treated clothing.

Mr. LARRY DAPSIS: Year-round.

Deputy Speaker MCCUTCHEON: Year-round, good. Thank you.

Speaker BERGSTROM: All right. Brian.

Mr. O'MALLEY: Mr. Dapsis, you referenced Permethrin-treated clothing and foot gear.

Are there products that can be applied to a pair of jeans, pair of shoes? Are there commercial products available?

Mr. LARRY DAPSIS: Sure. You can buy these products now. I convinced all the major garden centers on the Cape to carry Permethrin products that you can treat your clothing and footwear with.

When I came here and saw how effective it was, that was the frustrating thing. If you knew about it, Eastern Mountain Sports was the only place that had it.

The garden centers have now emerged and developed as a major outreach partner for our program. So not only are they stocking the right products, but they bring me in to do workshops and different events at stores. So it's been a really good arrangement.

Mr. O'MALLEY: Great. Thank you.

Speaker BERGSTROM: Lilli.

Ms. GREEN: Thank you. Something you just mentioned, you said that you wear Permethrin-treated clothing year-round.

Mr. LARRY DAPSIS: Absolutely.

Ms. GREEN: I don't have a dog but I'm a walker and I've been walking for many years. And I walk in the woods; I walk on the beach, and a lot of

people in my town, Wellfleet, do walk within the National Seashore.

I'd like to ask you about that, about wearing the clothing year-round and also about the dangers and precautions when you spray your clothes. I was reading about that as well.

Mr. LARRY DAPSI: Sure. And it's significant for you because I think, if I'm not mistaken, Wellfleet's the highest incidence rate of Lyme with any town on the Cape.

So treating clothing is easy. It's basically putting your clothes over like a porch rail, shoes on a deck, treat them until they're slightly damp, let them dry. What I also do with my jeans, unless I'm wearing pretreated clothing from a company called Insect Shield, then I'll turn them inside out and treat the inside from like the knee down in case ticks come in from underneath; got to kind of think like a tick in these situations.

Ms. GREEN: And you think that's important to do this year-round?

Mr. LARRY DAPSI: Well, here, look at it this way. Your winters here on the Cape are very mild even though you sometimes think they're harsh. If you look at the reported cases of Lyme disease by month, they go from January to December. So anytime you get temperatures about freezing and a break in snow cover, you're going to have tick activity.

Deputy Speaker MCCUTCHEON: And they're hungry.

Mr. LARRY DAPSI: They are.

Speaker BERGSTROM: Anybody else? Ed.

Mr. MCMANUS: Yes, I've noticed in the last couple of years during the summer I've been in a number of arts and crafts fairs; there's Cape Cod Natural Remedies that was selling some flea and tick repellents. I wonder of the efficacy of using those products and whether you've tested them at all?

Mr. LARRY DAPSI: I steer people away from those types of products at all costs. The big difference between a repellent that like DEET or something, they're EPA registered. If they say on the label, "Repels ticks and mosquitos for six hours," there are data on file to support that claim.

These all natural products, their EPA registration exempt, meaning they don't have to supply any data to support they work at all.

And the other thing is I investigated those active ingredients. If you really look into it, a number of them are actually known human allergens and there are documented cases of those products interacting negatively with sunscreens. So I waive off.

Speaker BERGSTROM: Okay. Let me ask you one more question. If you're a parent and let's say you have a child maybe 10 years old and you find that they have a tick on them and maybe the tick has been there for a while. I've found ticks on me that like they've been there for years.

So what would you -- what advice would you give to that parent as far as, you know, some people -- for some reason I'd brush it off. Now that I've hear from you, I'm not going to -- I'm not going to be so cavalier about it, but I mean some people fly into a panic and they think, oh my God. Should they have that tick tested?

Mr. LARRY DAPSI: I think it's a good idea. And I look at ticks with

people to see if there are any signs of engorgement. Has this thing been attached for some period of time? The benefits of getting a tick tested is that you have hard data. So if you have a kid or even yourself and you get a tick bite and you're not feeling well, now you can go into a doctor's office and say, hey, I was exposed to this but maybe I was also exposed to this.

Because in our research over five years, we found that on average 8 percent of the nymph-stage ticks that we evaluated -- 8 percent are co-infected, meaning they're packing Lyme plus one of these other things. And you can come down with more than one of these diseases at the same time, which really complicates diagnosis.

Speaker BERGSTROM: All right. So you would take the tick -- you remove the tick, obviously. Put it in a little sandwich bag or something like that?

Mr. LARRY DAPSIS: Yes.

Speaker BERGSTROM: Bring it to -- where would we bring it?

Mr. LARRY DAPSIS: No. You would go to TickReport.com, that's the UMass Laboratory of Medical Zoology. There's an online submission process, which is very easy. Plus, if you get stuck, there's an online chat function that they monitor constantly. They get the tick and after they receive it, you get your test results in 3 to 5 business days.

Speaker BERGSTROM: Okay. Good. That's good to know. Well, I guess -- oh, we've got one more here from Julia.

Ms. TAYLOR: I'll just comment while you were speaking, I did order from a leading online retail company --

Mr. LARRY DAPSIS: Good for you.

Ms. TAYLOR: -- spray and it will be delivered tomorrow at my P.O. Box.

Speaker BERGSTROM: All right. See that, you're a success already.

Mr. LARRY DAPSIS: I should be in sales, yes?

Mr. LEWIS: You should be an investor in a company.

Speaker BERGSTROM: Now we have -- unfortunately, you have other critters to discuss, so I'm going to move right along then to the next.

Mr. LARRY DAPSIS: Let's talk about something that doesn't infect or diseases but can be equally annoying, our friend the gypsy moth. And it's hard to see with all the lights on here but this is just complete defoliation, which is something that people have been seeing more and more of. These are from the outer Cape that was hit particularly hard this year. And as the trees are completely defoliated and the caterpillars maturing and you see this happening a lot. This is when my phone starts ringing off the hook like what is going on? What are these things? Why are they here? What can you do to get rid of them? So it's been an interesting three or four weeks of teaching people the ins and outs of forest ecology.

One of the things that I was able to get from Conservation and Recreation are data on actual acres defoliated by gypsy moth. If you look at this -- they did aerial surveys in the middle of the summer after the gypsy moth season, and in 2015, you can see that on the Cape, particularly the upper-Cape into the mid-Cape, was hit particularly hard, okay.

When you compare that to 2016, I've had these data for about 24 hours, certainly the outer-Cape was hit particularly hard this year. But you look at southern Plymouth County, Bristol County, southern Worcester County, this thing is really ramped up hard. And when they supplied me the actual acres data, acres defoliated, it was pretty staggering.

In Barnstable County, last year there were about 14,000 acres defoliated. That over doubled this year, 34,000 acres.

If you look at the state, just under 40,000 acres last year; this year 350,000 acres. So somebody made a reference to the gypsy moth problems in the 1980s, that's what this looked like in the 1980s. We're kind of back to that point.

So needless to say a lot of people have been calling about should they get gypsy moth traps because the moths are flying right now. And I tell people that the gypsy moth traps are basically a monitoring tool for USDA, complete waste of money. But for some people, it's kind of a feel good exercise.

Banding of trees to prevent larvae from going up or down, pretty useless. You're not going to have an impact on the population with that. Some people have asked about what if I scrape those egg masses off the side of my tree? Again, people want to kind of take a little bit of vengeance on these things. That has no material impact on the populations because when these things hatch out in the spring, they're little. They spin a silk thread. They can float onto the wind and so even if you clean up your yard, depending on which way the wind's blowing, these things can come back into your neighborhood from five miles away, okay.

So local intervention, other than spraying your trees, is kind of a waste of money.

All right. Why is it a problem now? This thing actually has been kept in check for a long time by this fungus *Enterogenous Entomophaga*, okay. This thing was initially released back in 1910 from in Japan and it just failed to establish. So people kind of dismissed it, gave up on it.

But about 70 years later, some people thought let's give it another try. So they reintroduced it in 1989 in Connecticut. And it not only took hold, but it just ripped through the entire Northeast and established itself.

So it's here and this has been a great suppressor, sustainable suppression of these populations; it's kind of pushed gypsy moth into the background for a number of years until recently.

In the last two years, we've had very dry springs. That interferes with the ability for the fungus to become activated. So last year being so dry it let gypsy moth kind of get out of their blocks, lay a lot of eggs, and that carried over to this year and another dry spring.

So what we really need is next year, next spring to actually have a reasonable amount of rainfall, get this fungus going again, and push them into the background. When this thing is active, it's easy to see. Those are gypsy moths hanging. They're basically dissolving from the inside, okay. When these fungal spores come in contact with the caterpillar, they germinate and kind of invade the caterpillar and dissolve it from the inside, kind of like *Invasion of*

the Body Snatchers, sort of thing. So it will form more spores. Yeah, it's actually pretty cool, from a bug-person standpoint, and Gaby can appreciate it. But we're hoping that this thing will come back and bring -- put this whole thing back into balance.

Now it hasn't happened yet, so one of the things we're looking at is what are the implications of continuous defoliation? Well, certainly, wildfire risk kind of comes to mind because you lose your tree canopy, you dry out the forest floor more easily.

So I actually had a nice discussion this morning with Dave Celino, who's the State Fire Warden, and he kind of put it in perspective for us that this isn't clear and present danger necessarily. The primary driver of wildfires to occur is really drought. That's really what's amplified this to date, the risk of wildfire.

But defoliation is a second risk driver, and, unfortunately, for us, we have these things working in tandem. So we have, according to their risk index, we're at a moderate risk but that risk is climbing each and every day.

So what they had called the small ground fuel, the twigs and the leaf litter, that is completely dried out but that doesn't trigger the biggest fires. Their concern is really the large ground fuel, logs on the ground that are three to six inches in diameter. When those things dry down to about 20 percent moisture level that can generate some very deep fires that are hard to put out.

The other thing that we're looking at or thinking about is forest health. We know that successive defoliation from gypsy moth will lead to a decline in acorn production, okay, and that has implications for forest regeneration.

When oak trees are really hammered by gypsy moth along with the winter moth and crypt gall wasp, it will take maybe 10 years for that tree to fully recover once those stressors are removed.

And there are other implications about acorns, okay. Acorns actually happen to be the primary fuel that drives the tick-borne disease ecosystem. So while you all thought we were switching from ticks to gypsy moths, it all circles back to ticks, okay.

Because what we do know is that acorn production, mouse populations, and tick populations are all linked, okay, everything is connected. So what we're trying to consider what are the implications of a very small acorn crop?

We know through a number of research findings that when you have a bumper crop of acorns you get an explosion in the mouse population in the next year. And then the next year you see a result in increase in tick populations.

When you have a very small crop, we're going to get a crash in mouse populations. But there's some ways I'm thinking about this that imply that you actually could see an increase in the risk of tick-borne diseases.

So I'm waiting for Rich Ostfeld -- he is an Ecologist at the Cary Institute of Ecological Studies in New York. He is the world's expert on Lyme disease ecosystem. And I contacted Rich and he sent me back an email from a remote location in Kenya. So we're going to chat about this but he'll be back in the country next week. So it's good to have a resource like Rich in our pocket to discuss things like this with.

And I think that is it. Yes.

Speaker BERGSTROM: Okay. Thank you. Do you have any questions or concerns about these critters? I know that I have several trees that have been defoliated by first by the winter months and then by the gypsy moth. And right now as I left my house, I have moths flying all over the place. It's amazing how the concentration is in certain areas. But you're telling me that they don't necessarily kill the tree.

Mr. LARRY DAPSIS: Oh no. Successive years of defoliation -- conifers, like they like white pine and they will feed on pitch pine, and you get a full defoliation in one year of a conifer, that tree is hurt badly.

Oak trees, hardwoods in general, can take two or three years of heavy defoliation before it kind of makes them weaker and more susceptible to diseases and other things.

Speaker BERGSTROM: Well, I mean, just because, you know, for homeowners, it's expensive to cut down a tree. In other words, if you lose a beautiful tree, I mean not only do you lose a tree but you also have to cut -- have to hire someone to come in and cut it down and carry it away and it's kind of a bad experience.

So we have to pray for rain is what you're saying for next spring pretty much.

Mr. LARRY DAPSIS: Yes.

Speaker BERGSTROM: I've got hands up all over. I'll start at the far end with Dr. O'Malley.

Mr. O'MALLEY: Thank you. Larry, is there introduction of Entomophaga a plan; is that done by spraying? I mean you say it reestablished in Connecticut. It was facilitated by us?

Mr. LARRY DAPSIS: Yes.

Mr. O'MALLEY: It was.

Mr. LARRY DAPSIS: Yes. We did it.

Mr. O'MALLEY: Is there any plan for that to happen here?

Mr. LARRY DAPSIS: It spread from Connecticut. It's here. It is here.

Mr. O'MALLEY: Here. We don't plan to augment it?

Mr. LARRY DAPSIS: We don't need to.

Mr. O'MALLEY: You don't need to. Okay.

Mr. LARRY DAPSIS: You don't need to. It's here. And when we've got the right environmental conditions, it will push gypsy moths into the background like it has been for a number of years now.

Mr. O'MALLEY: Thank you.

Speaker BERGSTROM: Okay. Who do we have? We've got Ed.

Mr. LEWIS: Yes, we spray our trees every year. We have a company come in and they spray it and everything; we haven't had a problem. There are lots of moths flying around right now but they don't cause -- caterpillars cause the problem.

Mr. LARRY DAPSIS: Correct.

Mr. LEWIS: And the spraying seems to work. The biggest problem we've had there to try and work on that with the oak trees is that wasp you talked about.

Mr. LARRY DAPSIS: Oh, the crypt gall wasp, yes.

Mr. LEWIS: That, and so they have to drill into the tree and put some stuff in there in several places.

Mr. LARRY DAPSIS: And even that's not been proven.

Mr. LEWIS: Well, it seems to have worked.

Mr. LARRY DAPSIS: Sure. I mean people are kind of guessing at this one.

Mr. LEWIS: Well, but it has stopped some of the distress because when we called these people to come out, full limbs were just falling off.

Mr. LARRY DAPSIS: Sure. We're hoping to see what's happening with gall wasp on Long Island years ago. It was a big problem for about 10 years and then it just disappeared. There was a parasite that came in and took care of the wasp.

Mr. LEWIS: But it's, you know, to go along with what Ron said, if you go out and you're aggressive and you treat it, do the best you can --

Mr. LARRY DAPSIS: Well, it's the only tool in the box we have.

Mr. LEWIS: Yes, both spraying for the gypsies and everything. You can say it because it costs a lot more to cut down a tree than it does to treat it.

Mr. LARRY DAPSIS: I agree.

Mr. LEWIS: It's not really that bad.

Speaker BERGSTROM: Okay. Ed McManus.

Mr. MCMANUS: Just briefly, what stage do the gypsy moths do the major defoliation in?

Mr. LARRY DAPSIS: From the point they hatch out of this little teeny tiny larvae to the point they're just about to become a pupae. Believe it or not, the appetite of a gypsy moth is enormous. The female moths or caterpillars are bigger than the males, okay. And if you look at what a single female gypsy moth caterpillar consumes later in the game, 12 square inches of foliage per day, okay.

When you look at the entire lifecycle from hatch to maturity, each caterpillar has consumed a square yard of leaf area.

Speaker BERGSTROM: I've got an additional problem. We're beekeepers so, of course, if you add any chemical spraying to the trees and stuff, it's met with some opposition.

Mr. LARRY DAPSIS: Sure. If you have a tree in bloom, there have been big bee kills from people applying Spinoso to trees that were in bloom.

Speaker BERGSTROM: Okay. But if they're not -- yes, well, so, basically, that's the issue is that they're in bloom then.

Mr. LARRY DAPSIS: Exactly.

Speaker BERGSTROM: Okay.

Ms. MCAULIFFE: I had the opportunity to drive to Connecticut last week, and driving through Rhode Island, they're literally the whole side of one -- it's interesting, one side of the highway is defoliated, almost the whole state of Rhode Island. And then you go into Connecticut. So it's not just the Cape that is suffering.

Mr. LARRY DAPSIS: No.

Ms. MCAULIFFE: So we have to hope that that fungus --

Mr. LARRY DAPSI: No. I talked with my counterpart in Connecticut and he's praying as much for rain as I am.

Speaker BERGSTROM: Jim.

Mr. KILLION: Thank you, Mr. Speaker. This last slide here you mentioned that the mice being a problem. They're sort of host for this virus that the ticks transmit?

Mr. LARRY DAPSI: Sam Telford at Tufts University believes that the Powassan virus can reside in mice. I haven't seen any data that show that. But mice seem to be involved in every single thing involving ticks and a disease. But it is known that possums and skunks and raccoons are major players in this.

Mr. KILLION: Is much known about where that virus originates?

Mr. LARRY DAPSI: No. No. No, it was first described medically in Ontario but it could've come from Manitoba. I don't know.

Speaker BERGSTROM: Deborah.

Deputy Speaker MCCUTCHEON: Just a little follow-up there on the acorns, mice, and ticks. So if you don't have -- the gypsy moths get rid of the acorns by getting the trees that make the acorns, right? So is the solution to this problem to get rid of the oak trees and the mice?

Mr. LARRY DAPSI: I don't think that's necessarily sound ecological thinking. But we do know that it all works in tandem as acorn production goes up, mouse populations go up. Gypsy moth populations go down because mice love to feast on those little pupae hanging on the side of a tree. To a mouse, a gypsy moth pupa is like movie theatre buttered popcorn, literally.

Deputy Speaker MCCUTCHEON: And I -- yes, this is overwhelming. Thank you, again. It seems like it's a task without a solution.

Mr. LARRY DAPSI: It's a task that can be managed.

Speaker BERGSTROM: Okay. Yes, Lilli.

Ms. GREEN: Thank you. So can you speak a little bit about how long we should see the moths and is there anything at all that -- I mean, you said that there's basically nothing you really can do.

Mr. LARRY DAPSI: No, the moths -- what you see flying right now are the male moths. The female moths are sitting on the side of a tree calling their hearts out for a boyfriend. And so once they finish laying eggs -- so they'll be dying off fairly shortly, but they're not doing any damage per se.

Speaker BERGSTROM: Okay. Thank you. Well, you know, you indicated earlier if we can get some of this information online. I know people are concerned all over the Cape not only about the virus --

Mr. LARRY DAPSI: We haven't posted the Powassan material online as yet.

Speaker BERGSTROM: No, but I'm sure you will. Okay. Thank you.

Mr. LARRY DAPSI: All right. Very good. Thank you for your attention.

Mr. LEWIS: Thanks, very much, Larry.

Speaker BERGSTROM: I noticed that two of the Commissioners are here, so I'll go back to Number 8 on our agenda; communication from the Board of Regional Commissioners. Anything substantive to tell us?

Commissioner CAKOUNES: Are you done with the ticks?

Mr. LARRY DAPSI: We're never done with the ticks.

Mr. LEWIS: Mr. Speaker -- Mr. Chair, there's -- we have a representative from the Mosquito Control.

Commissioner CAKOUNES: Yes.

Mr. LEWIS: I don't know if you want to just -- if there are any questions regarding that for that lady there.

Commissioner CAKOUNES: That's where I figured they were headed.

Commissioner FLYNN: Microphone, Gaby.

Ms. GABRIELLE SAKOLSKY: Sure. The County Health and the Extension Service work closely with us and they asked me to come in today. We've been working with the County Health Department on a Zika fact sheet that they are distributing that will give information.

I know that that's the -- Mosquito Control is kind of old news and I recognize a lot of faces and I've told my story a lot. I have crews out there that are doing the same thing that they've been doing, controlling mosquitoes in all of your towns.

The news has been Zika virus so we'd just like to get the information out there. The people on Cape Cod don't need to be concerned. We've been doing surveillance for the species of mosquito that might be carrying this disease in the northeast for the past number of years. It was first Asian tiger mosquito is the only species in this area that would be capable of transmitting Zika virus.

Asian tiger mosquito has not been found on Cape Cod. They have a population in New Bedford that they've been picking up since 2008. So we've been doing surveillance specifically to see if that mosquito is here. It's not here. There's no mosquito on Cape Cod as far as we know that can transmit Zika virus.

The concern here is the same old concerns I always talk about; West Nile virus. Larry mentioned it. It's very similar to Powassan. West Nile virus we've gotten our first positive, which is about a month earlier that we've been getting it the past few years in Falmouth this last week.

And the message is the same; the mosquitos that carry West Nile virus and the mosquitos that lay their eggs in manmade containers. If you go around your hard after it rains and dump out all of the water in those containers, you're doing what you can to control those mosquitos. They don't fly very far. So that's the best thing you can do. And repellants, you know, to avoid mosquito bites.

So quick, that was mosquitos in a nutshell.

Mr. LEWIS: Thank you.

Speaker BERGSTROM: Thank you.

Commissioner CAKOUNES: Give them the days of hatch.

Ms. GABRIELLE SAKOLSKY: Give them the what?

Commissioner CAKOUNES: The days of hatch.

Ms. GABRIELLE SAKOLSKY: Oh okay. So, thank you, Commissioner. The one thing that I should mention is that mosquitoes will lay their eggs. They hatch, they go through their larvae stage, pupa stage, they're

flying adults in seven days.

So a small container of water in your yard left with water in it for seven days can create hundreds of mosquitoes.

Speaker BERGSTROM: Thank you. George, do you have anything to add to this?

Mr. GEORGE HEUFELDER: I'll just add one little brief thing to the update. Many of you know that the governor had in his budget a stipulation for folks who are seeking relief from long-term effects of Lyme. He actually added to his budget something that would have made it more difficult to obtain that and be covered by insurance.

On behalf of the County and as County Health Officer, we contacted every one of the Cape legislators as well as the Senate President and the Speaker of the House in opposition to that. And I believe that it's on its way back to the wording that was there, basically would have allowed, does allow, will allow a doctor to prescribe antibiotics beyond that short period that they're normally covered for.

And this we thought very important because the language that the governor placed in there would have been so specific that many of those specialists that were indicated in his revised wording don't really take Lyme patients for very long. And there are other good doctors out there doing some very good research on things and very knowledgeable about the use of antibiotics in this case -- these cases that would be prohibited -- well, they would prescribe it; however, there would be no coverage for it.

So that along with one other brief update as you heard, the Zika -- the Zika sort of scare. We realized that this risk is pretty low for our area but the Regional Emergency Planning Committee in conjunction with Gaby and in conjunction with Extension and others have put together a flyer which we are just in our final draft phase of. We're about to translate it to other languages also for the general public. Very much like what we did with Ebola, because when Ebola hit, of course, that was such a scare. We had to outreach to a lot of the first responders.

And in this case, we know that the threat level is much lower but DPH presently gets 50 calls a week on Zika. So we know that the interest is still high there, that the lack of understanding and knowledge is high, so we're continuing our outreach in conjunction with the other departments you heard from.

That's it. Didn't want to show up first and bury the lead story because, I'll tell you, the Powassan was definitely the lead story.

Speaker BERGSTROM: George, as far as I know, there's been a big debate about Lyme disease with doctors on both sides as to whether it's chronic. It seems to be that -- do you feel that they have a handle now on this?

Mr. GEORGE HEUFELDER: I think they'll always be the controversy, but I would urge any of you who are sort of on the state-side of the fence that says, ah no, there's really no controversy. This is just something vague that goes on for years; people have fibromyalgia or something like that.

I would urge you to look at some the research, some of the research that Dr. Aucott has done down at John Hopkins University, something called a

SLICE Study. We actually looked at people who had symptoms, the bull's-eye rash, had to be a bull's-eye rash, been treated with antibiotics, and for two years follow them quarterly, and reports on the percentage of people who look and they say, "That's in the rearview mirror. I'll never see anything about Lyme again." And a significant percentage who don't go that way, that after two years they start reporting some symptoms or six months, long after the antibiotics have stopped.

So I'll tell you that personally in viewing literature; I'm not a doctor. I do fancy that I can read. I believe that the literature and the scientific medical studies point towards something going beyond that. And I would doubt there's anybody in this room who probably doesn't know somebody who has had some extended sort of symptoms of Lyme long after they've been treated with antibiotics first, bull's-eye rash is gone, they hardly remember that but some symptoms persist. So I believe something is going on.

Speaker BERGSTROM: I have a nephew who was diagnosed with Lyme after he had gone through -- he had vague symptoms and nobody could figure it out. Finally, he was diagnosed as Lyme probably five or six years ago. He's still on some kind of medication.

Mr. GEORGE HEUFELDER: The diagnostic tests are not really good. There's some work being done on that. However, I believe there will always be the controversy even among some of the members of the task force that the County has, the Lyme and Tick-Borne Disease Task Force, there's some controversy.

But I do think that it was appropriate for me, as your County Health Officer, to make the comments on the governor's sort of changes to the legislation because there are a lot of people down here that would have made it more difficult to continue their regimen.

Speaker BERGSTROM: Yes, Ed.

Mr. MCMANUS: Quickly on a public health note. I noticed when Gaby was getting up and sitting down, on the back of her t-shirt she said -- there's something about, "Are you a blood donor?" I just wanted to note that this Wednesday Cape Cod Healthcare at the Mid-Cape Home Center is doing a blood drive. They're running significantly low, certain types of blood groups and people are being encouraged to donate blood if they physically can do so.

Speaker BERGSTROM: Brian.

Mr. O'MALLEY: Thank you, Mr. Speaker. Just to expand a little bit on what Director Heufelder has said about long-term Lyme. I think, pretty clearly, that the crux of the controversy is not whether there are people who certainly have long-term chronic symptoms but whether those symptoms represent active infection or whether those represent some kind of response. That's really where the controversy lies.

Mr. GEORGE HEUFELDER: Right.

Mr. O'MALLEY: Clearly, there are people who run into difficulty.

Mr. GEORGE HEUFELDER: Right.

Mr. O'MALLEY: And there are, even some of the people who do believe that it's a chronic infection recognize that sort of the antibiotics have

anti-inflammatory properties and that may be due to that. That's the essence of the scientific conundrum.

Mr. GEORGE HEUFELDER: Absolutely. Because the infection even in somebody who has long since thought it was in the rearview mirror, it can't pick up the organism in the blood. But what's really scary is some of the research after they've past and have done some sections of tissue they can say, "Whoa, how did it get that tissue," you know, things like cartilage and, you go, "Wow."

Speaker BERGSTROM: I'll never look at bugs again the same.

Mr. GEORGE HEUFELDER: You never will.

Speaker BERGSTROM: I'll be dreaming about bugs coming at me from all different directions.

Mr. GEORGE HEUFELDER: Larry just scared the hell out of everybody and we just sort of educate them so they don't have to be scared.

Speaker BERGSTROM: All right. Well, thank you, George. I'm glad you're on that case.

Mr. GEORGE HEUFELDER: Thank you.

Communications with the Board of Regional Commissioners

Speaker BERGSTROM: Okay. Well I guess now we can move on to the Commissioners. Sorry about that.

Commissioner CAKOUNES: Don't turn the camera off. That's the only reason why I came here. I've got to get this free press.

Speaker BERGSTROM: Welcome.

Commissioner FLYNN: Thank you. I didn't think we'd get here. Things kept going on and on but here we are.

We did vote today to establish an Other Post-Employment Benefits liability trust fund. Many towns have already done this. It's other than attempting to try to pay those benefits out of the operating budget year after year after year really doesn't work. So we're doing the same thing. We're going to establish a trust fund.

I know some towns actually when they did do that they actually changed the benefit for some retirees, particularly the percentage the town's paying toward health insurance. Some that were paying 75 percent dropped it to 50 percent or something like that. But we're just simply, at this stage, establishing the trust fund and we'll see where it goes from there.

Mary McIsaac did give us a report on the capital projects year-to-date.

Mr. LEWIS: We got that.

Commissioner FLYNN: You have those. Yes, so we're going to have that, so there's no need for us to talk about it. You'll have it; we'll have it, and then at some point in time we will be discussing it anyway when it comes to the budget.

And George, he already gave you the same report we had.

And the only other thing we discussed was, and you may probably already know, that the Cape Cod Commission was --undertook a reclassification of their employees and the positions of the Cape Cod Commission. And we

decided it was time for us to do the same thing.

Not that the jobs don't in any way relate to one another, their jobs are totally different from the jobs at the County, but we can still follow the same process in the sense of keeping an employment structure pretty much as similar as we possibly can so that we don't end up with two different groups of people operating off two different basic principles of operation. So ours won't necessarily conform to it but it will conform to the structure.

Leo.

Commissioner CAKOUNES: Just the only action that you missed was the approval for the Pan-Mass Challenge to use our facility out here. And the only reason I want to update you with that is to give them a little press time. I think it's going to be -- I know it's going to be Sunday, August 7, 2016, and it's the 36th Annual Pan-Mass Challenge, the Jimmy Fund Cancer Research.

Speaker BERGSTROM: Is that -- did they pick that because that's going to be hottest day of the year? They didn't really look.

Commissioner CAKOUNES: I have no idea. I don't run so -- run -- it's a bike thing.

Speaker BERGSTROM: And reclassification..... often times results in people's salaries being adjusted; is that going to be the case here?

Commissioner CAKOUNES: Today we actually voted in and approved the Cape Cod Commission's reclassification study. The only really difference in there -- included in their plan is they have a merit system now so that when an individual caps out, if you will, at the step that they are categorized under and they cannot move into a different category, they' basically -- what's the term? Is it "stepped out"? Is that what they use?

Commissioner FLYNN: Maxed out.

Commissioner CAKOUNES: Maxed out. They're going to implement a merit system. And we authorized -- we read the plan, looked at the plan, and approved it, and we authorized the executive director of the Cape Cod Commission to implement that. And the only changes that we're going to be doing is probably adjusting our personnel manual to reflect that.

And Jack is, with his staff, looking now at the reclassification of -- I guess I'll use the word "general" County employees to see how that might fit in our plan. We had not taken any action for the general County employees. The only action that was taken today was for the Cape Cod Commission.

Speaker BERGSTROM: Is that going to have an immediate effect on the fiscal 2017 budget?

Commissioner CAKOUNES: Absolutely not. Everything that we voted in the fiscal FY17 budget was and under anticipation of this plan moving forward. It was actually on our desk and we were reviewing it when we were reviewing the budget. And I was the one that asked that it be tabled until our new executive director could -- our new executive could look at it because Jack wasn't here then. So all we did today was approve it.

Speaker BERGSTROM: Okay. Any questions for the Commissioners? I'll start with Ed.

Mr. LEWIS: Just a cautionary; you know school committees and schools

all operate with both lanes and what's the other term?

Mr. MCMANUS: Steps.

Mr. LEWIS: Steps, steps and lanes and people max out and stuff like that. But we also have cost-of-living increases, which are over and above that. So you're getting two. And if you end up doing it for one and put in merits, you're going to end up -- merit is, supposedly, is in everything.

But just be aware that once you do that for one group, other groups are going to, you know. We're lucky as far as the County is concerned we don't have police and fire. Towns do have police and fire as well as education and then they have the unions, so all of that stuff.

So when you're doing that, and I commend you for doing it, just be aware that that has a way of going across the whole breath of the employment.

Commissioner FLYNN: Well, actually, the County already has that process in place that if a person's been in a position for three years, they've maxed out. Then each three years their position is reviewed with them.

I don't have any data to say have those ever been changed or have they ever been upgraded. I'm sure in some instances they have, but we can ask the County Administrator for that information.

Speaker BERGSTROM: Yes, Suzanne.

Ms. MCAULIFFE: I'm going to be even a little stronger than Ed Lewis was. I was very concerned this budget cycle that the Commission chose to give salary increases to its employees when the rest of the County had essentially a pay freeze.

It was my understanding that steps are traditionally used because you start people a low-paying salaries and it's used to catch people up to a higher salary more quickly. And that's traditionally why you give steps in a contract.

And you're right, people get steps and they get a cost-of-living and you can have 5, 7, 12 steps, whatever the contract calls for.

And now you're going to add merit to those who have maxed out of their steps, so you're going to continue to double increases, cost-of-living, and merit because from the people who currently get merit now which are 14 or 15 administrators, they get their merit.

So I'm just very concerned that the Commission, Cape Cod Commission, because they have money and they are a separate entity from the County, sort of but not really, that they are now going to be making sure that their highly-paid salaried personnel are going to get increases that are going to be out of step with the rest of the County. That's just my two cents.

Commissioner FLYNN: Thanks.

Speaker BERGSTROM: Just I know I've gone over this before when we had the debate, but, you know, I'd like to encourage public employees. I think that they perform a good service. The whole idea that the people mention the cost-of-living increase, well the cost-of-living increase is a measure to compensate for inflation.

So, theoretically, if you just a cost-of-living increase for 10 years, you would have the same purchasing power in your salary as you did the first year.

As far as the merits go -- the merit pay and the step increase as well, if

you work a job, you know, you could come into a job and you get paid a certain amount of money. After 10 years, you expect you're going to get a raise. Otherwise, you made a bad decision in getting that job.

And I had asked Paul Niedzwiecki, the Executive Director, how his salaries compare with the private sector. And he assures me that they are at least -- they are no higher than the private sector. That's what he says. And he says in most cases they're lower.

I mean I have the same concerns over the Commission's budget because I don't think it gets the level of scrutiny that the rest of the budget does, but I'm not suggesting there's anything in there that anybody doing wrong.

But I'd like to see that whole discussion brought to the floor at the next budget cycle when we look at all the salaries. So that's just my editorial comment on that.

Commissioner CAKOUNES: Can I just respond, Mr. Speaker?

Speaker BERGSTROM: Sure.

Commissioner CAKOUNES: I heard all three of you, and I'll speak for my fellow Commissioners sitting next to me; we heard all three of you and that's why when this was brought forth to us in March we tabled it, and we allowed our new administration and new staff to get on board and be able to review it. It's a very lengthy document, a review that the Cape Cod Commission paid for for this reclassification, did an excellent job, far better job than ours did when we had a group look at the County employees.

So everything that you have mentioned has been considered, and, again, as a person sitting in the position that we're sitting in, we had to rely on our staff, who's reviewed this, and move forward. And that's why we chose today to implement it.

But all your concerns, everything you guys mentioned, believe me, were equally felt at the Commissioners table too.

Speaker BERGSTROM: Ed, do you have something?

Mr. LEWIS: Yes, just to piggyback on what the Speaker said, and I think what you're saying there also, Commissioners. One of the things that I feel we don't do a good job of -- when I say "we," I mean the Assembly -- I'm not talking for the Commissioners, is when we look at the various budgets, the salary levels that there is no study that's given to us as to whether or not we're competitive or not competitive with similar type jobs.

And, in fact, we're not presented with most of the salary information unless we sort of like demand it and then it's very difficult to get. And I'm not saying anybody in the County is not being paid a fair salary or an unfair salary. I'm just saying from a budget process when we get to that, that's something that we should be looking at as well as the programs that we look at because salaries are probably 60-70 percent of the total -- well maybe not that much in the County, but it's a high percentage.

Speaker BERGSTROM: All right. Well. Yes, Deborah.

Deputy Speaker MCCUTCHEON: I would like to add my voice to some of this discussion about salaries. I think that we live in a time now when people don't have a right really to expect a significant salary increase every year. I think

it's only in the public sector that you see salaries going up 6 percent/7 percent every single year. It doesn't happen in the private sector. The private sector doesn't have the kind of money any more. It doesn't have to pay it.

And I think that we need to make our jobs competitive in a different way. And I just think that it ought not to be that we need to stop thinking that everybody has to have a raise of at least 3 to 5 percent every single year. It doesn't happen anywhere but in the private -- in the public sector.

Commissioner CAKOUNES: Can I, Mr. Speaker?

Speaker BERGSTROM: Go ahead.

Commissioner CAKOUNES: I just want to respond on two things just to kind of make you guys aware of it. As I mentioned earlier, the County did an assessment, and I'm not going to mention the company that did it, but we paid to have a classification study done and the things as Ed Lewis was talking about, you know, are we paying people fairly? And then the Cape Cod Commission hired a completely different firm.

And I would ask all of you to get copies of both of those reports, and I think you'll find that the Cape Cod Commission's really did an excellent job.

I also want to add to that, I know the first thing that you're probably going to feel as I felt is why doesn't the County go out and pay and have another one down. I don't think we have the money to do that.

And I tell you I, as one Commissioner, we have not spoken about this at the board level, but as one Commissioner I strongly feel that we don't need to do that at this time. We have enough information. We have new staff. We can probably do it in-house.

And I believe if Jack's going to speak today, he'll probably allude to something that he's looking into along those lines. So just sometimes I think, and I know you're smiling, Ron, but -- and I know Ed knows this, when you go out and you ask for these studies to be done, be careful what you wish for because the information you get back may not be what you wanted. And I'll have to tell you, I think in this case, we did the right thing.

Speaker BERGSTROM: Is Julia leaving us? Julia, you're not leaving us; are you?

Ms. TAYLOR: Well --

Speaker BERGSTROM: Because we need you. You're a walking quorum right now.

Ms. TAYLOR: Okay. Well let's move along. Let's move right along.

Speaker BERGSTROM: Yeah, well, I'm trying to do that.

Commissioner CAKOUNES: Sorry.

Commissioner FLYNN: We're done.

Commissioner CAKOUNES: Support the resolution. The Commissioners did their own, by the way, just so you'll know.

Speaker BERGSTROM: Well, I could but I think we're done here except for we have a couple -- we'll be done in 20 minutes.

Speaker BERGSTROM: Do we have any communications from Public Officials? Hearing none.

Communications from Members of the Public

Speaker BERGSTROM: Do we have any communications from Members of the Public? I see a member of the public. Communicate, please.

Ms. ELENITA MUNIZ: I come bearing gifts. I will be fast.

Speaker BERGSTROM: Thank you.

Ms. ELENITA MUNIZ: Elenita Muniz from the Human Rights Commission. I have brought you two things, and I just have one other head's up for you.

The yellow report is the report of the Human Rights Academy for the projects of this year. The kids come to us in the spring and tell us the projects they've done over the course of the year. They're self-explanatory.

I'll just say that many of them do raise money, not all of them reported the amount they raised. But when I added up the amount of the schools that did report it, it came to over \$28,000, which went almost entirely to Cape Cod service agencies and programs.

So over the course of the years that Cape Cod Academy's been doing their Shelter from the Storm concert, they raised over \$100,000, which has also gone into Cape Cod service agencies.

So they're doing some pretty wonderful work and we're quite proud of them. And thank you for supporting that at the Academy; we appreciate that.

The second thing is the two new translations of our newest brochure, the general brochure about the Human Rights Commission, now available in Spanish and Portuguese, just from the printer so we haven't gotten it distributed yet but that is our next task.

And we also have two other brochures on bullying and on filing a complaint that are also available in three languages. And we'll be working with George Heufelder to get the Zika virus thing translated as well.

And the final thing is a head's up on April 15 we are putting on a conference on human rights and climate change. Brian's going to be facilitating one of the panels. Judith Blau, who's a Commissioner who lives in Wellfleet, has been crisscrossing the Cape and has gotten a wonderful, powerful, enthusiastic response. It's going to be quite an interesting day.

So more information will be coming but just to let you know, mark your calendars. On tax day, you can do something more fun than pay your taxes.

Speaker BERGSTROM: Thank you.

Ms. ELENITA MUNIZ: Thank you.

Assembly Convenes

Proposed Resolution 16-05: Support of federal legislation to resolve Monomoy Refuge boundary dispute

Speaker BERGSTROM: Okay. The Assembly will now convene, and we will bring up Assembly vote on Proposed Resolution 16-05, support of legislative efforts to resolve Monomoy Refuge Boundary dispute in Chatham.

I submitted this. For those of you who were here last week, you know the Commissioners -- this was submitted to the Commissioners and they approved it.

To give you a quick heads up, the wildlife refuges were mandated by Congress to have management plans. This went back quite a while, I would think almost 10 years. So the management plans have been working their way through the system and, finally, it was in a draft proposals and the town of Chatham objected to some of the authority that was imposed on the Monomoy Wildlife Refuge that restricted fishing and other traditional activities out there.

And there was an extensive negotiation process. We had some public hearings back and forth, and I would say that a lot of the issues were resolved.

But the issue that was not resolved was that the wildlife refuge claims jurisdiction over areas below the low watermark. So if you're standing on the flats out in Nantucket sound and you're looking over Nantucket sound, they extend their authority beyond that into water that's never dry at low tide.

And the implications of that are that traditional fishing methods: dragging for quahogs, collecting muscles, there are trap grants out there would come under the jurisdiction of the wildlife refuge.

And in Massachusetts, as you probably know, the state delegates authority over the activity, shellfishing activities and so on to the towns to extend to three miles.

So that's really been the debate. They want to restrict it. We say no. These activities have gone on for a long time. They're part of the economic -- the economic being of the town. And so they feel that they -- they feel that they are -- this is the wildlife service -- feels that they are mandated to do this by various acts of Congress over the course of time.

So this is an attempt to submit legislation that will correct that and enable the town to maintain its authority, not over the whole area, but simply over certain traditional activities within that area below the low water and to the extent that the wildlife refuge claims authority.

So I don't know if you have any questions on that. Yes.

Proposed Resolution 16-05;

Whereas, on or about, March 18, 2016 the United States Fish and Wildlife Service Regional Director for the Northeast Region approved and signed a final Comprehensive Conservation Plan (CCP) for Monomoy National Wildlife Refuge and Wilderness Area, and

Whereas, Monomoy National Wildlife Refuge and Wilderness Area is wholly located within the Town of Chatham, in the County of Barnstable, and the Commonwealth of Massachusetts, and

Whereas, by virtue of the signing of the CCP the United States Fish and Wildlife Service did declare and ordain its authority and jurisdiction over certain submerged lands, waters, and dis-contiguous intertidal lands lying West of the so called Monomoy Barrier Beach Group, and

Whereas, such a claim to these waters, submerged lands, and intertidal lands is in direct conflict with the language of the 1944 Order of Taking, which provided

for the creation of the Monomoy National Wildlife Refuge and Wilderness Area, and similarly, is in direct conflict with the historic and traditional oversight and management of these waters, submerged lands, and intertidal lands, and
Whereas, both the Town of Chatham and the Attorney General for the Commonwealth of Massachusetts, have voiced objection to the jurisdictional claims made by the United States Fish and Wildlife Service, and
Whereas: the Honorable William Keating, United States Congressman for the First Massachusetts District, has filed legislation in the United States House of Representatives, which seeks to affirm and designate the jurisdictional limits of the United States Fish and Wildlife Service, on and within the Monomoy National Wildlife Refuge and Wilderness Area to extend only so far as mean-low-water,
NOW, THEREFORE,
BE IT HEREBY RESOLVED that the Barnstable County Assembly of Delegates: Supports and endorses the legislative efforts of Congressman Keating and asks that the members of the United States House of Representatives and the United States Senate recognize the merits of Congressman Keating’s legislation to resolve and restrict the jurisdictional boundary authority of the U.S. Fish and Wildlife Service on Monomoy and advance it into law.

Ms. MCAULIFFE: No. I was just going to move the Resolution and put it on the floor.

Speaker BERGSTROM: Okay.

Mr. LEWIS: Second.

Speaker BERGSTROM: Moved and seconded. Anybody? All right. We'll take a vote on it.

Roll Call (63.71%): Ronald Bergstrom (2.84% - Chatham), Lilli-Ann Green - (1.27% - Wellfleet), Christopher Kanaga (2.73% - Orleans), James Killion (9.58% - Sandwich), Edward Lewis (4.55% - Brewster), Suzanne McAuliffe (11.02% - Yarmouth), Deborah McCutcheon (0.93% - Truro), Edward McManus (5.67% - Harwich), Brian O'Malley (1.36% - Provincetown), Julia Taylor (14.61% - Falmouth), Linda Zuern (9.15% - Bourne).
Absent (36.29%): Marcia King (6.49% - Mashpee), Teresa Martin (2.30% - Eastham), John Ohman (6.58% - Dennis), Patrick Princi (20.92% - Barnstable).

Clerk O'CONNELL: Mr. Speaker, Proposed Resolution 16-05 passes with 63.71 percent of the Delegates voting yes; 36.29 are absent.

Speaker BERGSTROM: Thank you. There are no committee reports. The committees have been in the back burner.

Speaker BERGSTROM: Do we have anything from the Clerk?

Clerk O'CONNELL: No.

Speaker BERGSTROM: Nothing from the Clerk.

Other Business

Speaker BERGSTROM: Any other business?

Ms. MCAULIFFE: Reminder that the nomination papers are due Tuesday the 26th for anyone running for reelection.

Speaker BERGSTROM: To the Town Clerks.

Ms. MCAULIFFE: To the Town Clerk, and then you have to pick them up after they've been checked.

And then the second thing is with the publication of the lawsuit from Barnstable suing the County, there have been questions in my town, and I'm sure other towns, of liability issues.

So just to the Executive and to the Commissioners, I know they can't discuss things under liability, but maybe they just need to make a statement because people are concerned about what they're going to be on the hook for. And we can't tell because it's under litigation.

Speaker BERGSTROM: I don't know what the Commissioners have said. Unfortunately, when it goes to the lawyers, everything gets done in executive session.

Ms. MCAULIFFE: I know. So maybe we just need to issue a town -- a town statement to each town to say, you know, it's in litigation. We don't have any answers at this point.

Speaker BERGSTROM: Okay. Is that it? Do we have a motion? Doc, did you have something quick?

Mr. O'MALLEY: I do, Mr. Speaker, in apropos of a lawsuit about the toxin in the water. This is just a follow-up report on our Resolution 16-03, which we passed 18 -- May 18 with 67 percent in favor. That was petitioning the governor to deny the yearly operating plan for the permission to use herbicides. The Clerk tells me that that went out to the governor's office the next day.

MS. O'CONNELL: Yes.

Mr. O'MALLEY: On June 23rd, I called the governor's office and spoke with an aide. He said he would reach out and find out. Well, there's been no reach out, no find out. That's kind of how seriously we're taken up there.

Just the other day, July 15, MDAR approved Eversource's use of herbicides for its 2016 yearly operating plan.

Interestingly, the only reference they cite in their decision is to how this was made, and I have that decision here, the only reference they cite is the plan submitted by Eversource. They appeared not to have cited any other scientific references or any other opinions, such as our petition.

What this means, right now, is that the Delegates from Bourne, Falmouth, Sandwich, Barnstable, Yarmouth, Dennis, Brewster, and Orleans spraying may begin at any time.

So there is a pushback. A number of communities have committed to challenge the approval as aggrieved parties through the legal adjudicatory hearing process. Those being Eastham, Orleans, Brewster, and Dennis are each contributing \$15,000 towards the legal fund that will -- this case will be heard before the 13 member Massachusetts Pesticide Board.

However, the truth is the Pesticide Board has never refused --

Mr. LEWIS: Never.

Mr. O'MALLEY: -- never reversed MDAR's decision. Legal counsel, some very, very good scientific testimony has been engaged. Attorney Bruce Taub from Orleans, who spoke to us here, will represent the towns.

And I simply want to bring this to attention as a follow up on decisions we make. Thank you.

Mr. LEWIS: They were there yesterday, Eversource.

Mr. O'MALLEY: Spraying?

Mr. LEWIS: Not spraying. Getting ready.

Speaker BERGSTROM: One more -- anybody else have a motion?

Ms. MCAULIFFE: Move to adjourn.

Deputy Speaker MCCUTCHEON: Move to adjourn. Second.

Speaker BERGSTROM: Second. All those in favor? Aye.

Okay. Thank you for your patience.

Whereupon, it was moved, seconded, and voted to adjourn the Assembly of Delegates at 5:45 p.m.

Submitted by:

Janice O'Connell, Clerk
Assembly of Delegates

List of materials used and submitted at the meeting:

- Business Calendar of 7/20/16
- Unapproved Journal of Proceedings of 7/6/16
- Human Rights Commission Academy Report 2016 and brochure handout
- Memo from Finance Director Mary McIsaac regarding capital projects FY 2014 - 2016
- Background information handout dated 7/20/16 from L. Dapsis on tick borne viruses
- PowerPoint presentation dated 7/20/16 from L. Dapsis on mosquito viruses, ticks and gypsy moths
- Proposed Resolution 16-05
- List of letters of support from Town of Chatham regarding Monomoy boundary clarification legislation