In the Matter Of:

LICAP

2019 State of the Aquifer Report Update

PUBLIC HEARING

December 18, 2019

Groundwater Resources Management Plan



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4	2019 STATE OF THE AQUIFER REPORT UPDATE and
5	LICAP GROUNDWATER RESOURCES MANAGEMENT PLAN
6	PRESENTED BY THE LONG ISLAND COMMISSION FOR
7	AQUIFER PROTECTION (LICAP)
8	x
9	1150 Franklin Avenue Garden City, New York
10	December 18, 2019
11	4:08 p.m.
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14	LONG ISLAND COMMISSION FOR AQUIFER
15	PROTECTION PUBLIC HEARING ON GROUNDWATER
16	RESOURCES MANAGEMENT PLAN, held at the above
17	time and place, taken before Charissa Hromadka, a
18	shorthand reporter and Notary Public within and
19	for the State of New York.
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PUBLIC HEARING Groundwater Resources Management Plan December 18, 2019 LICAP 2

1	APPEARANCES:
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3	JEFFREY W. SZABO, Chairman Suffolk County Water
4	Sulloik Councy water
5	DON IRWIN Nassau County Department of Health
6	CHRIS OSTUNI
7	Nassau County Legislature
8	DAVID GANIM Nassau County Soil and Water Conservation District
LO	BRIAN SCHNEIDER Nassau County Executive
L1	STEPHEN TERRACCIANO U.S. Geological Survey Long Island Program Office
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1	HEARING
2	MR. SZABO: My name is Jeff Szabo. I'm
3	the Chief Executive Officer of the Suffolk
4	County Water Authority and Chairman of the
5	LICAP Commission. Let me allow the individuals
6	here to identify themselves. We will start
7	with Mr. Irwin.
8	MR. IRWIN: Don Irwin, Nassau County
9	Commissioner of Health.
10	MR. TERRACCIANO: Steven Terracciano,
11	U.S. Geological Survey.
12	MR. SCHNEIDER: Brian Schneider, Nassau
13	County Executive Office.
14	MR. GAMIN: David Gamin, Nassau County
15	Soil & Water Conservation District.
16	MR. SZABO: Thank you all for being here
17	today and for you attending the audience.
18	Before we start, let's do the Pledge of
19	Allegiance.
20	(Whereupon, the Pledge of Allegiance
21	was recited.)
22	MR. SZABO: Thank you very much. We are
23	going to start today's hearing by having a
24	presentation sort of a summary, a PowerPoint
25	presentation and summary by Steve Colabufo



related to the Groundwater Management Resource Plan. Mr. Colabufo will make the presentation and then we will go into accepting comments about the plan.

Steve?

MR. COLABUFO: Thanks, Jeff. As Jeff mentioned, I'm Steve Colabufo. I'm the Water Resources Manager for the Suffolk County Water Authority and we are here to talk about the 2019 State of the Aquifer update, as well as the update (inaudible). This is the fourth State of the Aquifer update and the third update since the initial report back in 2016, as well as the culmination of the Groundwater Resources Management Plan. So it's an interesting time for LICAP and for groundwater on Long Island so we are here to talk about that.

For those who may not know, LICAP, Long Island Commission for Aquifer Protection, is a bi-county entity formed to address both quality quantity issues facing Long Island's aquifers on an island wide basis.

It was created through legislation passed



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by Nassau and Suffolk Legislatures in 2013 and reauthorized last year in 2018 for another five years.

The two major deliverables, products we have been focused on since LICAP's inception have been the annual State of the Aguifer Report, as well as the Groundwater Resources Management Plan. LICAP members consist of the very broad array of groundwater professionals representing water providers, Nassau and Suffolk County Executors, legislator branches, as well as the Department of Health, Soil & Water Conservation District of all counties, the New York State DEC, as well as the United States Geological Survey, a very broad range of groundwater professionals and really the underlying -- the technical details and the products we are going to present, the people and the process is just as important. It can't happen without all of your efforts with many people of Long Island.

There's 11 voting members in LICAP.

There's an additional nine members that were added to the 2018 and voting members and



1 HEARING 2 there's two original or four total subcommittees. Two original LICAP back in 2013 3 4 the Water Resources Infrastructure 5 Subcommittee, as well as the Water Resources Opportunities Subcommittee, and then with the 6 7 2018 resource subcommittees were formed. 8 Conservation Subcommittee, as well as the Long Island Nitrogen Action Plan Subcommittee. 9 10 one is focuses on work products that it deals 11 with. 12 So the State of the Aquifer update for this year, we took a slightly different 13 14 approach than what we did in the past. Myself 15 and Tim Motes (phonetic) who is also here. 16 properly establish a working group to really 17 focus our efforts on a better version of the 18 State of the Aguifer Report, we established a 19 system consisting of a similar cross section of 20 groundwater professionals. This time we added 21 a couple of people and the irrigation industry, 22 as well as community and environmental 23 organizations. So we had about 11 or 12 24 members, I believe we met twice over the course 25 of the summer, and the working group ultimately



decided on content and the format. The format we came up with was to have several reoccurring topics that would appear in all State of the Aquifer Report updates in the future that way we can provide a year-to-year continuity and track progress in those areas, and one featured topic that can change each year what will be based on what is newsworthy and what is the hot topic that year in the water industry.

So for State of the Aquifer Report this year, we will be talking about the following reoccurring topics and appear in all future reports, hydrologic condition for Nassau and Suffolk Counties that was part of last years report, so a less intense or similar version of that is included this year. Groundwater quality, we talked about removing contaminants, as well as the update to the Grumman plume and the cleanup efforts for it. The groundwater monitoring efforts, we realize that government agencies in Nassau and Suffolk do a lot (inaudible) monitoring, so we felt like it would be a good idea to highlight that in this and future State of the Aquifer Report and then



1	HEARING
2	groundwater pumpage, that's a manifestation of
3	the State of the Aquifer, how much pumpage
4	occurs. Karen Gomez and Jennifer Pilewski of
5	the New York State DEC and then conservation
6	initiatives as well like water supplies have
7	begun to really well, have begun
8	conservation initiatives to intensify during
9	the summer and highlights four of those
10	initiatives and then we are going to put a
11	section (inaudible) significant LICAP
12	achievement Our Water Our Lives campaign, as
13	well as the Groundwater Management Plan, we
14	will talk about that in greater depth towards
15	the end of the presentation.
16	And the key features here is 1, 4 dioxane
17	has been gaining a lot of press, a lot of
18	effort and suppliers and government agencies
19	and Newsday on 1, 4 dioxane at least in part.
20	That is going to be the subject of this year's
21	State of the Aquifer Report.
22	So 1,4 dioxane we devoted about six or
23	even pages of it to the very beginning of the
24	state of Aquifer Report focusing mostly on the
25	history and the occurrence of 1, 4 dioxane in



1 HEARING 2 groundwater as well as the health risks of 1, 4 3 dioxane poses also some treatment strategies 4 that are being implemented by water supplies and we also focused on the lengthy process 5 that's involved in taking treatment system from 6 7 concept to completion, it's a pretty long 8 process of planning and testing, things like 9 that, you can see on the lower way of the 10 picture on the screen shows that is an advanced 11 oxidation reactor that the Water Authority has 12 at one of its pump stations. You will see a 13 lot of those in the next five years or so. 14 They are quite costly and require a lot of 15 effort, manning, et cetera. So we focus on 16 that as well as the cost. The cost will be 17 significant, the water suppliers and consumers 18 in the next few years, so we devoted a good 19 section of the future to that. 20 Hydrologic conditions, basically there's 21 three aspects of hydrologic conditions, 22 precipitation, groundwater levels and 23 streamflows. So precipitation is focused on 24 the Islip Airport precipitation station. 25 this chart so that you can see on the picture



1	HEARING
2	in last years's State of the Aquifer Report.
3	It's one of those situations where the figures
4	kind of don't quite tell the whole story. That
5	ten-year period averaged out to pretty much
6	normal, however, as you can see in the red
7	numbers there highlighted, these red numbers
8	indicate a pretty significant deficit in six of
9	those years and two years here also that show a
10	surplus 2011 and 2014, but that surplus is
11	attributed to one specific storm in each of
12	those years. So in all honesty, there was
13	about eight consecutive years where it was
14	pretty significant below the normal
15	precipitation throughout Long Island and the
16	water levels and streamflows decline and
17	groundwater levels decline as well. So now
18	that all sort of reverses itself in late 2017
19	and we have gotten a lot of precipitation since
20	that time. You can see the calendar year of
21	2018, there was almost 18 inches above normal
22	in precipitation. In this specific report I
23	started gathering the data in late September,
24	early October so I focused more on the
25	September to August time period and in those



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two years, those two September to August time periods since 2017, we have seen a continuation of that significantly high additional rainfall, 10 to 20 percent above normal. As you might expect, streamflows and water levels have responded the way you would expect. We started off with a record here in the beginning of 2017 pretty low below normal and in this particular graph you see the two sets of lines, the orange one is longterm average flow as it fluctuates throughout the seasons, it's higher in the spring and lower in the summer and the red line is the measure of the discharge from USGS gauge and that has fluctuated, as well and you can see it was pretty much below normal until the early part of 2018 and then responded to the precipitation by recovering to normal levels, and then probably about the earlier part of 2019 way, way above normal for quite some time and since about the spring it's returned to normal levels of precipitation.

There's three different gauges that we took a look at in the State of the Aquifer

Report. You have Massapequa Creek, Connetquot



1	HEARING
2	River, Peconic River. They represent three
3	different levels of representation throughout
4	Long Island, Connetquot River being right in
5	the middle, Peconic in the east. That's the
6	one I put into the presentation. All three are
7	mentioned in the State of the Aquifer Report.
8	Groundwater levels have seen a similar
9	recovery. This is two hydrographic upper
10	glacial wells and Magothy in Suffolk. You can
11	kind of see the pattern of recovery. It was a
12	pretty significantly low period around 2002,
13	2003 and then explanatory high period around
14	2010 and then 2017, 2018 low recovery, pretty
15	good recovery since then. So we have had about
16	six to eight feet of recovery in both of these
17	wells in Suffolk County since 2018, 2017 rather
18	Nassau County has shown a similar pattern and
19	recovery and possibly this specifically Magothy
20	recovery was a little later and then subsided.
21	That can be conditions in the vicinity of that
22	specific well or maybe overall renewal
23	conditions, not 100 percent sure, but again,
24	bottom line is significant recovery occurred
25	from the 2017, 2018 lows.



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One of the more interesting water quality issues this year has been the Northrop Grumman In June of 2019, the DEC released their proposed record of decision, as well as detail on enhanced investigation and a proposed They have an updated plume map and this was the website that I utilized to get most of my information. There's links to documents dated back 10 or 15 years. It's an excellent website to get any and all information on the Northrop Grumman plume. We have a handout in the lobby that shows these two pages. Again, the summary of the expanded investigation and the proposed remedies really detail, so it's a comprehensive look at the history, past history, and the future of the Grumman site.

Pumpage is an important aspect of the State of the Aquifer. I was able to get the information from the DEC, Nassau County and Suffolk County supply pumpage. Nassau I refer to the last seven years or so, shown an average of about 185 million gallons a day in that period, but it does vary as you might have saw.



The blue bars rather show nonpeak season pumpage from October to about April. The red bars show the peak season pumpage from May to September and you can see there's a big disparity. It's doubling of pumpage from offseason to peak season, but it's not as a response to the precipitation, it's a leveling off of pumpage from a high (inaudible) 2016 to (inaudible) of level off slightly decreased since that time and the bottom graph does show the relationship and precipitation as you might expect as one goes up, the other goes down with the increased precipitation.

Lawn sprinkling has decreased somewhat so the peak summer pumpage decreased. Suffolk County 227 million gallons a day, a little higher in Nassau and in the seasonal (inaudible) it's more like a tripling of pumpage from offseason, the peak season and, again, the leveling off from the 2015 to 2016 peak to now due largely in response to precipitation. Increase in precipitation has caused people to back off on irrigation over the last couple of years. That relationship is



just part of the scenario giving the largest water use in the summer is typically sprinkling you would expect with the precipitation is higher in the summer water use a little lower. Along those lines we did talk a lot in the State of the Aquifer Report we highlighted the efforts of Port Washington and their Be Smart, Be Green, Be safe 15 plan, 15 being a reference to the DEC's request for water supplies to cut 15 percent off of their peak season pumpage, . So there's a lot of information on that for Port Washington.

Roslyn initiated Save 2 Minutes program to incentivize off of each zone of their irrigation to save you water that way. On the bottom of the picture, New York American Water, they have a control program. There's a video online. It's not linked on the presentation, but there's a video explaining (inaudible) and the Water Authority -- we highlighted the Water Wise Program. That's a program where we can actually send a person to your house, take a look at your water use, sprinkler use, shower use, toilets, et cetera, recommend ways that



1 HEARING
2 you can curtail your water use and use water

more efficiently, as well as quality rebates
for installing some water use fixtures, low

4 | for installing some water use fixtures, low

5 | water use fixtures.

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That brings us to noteworthy LICAP achievements for 2019. We hired a firm, a public relations firm, called Affirm to develop this program to help with this program.

There's a website here OurWaterOurLives.com drives a public education campaign a year towards conservation. One of the interesting features of it was that it went one step (inaudible) -- by virtue of an online pledge,

(inaudible) -- by virtue of an online pledge,

we got over 3,000 pledges as of October. We

would have been quite happy with 1,000 people,

but we got over 3,000 people to take this

online pledge. If you go to Our Water Our

19 Lives website, check on that greenfield there.

20 This pledge form comes up and there are ways to

21 check boxes and different ways to conserve

22 | water and then sign up with an e-mail alert and

23 | things like that. So it really keeps people

24 informed and a little bit more of a personal

25 involvement in the (inaudible) --



1 HEARING 2 MS. REPORTER: I can't hear you. MR. COLABUFO: The noteworthy LICAP 3 achievements, number one, is the Our Water Our 4 That's public information on 5 Lives campaign. 6 the conservation campaign. We hired a firm 7 called Affirm to help foster this, as well as 8 our own people and the Water Authority to

significant aspects of it was an online pledge form that people could fill out. If you go to

foster the project along. One of the more

the -- this is the topline of the website to

click on that greenfield and the online form

comes up and you can get involved by clicking

different ways that you can pledge to conserve

water. So it was a good way of fostering the

17 public's involvement in getting different

information, a campaign you can actively

19 participate in.

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The other noteworthy LICAP achievement for 2019 was the Groundwater Resources

Management Plan, H2M Architects and engineers that have been working on it for a little over a year. It's just about finalized. The culmination of about a five-year process that



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began back in 2014 and, again, like a lot of this was produced as a result of volunteer efforts of existing practitioners within the groundwater industry. The plan identifies threats to groundwater on Long Island and potential damage caused by those threats. It assesses the adequacy of existing programs and creates an implementation in the plan called rolls and statements.

The two subcommittees that were formed initially with LICAP sort of fostered the whole plan at least at the very beginning. The water resources used I had the pleasure of chairing that one. Water Resources Opportunities Subcommittee was chaired by Bill Merklin of Dvirka and Bartilucci Engineering and the subcommittees, as I mentioned earlier, back in September of 2019 the meetings were attended by, again, a large variety of existing practitioners within the Long Island groundwater field and the subcommittee members and the attendees ultimately determined the content of the Groundwater Management Plan and the subcommittee members, along with their



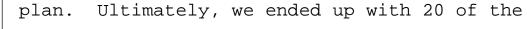
Τ	HEARING
2	report writing group, authored 17 reports that
3	all served as the foundation for the
4	Groundwater Management Plan. The Water
5	Resources Infrastructure Subcommittee focused
6	on the longterm water resource oriented topics
7	and the Water Resources Opportunities
8	Subcommittee was more short term facilities
9	oriented topics and reports of those
10	subcommittees have been added to or apart of
11	the final Groundwater Resources Management
12	Plan.
13	Now, back in late 2017, LICAP adopted an
14	interim Groundwater Management Plan. We did
15	some public presentations on that in March of
16	2018, as I recall. We sent out an RFP to
17	finalize that plan back in June of 2018. It
18	was awarded to H2M in October of 2018 and there
19	were a few modifications and alterations that
20	were necessary to address the change in
21	concerns and as well as information gaps that
22	were found within the subcommittee reports.
23	For one, we added five additional
24	recommendations. H2M put in this
25	recommendation matrix. The subcommittee



1	HEARING
2	reports were also included as the final plan,
3	as well as a report on the feasibility of New
4	York City Water Supply for Long Island. There
5	was an excellent report I believe done by Brian
6	Schneider on Queens wells reactivation that was
7	included in the interim plan. Given the change
8	in landscape, we felt we needed to supplement
9	that with a feasibility report from the surface
LO	water reviews. Again, a report on private
L1	wells in Suffolk County and an enhanced report
L2	and regional contamination events and then
L3	finally figures and graphics were added for
L4	better readability.
L5	Probably one of the more significant
L6	things that came from the Groundwater Resource
L7	Management plan was the 143 recommendations
L8	that came out as a result of the 17
L9	subcommittee reports. They were ranked by
20	LICAP voting board members in an A, B, C
21	format, A being immediate and most important.

recommendations that made the A list. We had 5 additional recommendations as part of the final

As of the interim plan, we had 15





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most important recommendations and they were assembled in this matrix format. The matrix is one of the handouts. It's available in the lobby and the matrix identifies specific stakeholders, interested parties as well as cost estimates, time implementation estimates and also a summary of the challenges and hurdles that may be involved in implementing some of the recommendations.

So we ended up with a very comprehensive look at the water situation on Long Island and going forward where we should best focus our efforts on. So an excellent job on H2M in encapsulating the main issues in the groundwater industry going forward.

Public comment will be available on both the State of the Aquifer Report and the Groundwater Management Plan until January 17th and then the final plan and the final State of the Aquifer Report will be voted on in late January or adopted in late January at a LICAP meeting event.

I will leave the slide up to see the addresses, phone numbers and whatever else you



need to submit public comments. If you don't do it tonight, you can do it by mail, e-mail or phone or later on. With that, I will turn it over to Jeff for whoever wants to make a public comment.

MR. SZABO: Thank you, Mr. Colabufo. We appreciate it. Any question or comments from commission members? What we will do then is go into public speakers. I have a couple of cards up here. The first person requesting to speak is Michael Nuler (phonetic) Plainview Water. Is Mr. Nuler here?

MR. NULER: I'm not exactly from the Plainview Water District. I am a resident of the Plainview Water District. I live six houses away from the main office. I've lived in Plainview for 26 years and within those 26 years for the last 17 and a half years I have

been battling cancer, metastasized cancer. I just have a couple of quick questions.

In giving the additional two to three years to begin temporary 1, 4 dioxane removal, what is being done to address and explain what to do for expecting women, nursing mothers,



1 HEARING 2 babies children and people with compromised 3 immune systems like me? Now, my surgeons at 4 Sloan Kettering suggested that I don't drink the water. So for months now my wife and I 5 have been purchasing bottles of Poland Spring 6 7 Next -- and this is in no order. 8 just me rambling -- monthly water analysis reports for only the toxic and carcinogenic 9 10 chemicals including the possible carcinogenic 11 chemicals too, that would be important for 12 every single resident. I don't care what water 13 district you are from, but especially for the 14 people that are pregnant, the nursing mothers, 15 you know, babies and compromised immune 16 systems. Now, the Plainview Water -- in the last 17 18 eight months, I have been the only resident to 19 attend those Tuesday night -- actually, 20 afternoon meetings, the only one, but the 21 Plainview Water District is not as open or 22 transparent as they must be for their residents 23 who consume the Plainview Water District 24 products. There's a lot of old people, there's

a lot of new couples coming in with babies.



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2 It's a bouillabaisse of people like in Suffolk 3 and Nassau County. No report concerning any and all soil contamination from the excavation 4 pit being dug for the AOP reactor. Now, this 5 pit, from what I understand, has gone down 40 6 7 feet and I know based on the decades we have 8 lived in Plainview that there was industrial 9 area in Plainview that was just dumping stuff 10 into the ground and there was a lawsuit a long 11 time ago that said they were worried about 12 those contaminants reaching well number 1, 13 which is at the Plainview Water main office, 14 but in the conventional wisdom of the day at 15 the time the lawsuit happened, the geologist 16 and everybody else said that it would take 26 17 to 30 years for that contaminate to possibly 18 reach that well. Guess what? The time is now 19 and no reports have come out as to what has taken place, including at the four corners of 20 21 Old Country Road and Manetto Hill Road. There 22 used to be four gas stations, three of which 23 were leaking gasoline into the ground and they 24 have since closed up. They are no longer 25 pumping gasoline.



Next, it seems to me and others it is much more important to cleanup our potable drinking water as opposed to spending taxpayer money on parks, schools and et cetera. We all need water to live and yet, you know, more money is being spent on schools, on parks on all kinds of stuff that is nice to have as opposed to need to have. I fear that at the rate we are going, our only source of potable water, the aquifer is going to be so polluted and so expensive to clean it up on a temporary basis, because that's all we are doing, that our homes and our properties and the tourism industry will evaporate.

No 1, 4 dioxane or any other household product enters into our groundwater if the home is connected into the public sewer systems.

Only those still using cesspools, septic tanks are dumping their human waste, including toxic and carcinogenic chemicals directly into the ground where it eventually goes into our aquifer. Now, the reports that I have seen from all the agencies said that about 20 percent of the homes in Nassau County all on



1	HEARING
2	the North Shore are still using cesspools,
3	leaching fields and septic tanks in various
4	stages of repair or disrepair. On the other
5	hand, Suffolk County has admitted that only 23
6	percent of all of their buildings, homes,
7	condos, co-ops, everything, 23 percent are
8	connected into sewer systems and the other 70
9	some odd percent are still dumping stuff into
10	cesspools, leaching fields and septic tanks.
11	Then we wonder, wait a minute, why is the water
12	that we are drinking have all of these
13	contaminants, why are the shellfish and some of
14	the regular fish dying off, because the aquifer
15	is actually finally telling us all, enough is
16	enough. We have to start understanding the
17	importance of our only source of water and
18	that's the aquifer, no other place.
19	You know, we can keep building all of

You know, we can keep building all of these exotic AOP reactors if that's what they are called, but that's only a temporary fix. They are not addressing the actual problem to stop all these toxins and carcinogens from entering the water and like any Boy Scout would know, if you are going to build an outhouse,



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don't do it north of where you are living and how the river or the stream flows because eventually everything you are going to dump into that stream, creek, aguifer, is going to eventually creep down to where you are actually living and I'm telling you that all of these places up in the North Shore that are still using antiquated sewer systems, it's all coming back down into areas like Plainview that are spending millions of dollars trying to cleanup the water that is just being pumped. Whatever is not being pumped and cleaned, that same water is going further down the stream of the aguifer and into Suffolk County as well, and they contribute even more contamination to it because of the amount of non-sewered buildings that they have.

I created the website Plainview water, water everywhere nor any drop to drink. I urge you to let's start thinking about not next month, not next year, not in ten years, but what is this island going to be like in 20, 30, 40 years if we are just addressing the cleanup of the water that we are pumping, not the rest



1 HEARING 2 of it that's coming down the pipe. I thank you very much for listening to me. I appreciate 3 4 it. 5 MR. SZABO: Thank you very much, 6 Mr. Nuler. We appreciate your comments. 7 heart goes out to you for battling cancer. 8 Thank you for coming and speaking today. We 9 appreciate it and best of luck with your battle 10 against cancer. 11 I have cancer, I just had a MR. NULER: 12 hip replacement a year ago that's not going 13 well, I now have prostate cancer and I have 14 what's known as husband ear. 15 MR. SZABO: Just a couple of points. I'm 16 not a health expert. I cannot speak to the health effects of 1, 4 dioxane. I leave that 17 18 to the New York State Health Department and 19 others. I would, you know, suggest that you 20 look at comments on the EPA's website related 21 to 1, 4 dioxane and exposure to it and health 22 effects and also encourage you to read Governor 23 Cuomo's own comments about the compound. 24 to your point about bottled water, consumer 25 reports just I think last month issued a cover



water and municipal water looks very good compared to bottled water. Most people I think I used the term has been the greatest marketing campaign in the last 30 years, the bottled water companies, you know, convincing the public that it's all coming from a pristine pure source somewhere in Colorado and that's just not the truth. One, the drinking water is regulated by the EPA and bottled water is regulated by the Food & Drug Administration. It's not as rigorous as our standards for sure.

In fact, the Suffolk County Water
Authority in the next month or so plans to do a study, an analysis of what's in bottled water compared to what we test for and what's in the municipal drinking water in Suffolk County and it's going to make those results available. I think the public will find it very interesting and just last point, the 1, 4 dioxane, we completely agree, at least from my perspective as the CEO of a very large drinking water supplier, we didn't put it there. Our job is to clean it up and make sure it doesn't get out



1 HEARING 2 to the public and we are trying to do that, but 3 we have also been extremely aggressive 4 navigating the prohibitions of the products 5 that contain 1, 4 dioxane and I believe I just checked with Chris Ostuni, counsel to the 6 7 legislature in Nassau, I believe Governor Cuomo 8 just recently signed legislation that was 9 passed by both the state senate and the state 10 assembly this last legislation session that 11 would band products I think by 2022 or 2024, 12 I'm not sure of the specifics off the top of my 13 head, but there are steps we are taking to 14 removing it from allowing it to get into the 15 aquifer. 16 MR. NULER: With all due respect and I address this to the commissioners back at the 17 18 Plainview Water District that aren't here, but 19 they know me well enough and I'm sort of 20 referred to as the pita, the pain in the -- you 21 can figure out the rest. The issue with 22 bottled water -- and because I have not been 23 able to work in 17 years, I have a lot of time 24 on my hands and so it's me and Google and 25 Google and me forever and with all the research



1	HEARING
2	that I have done, if you look at bottled water
3	from the biggest bottling company in the United
4	States, all right, which is Nestles, all right,
5	they have several different products and at the
6	top of their list is Poland Spring and also
7	something that's called Pure. So I did the
8	research on both and it turns out that the Pure
9	water goes through the exact same process that
10	we are now drying to do with the AOP machines
11	that they have been doing for a long time.
12	They issue reports on all of their water
13	to the nth degree. Similar to what I had to
14	pay for in order to get the water analysis
15	report from the Plainview Water District. You
16	can get that right on the internet from Nestles
17	for each and every one of their particular
18	products, all right. In terms of what you said
19	about the EPA versus what was the other
20	agency you mentioned.
21	MR. SCHNEIDER: Food & Drug
22	Administration, FDA.
23	MR. NULER: Yes, the Federal Drug
24	Administration. Enlight of all the delays and
25	years that it's taken the EPA to come up with



addressing the issue and the standards for which we are now scrambling, to me, I would sooner take all of the information from the Federal Drug Administration than the EPA. Somebody at the EPA is literally, I feel, dragging their feet. So each one of us has to make up our own decisions, but we can only make those decisions if and when we are afforded the information that we need and we can't get that information from the water districts unless you pay for it. Why should we have to pay for it? They get it --

MR. SZABO: Sir, you know, not to interrupt, but all the drinking water providers are required to supply their testing results in an annual water quality report, which should be accessible in their office and should be accessible from their website for free and what we did a couple of years ago, this may be four or five years ago, we started putting all the drinking water provers and Nassau and Suffolk County started putting all of the drinking water results on LICAP's website. So you can actually go and type in a particular compound,



a level that you are searching for, you can look at a particular district, you can look at distribution samples. There is a ton of drinking water quality yearly, broken down by year, broken down by water district that's available to the public.

MR. NULER: But it's not available, for example, monthly or quarterly. It's available yearly. The other point with all this is that if you take, for example, 1, 4 dioxane and I don't know carbon tetrachloride, I don't know whatever is in our water and you analyze all of the different ingredients individually, you come up with individual reports on the toxins, carcinogens and minerals and everything else independent of one another.

What happens in real life is that you go for that glass or cup of water and you drink the entire bouillabaisse, the entire cocktail, you are not separating out all the different minerals and the toxins and the carcinogenic chemicals. There's an old thing in the back of my mind that says the hole is greater than the sum of its parts. When you begin to put all of



1	HEARING
2	these chemicals into one cup and drink it, does
3	the combined amount and toxicity of each
4	chemical become more potent when they are all
5	mixed together. I don't know. I'm not a
6	scientist, but it would seem to me that's how
7	we have to start looking at the stuff as one
8	whole unit, not individual pieces of it.
9	MR. IRWIN: Sir, I'm from the Department
10	of Health of Nassau County. So we regulate the
11	Plainview Water District and I would like to
12	talk to you more about this if you are here at
13	the end of the hearing and I will come down and
14	we can have a direct conversation and perhaps I
15	can provide some information that might be
16	helpful to you.
17	MR. NULER: As long as you are not going
18	to yell at me and tell my wife. I'm in enough
19	trouble. I'm here for you, I'm here for us
20	all.
21	MR. IRWIN: I would like to try to help
22	you understand what our role is and where you
23	might be able to get more information.
24	MR. NULER: Thank you very much.
25	MR. IRWIN: You're welcome.



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MR. SZABO: Thank you. Our next speaker is Richard Passariello, Chairman of the Long Island Water Conference.

MR. PASSARIELLO: Good afternoon. name is Rich Passariello. I am the chairman of Long Island Water Conference, I'm also the superintendent of Roslyn Water District. Thank you for holding this important hearing and providing me with the opportunity to speak. behalf of the Long Island water supplier, I would like to thank the members of LICAP. leadership and all those who put the time and effort into compiling these bio reports. amount of knowledge and care devoted to creating these comprehensive documents is impressive and this document will greatly impact the direction and attention paid to protecting our aquifer. You should all feel a great sense of pride in this work and what you have accomplished on behalf of the nearly 3 million Long Islanders who rely on this precious natural resource each and every day.

I would also like to applaud the membership for staying on a course that makes



recommendations and drives policy changes based on sound, science and research rather than a motion. At a time when we all too often see politics influence policy, your unwavering commitment to making fact based conclusions is not only refreshing, but it's crucial.

Knowledge is power, data is the building blocks to getting there. Long Island's water supply and its drinking water will forever benefit from the course of corrections and proactive measures laid out in your water management plans, we thank you once again for your commitments to protecting Long Island's Aquifer, as well as the vision to ensure its sustainability in the future. Thank you.

MR. SZABO: Thank you very much. We appreciate it. The final card I have up here is from Mike Dwyer, Levittown, New York. Hello, Mr. Dwyer.

MR. DWYER: Mike Dwyer, Levittown, New York. I'm also a member of the Irrigation
Association of New York and I have also been available and helped on a lot of some of the LICAP things and the one thing that I have



1 HEARING 2 noticed and I really have liked is what the 3 eyeopening experience it has been for me. 4 We use water, that's part of our business, the irrigation business, but to find 5 out how much we are using and how we can assist 6 7 to help the water districts come in compliance 8 help the counties when they come out with 9 ordnances to make sure we get the information 10 out there to everybody, it is a good thing. I really do like LICAP. I think it has allowed 11 12 me to inform the irrigation board a lot better 13 on what's going on and upcoming things because 14 you are looking down the road. You are not 15 reacting, you are trying to plan ahead and 16 planning ahead is how we stay ahead of things 17 and make sure that the public is knowing what's 18 going on and then we are ready for things 19 coming. So I do applaud the board. I do like 20 LICAP and I do think it's good for everybody. 21 Thank you for your time. 22 MR. SZABO: Thank you very much, 23 Mr. Dwyer. 24 That's the last card as I mentioned. Is

there anyone else who would like to speak?



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so, please approach the podium and state your name for the record.

Michael Kosinski. I'm one MR. KOSINSKI: of the commissioners of Roslyn Water District. I didn't expect to speak, but I kind of reviewed the document, which I think is the best thing I have seen in 20 years. We really need it and how it's wonderful. The unsewered areas, in our particular district, there's enormous growth now. Houses are coming down, they are rebuilding them. The new types of septic systems they are not happening in Nassau County, they are beginning to happen in Suffolk County. We need -- we are at the top of water -- it was referred to by another person, we are getting -- we are losing the opportunity to put them in and stop this slow migration of the nitrates out into the watershed and through the watershed. So that's one piece.

The irrigation law Nassau County has it's obsolete. It totally does not help us at all. We were forced to move into a system where we gave by neighborhood a time slot to irrigate so technically we were in violation of the law.



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We made everybody do it, but that's the only way we can survive. We have to start thinking about that law. Being we have no policy power, there's no way to have somebody -- you are not going to call a cop to have somebody turn your water off. How this all impacts, impacts those peak times when we have to irrigate all summer long.

If it's a dry summer, we are pumping like crazy. You guys know that. Save 2 minutes, that was after we really had our problems when we already put in place the change in having people irrigate by neighborhood. We relaxed our stance on having everybody be forced to have a time slot. What we did was go to contractors, irrigation contractors, and hammered them and said don't touch the clocks because we want everybody to still stick with the time, but as a PR piece we came up with the Save 2. It really doesn't do the job as well as making sure the irrigation contractors don't touch the clocks and that's what everybody needs to do in all of Long Island because we are now being faced with this idea of multiple



story housing. Our infrastructure was built not to take that kind of capacity. So when people are coming in, we are seeing with the demands that those people will be giving us, you know, low pressure is popping up in other areas of the district.

That's just a piece of information, which you probably already know that a lot of these communities and a lot of these districts are technically built out already. We are maxed out on the water capacity. We gotta save, where are you gonna save it. The only way to save it is irrigation because it's irrigation, irrigation, irrigation. That's where any of the water is going to be. Thank you.

MR. SZABO: Thank you very much.

Sir, yes, please come up and identify yourself.

MR. RIGANO: Chairman Szabo and members of LICAP, my name is Nicholas Rigano. I am the chair of the Environmental Association and for the Nassau County Bar Association and I also co-chair for the Water Quality Committee for the New York State Bar Association.



Τ	HEARING
2	Preliminarily, these reports are truly
3	wonderful. LICAP did a great service to all of
4	Long Island by producing these. Thank you very
5	much. You all should be applauded. In
6	addition, I would just like to offer my
7	services at any point in time. If there is
8	anything the Bar Association can do or myself
9	personally for LICAP, I would be more than
10	willing to help out in any way.
11	I come here today really to talk about
12	Task 3B of the Groundwater Resources Management
13	Plan. An incredible job, incredible report,
14	significant data and information in there for
15	all of Long Island. That's a section of the
16	Groundwater Resources Management Plan that
17	discusses the feasibility or potential
18	feasibility of using New York's water supply
19	for Nassau County. The report is clearly a
20	preliminary report and I come to you today with
21	a, I guess, it's called a proposal. I think
22	the next step should be taken and I think
23	should be taken immediately. I have been
24	working very closely with many stakeholders. I
25	actually went to Senator Kaminsky two or three



months ago to discuss the idea of York City
water to Nassau, look into and ultimately sent
a letter to the DOH and DEC, which resulted in
an article by Newsday, and I'm sure you are all
aware of the issues surrounding that. Since
that time and really before, I have been
working with many stakeholders and I'm in the
process of obtaining funding, project funding
to do that study and that study would obviously
need all stakeholders input, including water
districts, environmental groups,
municipalities, et cetera and the best way I
can think of to do that is to have this report
done in a model in which I engage in every day.

I work very closely with DEC and DOH and the way that the process works is, for example, at a super fund site, private parties are involved, private parties do the work, they pay for the work and DEC approves the work and the report that comes out and ultimately a plan gets put forth in a manner. In a similar manner what I would propose is this process, this report, these privately funded stakeholder inputs under LICAP's oversight, there would be



no better agency other than LICAP who is already made up of all these stakeholders to establish a public comment forum for this report, and it's my experience enlight of this model, that it's very, very efficient. It works very quickly. It alleviates a burden on governmental emphasis while giving the government the ultimate -- and here at LICAP, the ultimate ability to make the last call and public comment.

I propose that and if there's interest in it, please reach out and contact me. This idea of having New York City water brought to Nassau I think would allow the aquifer to heal if it's ultimately implemented both from a water quality and also a water quantity perspective and no means, by the way, is this New York City idea it's not an effort, I know there's some concern by the water district to consolidate Nassau County Water District. That's not the idea. The idea is to supplement Nassau County's water supply. There are certain pockets of Nassau County that have clean water, and so this would be able to supplement that so



Τ	HEARING
2	that clean water is provided to the public in
3	that matter. This distribution system and
4	wells would still need to be maintained and
5	used if this is ultimately developed. I
6	propose that as an idea and look forward to
7	hearing from everybody. Thank you very much.
8	MR. SZABO: Thank you very much and
9	appreciate you coming down and your comments.
10	We will be in touch.
11	MR. OSTUNI: Did you leave your contact
12	information with the stenographer?
13	MR. RIGANO: I can do that or I have
14	cards.
15	MR. SZABO: Mr. Wallick, do we have any
16	additional cards?
17	MR. WALLICK: No more at this time.
18	MR. SZABO: Mr. Schneider?
19	MR. SCHNEIDER: I just wanted to respond
20	to the previous speaker, Mike Kosinski. So you
21	had brought up a topic regarding the septic
22	systems that are currently still in place at
23	Nassau County, about 20 percent of the
24	population and even though Mr. Nuler mentioned
25	something about 20 percent of the population is



1	HEARING
2	still served by individual septic systems,
3	conversely Suffolk County has about 75 percent
4	of the population served by these individual
5	septic systems and you know that Suffolk County
6	has a very robust reclaim our water program
7	looking to replace these individual septic
8	systems.
9	Nassau County is about to launch a
10	similar system. We received a grant from the
11	Environmental Facilities Corporation. It's a
12	relatively small amount of money. It's a
13	million dollars, which is capped at \$10,000 per
14	household. So every property owner who is
15	looking to replace a failing septic system will
16	apply for a grant through Nassau County, it
17	will be administered through us and we will
18	reimburse the homeowners up to \$10,000.
19	Now, the Suffolk County program are
20	seeing systems on the average of 22 to \$24,000
21	a piece, plus engineering cost and also
22	maintenance cost. So that's a significant
23	outlay for property owners to
24	UNKNOWN SPEAKER: That's relative. We
25	are seeing 3 million dollar homes being built



1	HEARING
2	and we are at the top of the pile
3	MR. SCHNEIDER: Correct, but the bottom
4	line is that the county will be rolling out
5	this program. There's a lot of administrative
6	things that need to be done and we are also
7	going to be looking around for more funding, so
8	that the burden of these septic systems, these
9	innovative alternatives would not be completely
10	born or at least partly born on the individual
11	property owner. So look for a rollout in
12	earlier 2020.
13	UNKNOWN SPEAKER: Can I reach out to the
14	local villages?
15	MR. SCHNEIDER: We already started
16	conversations with the Town of North Hempstead
17	Building Department, the Town of Oyster Bay
18	Building Department. We will be filtering down
19	to some of the local municipality building
20	departments because they ultimately will be the
21	ones issuing the building permits because
22	Nassau County does not have a building
23	department, so we would not be the ones that
24	would be issuing the building permits to
25	install these replacement systems.



1 HEARING 2 UNKNOWN SPEAKER: Can we revise the 3 (inaudible) --4 MR. SCHNEIDER: That's a state code that 5 we would have to change, but again, there's a 6 definite need to replace these systems, 7 especially on the North Shore and, you know, we 8 are happy to get the money from the state EFC, 9 and we will be looking to roll this out, as I 10 mentioned, in early 2020. 11 Sir, hello. Before you come MR. SZABO: back for round 2, we have another individual 12 13 who has not spoken yet, John Walts. Mr. Walts? 14 MR. WALTS: I would like to commend LICAP 15 on the work that it has been doing and 16 basically reiterate what Richard said. I think 17 it's the right body to do what's needed to be 18 I think you need to be sustainable. You 19 need to keep going and keep doing what you are 20 doing year after year so as conditions change, 21 it's reflected in your reports.

recommendations in the matrix are right on the

administrative and technical targets to get

this done and the State of the Aquifer Report

It shows the right funding,



money to do that.

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is configured in such a way that you can continue to build on this every year and inform the Long Island community on the condition of the water, the quality, the quantity and is the right steering group to keep this going. Keep up the good work.

MR. SZABO: Thank you very much. We appreciate the comments.

Mr. Nuler, round two?

In my previous jobs, I was a MR. NULER: commercial advertising photographer with a studio in Midtown Manhattan so I worked on solving my clients' visual problems, nothing has changed. It's very expensive to ask people who are still using cesspools, leaching fields and septic tanks to like -- okay, we are going to give you 10,000, but it's going to cost you an additional \$20,000 to do it right. However, by hooking everybody up to a sewer system, specifically Nassau County, I don't know how to address the problem that Suffolk County has, but in Nassau County, it's only about 18 or 20 percent of the houses, mainly in the North Shore. By not doing it, hooking everybody up,



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2 what is it going to cost Nassau County in terms 3 of tourism, in terms of restaurants, in terms 4 of property values. That should be the top 5 I mean, certainly our tourism on all 6 of Long Island has got to be bringing in an 7 enormous amount of money, but the more and more 8 people see that our beaches are closed, you 9 can't swim in this water, that water and the 10 shellfish population has just recently died, 11 you know, the clams, oysters, whatever, the 12 fish have beginning to have problems, and that's all because -- my opinion is that it's 13 14 all because a lot of this pollution that's 15 happening. We can say it's for climate change, 16 this climate change, but the State of New York 17 and Albany has to realize or look at this thing 18 from if we don't work on this now, not 19 yesterday, but now, immediately, what's going 20 to happen to the tourism industry next summer, 21 next spring or the year after that. That's a 22 huge problem and the amount of money that we 23 will probably lose as a result could have 24 actually paid for the sewers to be installed. 25 Okay. Thank you. Thank you very much for



1 HEARING 2 listening to an old man. 3 MR. SZABO: Thank you. So we have no 4 more cards. It is 5:19. What I would like to 5 do if there's a consensus amongst the 6 commission is to recess at this point and give 7 it at least a few minutes maybe until 6:00 or 8 so to see if there are other speakers who come 9 in and would like to address the commission and then we will close the hearing, but we will 10 11 take a pause or a recess. If I make a motion, 12 is there a second? 13 MR. SCHNEIDER: Second. 14 MR. SZABO: Second by Mr. Schneider. 15 Thank you very much. We are recessed until a 16 little later until this evening. 17 (A brief recess was taken from 5:19 p.m. 18 to 5:49 p.m.) 19 MR. SZABO: If I can just have everyone's 20 attention, it's 5:50. We are back in session. Is there anyone from the public who would like 21 22 to address the commission? If so, please step 23 forward and raise your hand. I don't see 24 anybody, we are going to close this hearing at 5:50 in Mineola. The third and final LICAP 25



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1
                       HEARING
     public hearing for the year will be tomorrow
 2
     afternoon at the William Rogers Legislature
 3
     building in Hauppauge. Hope to see you there.
 4
     Thanks very much. Good night everyone.
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           (Time Noted: 5:50 p.m.)
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6	I, CHARISSA HROMADKA, a shorthand reporter
7	and Notary Public within and for the State of New
8	York, do hereby certify:
9	That the within statement is a true and
10	accurate record of the stenographic notes taken by
11	me.
12	I further certify that I am not related to
13	any of the parties to this action by blood or
14	marriage, and that I am in no way interested in the
15	outcome of this matter.
16	$A \mathcal{I} = A \mathcal{I} = A \mathcal{I}$
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