In the Matter Of:

LONG ISLAND COMMISSION

HEARING-LICAP

December 05, 2017

Volume 1



1	SUFFOLK COUNTY WATER AUTHORITY
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4	LONG ISLAND COMMISSION AQUIFER PROTECTION
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6	IN THE MATTER OF:
7	GROUNDWATER RESOURCES MANAGEMENT PLAN
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10	1550 Franklin Avenue
11	Mineola, New York
12	December 5, 2017
13	Time noted: 3:00 p.m.
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21	Reported by:
22	Kevin Jones
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     BEFORE:
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     STAN CAREY - Chairman LICAP
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     JEFFREY SZABO - Suffolk County Water Authority
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     FRANK KOCH - Member
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     BRIAN SCHNEIDER - Nassau County Executive's Office
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     SARAH MEYLAND - Minority Caucus Nassau County Legislature
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     DON IRWIN - Nassau Department of Health
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     MICHAEL WHITE - Suffolk Legislature P.O.
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     STEPHEN TERRACCIANO - U.S. Geological Survey (USGS)
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     CHRIS OSTUNI - Nassau Legislature
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     STEVEN COLABUFO - Suffolk County Water Authority
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1	HEARING-LICAP
2	MR. CAREY: Thank you for attending
3	today's public hearing hosted by the Long
4	Island Commission for Aquifer Protection or
5	LICAP. My name is Stan Carey, and I'm the
6	chairman of LICAP. I am joined today by
7	vice chairman Jeffrey Szabo from the Suffolk
8	County Water Authority, as well as Frank
9	Koch, Brian Schneider, Sarah Meyland, Don
LO	Irwin and Michael White.
L1	The purpose of these hearings is to
L2	elicit public comment on LICAP's draft
L3	Groundwater Resource Management Plan. The
L4	draft is available online at LI aquifer
L5	commission dot com. In just a minute I will
L6	introduce Steve Colabufo, who will give a
L7	brief presentation on what the Groundwater
L8	Resources Management Plan consists of as
L9	well as outline some of the key
20	recommendations. The list of those plans
21	top 15 recommendations is available outside
22	if you haven't picked one up already.
23	Before we begin, I would just like
24	to remind everybody that today's proceedings

are designed to provide a forum for comment



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on the plan, and that this is not a question and answer session. Any questions you may have can be submitted electronically by e-mailing to LICAP at SCWA dot com or by mail to PO Box 38, care of Suffolk County Water Authority, Oakdale, New York 11769. Either I or one of the other LICAP members will get back to you with an answer as soon as possible. All comments made today will be brought before the LICAP voting board for consideration during our upcoming general meeting on December 13th, and the final report we expect will be published before the end of this year.

As an organization our mission is to make sure our sole source of drinking water here on Long Island is protected for future generations, and so we love to see Long Island residents such as yourselves engage in these discussions and seeking to become more educated about the issues that impact our groundwater. So thank you once again for attending today's public hearing, and with that I turn it over to Steve Colabufo.



1	HEARING-LICAP
2	MR. COLABUFO: Thank you. Can
3	everybody hear me? Thank you, Stan. As
4	Stan mentioned my name is Steve Colabufo.
5	I'm the water resources manager of Suffolk
6	County Water Authority, and we are here
7	today to talk about the LICAP Groundwater
8	Resource Management Plan. The plan is the
9	second major deliverable from LICAP. Last
10	year we were here in a similar fashion to
11	talk about the state of the aquifer report.
12	The Groundwater Resources Management Plan is
13	obviously much larger, much more future
14	oriented, and that's the subject of the
15	discussion for the meeting tonight.
16	So a little background information.
17	For those who may not know LICAP, the Long
18	Island Commission for Aquifer Protection, is
19	a partnership basically of water resources
20	professionals in Nassau and Suffolk
21	including water suppliers, regulators,
22	government officials, academics and citizens
23	and activists and environmental groups, and
24	it was formed to address quality and
25	quantity issues on Long Island facing Long



1 HEARING-LICAP 2 Island's aguifers but on an island-wide 3 basis rather than focusing on these small 4 areas as had previously been done, kind of a 5 holistic island-wide approach to water quality and water quantity issues. 6 LICAP 7 was created through legislation passed by 8 both Nassau and Suffolk legislature back in 9 2013, and the Web site you can see at the bottom of the page, LI aquifer commission 10 11 dot com. LICAP members include all water 12 suppliers in Nassau and Suffolk who together 13 serve about 3 million people on Long Island. 14 Representatives of the Nassau and Suffolk executive offices, representatives of the 15 16 Nassau and Suffolk legislatures as well as 17 employees of the Nassau and Suffolk Health 18 Departments, the DEC and the U.S. Geological 19 Survey as well. This is kind of a collage 20 of all the logos of the various 21 participating agencies. There's actually a 22 lot more than what's shown here, but this is 23 about all that can really fit on one page. It's a very large, wide tent encompassing 24 25 pretty much all aspects of groundwater on



1	HEARING-LICAP
2	Long Island. We have nine voting members,
3	many of whom are seated behind me. We have
4	numerous nonvoting members again
5	representing numerous government agencies
6	and other people, other practitioners within
7	the Long Island groundwater community. One
8	of the more significant internal structures
9	of LICAP is the formation of two standing
10	subcommittees; one is known as the Water
11	Resources and Infrastructure Subcommittee.
12	That's chaired by myself, and its intent is
13	to develop a plan to identify long-term
14	risks to the water supply industry. The
15	second subcommittee, Water Resources and
16	Opportunities, chaired by Bill Merklin of
17	D and B Engineering, their job is to look at
18	potential short-term risks facing water
19	suppliers concerning the treatment and
20	distribution of water from our aquifers.
21	The subcommittee began meeting in 2014. The
22	meetings were attended by that same wide
23	cross section of Long Island's groundwater
24	community; suppliers, activists, regulators,
25	et cetera, and the attendees at those



1	HEARING-LICAP
2	initial five or six meetings determined the
3	content of the plan, following the adopted
4	LICAP law, determined the content, the
5	subject matter which would be included in
6	the plan. And then once those subjects,
7	those topics were decided on, the
8	subcommittee chairs then divided those
9	topics based on their specific mission. The
10	WRIS focused more on long-term resource
11	oriented topics. The Water Resources
12	Opportunity Subcommittee focused more on
13	shorter-term facilities oriented type
14	topics, and then the chairs organized and
15	oversaw the report writing teams to create
16	and edit the numerous reports that were
17	done, sort of formed the raw material from
18	which the plan was formulated. We ended up
19	with 15 individual reports created over a
20	three-year span. Like I said, they were
21	sort of the raw material, the nuts and bolts
22	that comprised the Groundwater Management
23	Plan. So the plan, as I mentioned, is the
24	culmination of a three-year process started
25	back in 2013 when LICAP was first created,



1	HEARING-LICAP
2	and it was produced, the big, significant
3	difference between this particular plan and
4	others that have come before it, it was
5	produced by the cooperative efforts of
6	existing practitioners within the
7	groundwater industry. Rather than giving it
8	to a consultant to view it independently on
9	his own, it was actually done by the
10	volunteer efforts of existing practitioners
11	within the groundwater industry. That
12	included all those areas that I described
13	before, water suppliers, public officials,
14	civic groups, et cetera. So it was a nice
15	reflection of the existing groundwater
16	community on Long Island.
17	So the plan does a couple of things;
18	it provides a clearer picture of the
19	specific threats facing the aquifer system,
20	it tests the adequacy of existing
21	regulations, creates an action plan for
22	long-term sustainability of the aquifer and
23	an implementation program prioritization
24	schedule for the various recommendations
25	that have come forth in the plan. And along



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1 HEARING-LICAP

with that recommended amendments to the regulatory administrative section.

So the next two slides are a list of report authors. I wouldn't expect anybody to commit these two slides to memory, but like I said before, it could not have been done without the volunteer efforts of the numerous groundwater professionals currently working within the groundwater community on Long Island. So the next couple of slides is really just a shout out to our fellow authors who really were responsible for the success of the whole plan. So kudos to everybody who participated, especially those who authored the reports.

Like I said, we ended up with 15 individual reports. We sort of divided them up into several basic general categories.

Starting out with the regulatory framework for Long Island groundwater management and what the laws currently are that govern groundwater on Long Island; state, local, federal, et cetera. And following from that we divided these up into natural versus



1 HEARING-LICAP 2 cultural issues affecting Long Island's 3 groundwater quality as well as quantity, and 4 there's climate change, potential impacts 5 from climate change, as well as the pine barrens and other land preservation needs 6 7 which are designed to protect the future 8 quality and quantity of Long Island's 9 groundwater, and moved on to cultural issues 10 that affect Long Island's groundwater. 11 includes wastewater management practices in 12 Nassau and Suffolk Counties, septic systems 13 versus regional sewering, and then another 14 burgeoning and important topic, geothermal 15 heating and cooling. It's a very up and 16 coming technology, a green technology, but 17 it does use groundwater to do its job. 18 shedding more information on that subject is 19 certainly an important consideration of the 20 plan, and we have a great report on that. 21 We also discuss briefly water supply 22 alternatives. These are sort of glanced 23 over any time people mention groundwater 24 resources on Long Island. We wanted to do a 25 little more of an in-depth look at water



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supply alternatives such as desalination,
potable reuse and aquifer storage and
recovery.

Finally, we have some water quality and water quantity issues. We have a report on regional groundwater contamination, as well as other plumes and industrial contamination that's affected water quality mostly in Nassau, but certainly in Suffolk Then chloride contamination, we as well. discussed that in one report. Lateral intrusion, road salting as well as vertical upcoming on the east end of the island, and additional water quality issues as described and defined by the Suffolk County Department of Health. They were an excellent report on emerging contaminants and things like that. Then water quantity, certainly no discussion would be complete without discussing water quantity, particularly competing uses. Water suppliers are not the only ones who use groundwater on Long Island. Others users, agriculture, golf courses, industry also are important contributors to water



1 HEARING-LICAP 2 quantity issues on Long Island, so that's 3 described in depth in the report. 4 Similarly, the Lloyd aguifer is used pretty 5 extensively in Nassau, but minimally in 6 Suffolk for water supply, so its current 7 status and future is the subject of another 8 report. And then certainly conservation 9 warrants a lot of attention. We have a 10 report on conservation, efficient water use, 11 and then a little part of that report 12 concerns reuse, particularly the use of 13 treated sewage effluent, irrigation of a 14 golf course out in Riverhead, a report on 15 that. And then cross-county water 16 transmission, several reports have glanced 17 over that in the past. We wanted to take 18 another look at it. Typically they supply 19 Nassau County from Suffolk from the east, 20 from the city to the west, so we took a look 21 Then one of the hotter topics at that. 22 going on right now, the reactivation, or the 23 potential for reactivation of public supply 24 wells in Oueens. Brian Schneider designed 25 an excellent report on that, kind of brings



1	HEARING-LICAP
2	us up to date with what's going on with that
3	topic.
4	In addition to the 15 reports we
5	also wanted to focus on a couple of
6	initiatives that are either done or at least
7	were under way since the formation of LICAP.
8	One of our biggest successes is Water Traq.
9	It's an interactive water quality database
10	which is available to the public right on
11	the Long Island Aquifer Commission Web site.
12	And additionally, the U.S. Geological Survey
13	has begun a sustainability study which
14	promises to be a new reexamination of the
15	groundwater conditions and geologic
16	conditions on Long Island going forward. So
17	that was started at least while LICAP was
18	forming, and will probably go on for another
19	couple of years. We have a report on that
20	as well, so we can see exactly what's been
21	going on since LICAP was founded.
22	So the plan is organized into ten
23	basic sections. The executive summary and
24	introduction is available out in the lobby.

Some of you may have it in front of you.



1	HEARING-LICA:

2 | That includes the top 15 recommendations.

3 We didn't want people to have to dig through

4 | an entire 200 page report before looking at

5 the main recommendations, so it's furnished

6 | right up front in the executive summary

7 introduction.

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The next four sections focus on existing conditions, groundwater conditions, as well as regulatory management conditions, existing threats and existing programs that are out there already. The next couple of sections focus more on the future, future management and implementation opportunities, and then probably most importantly of all the sections is recommendation and implementation schedules for those recommendations. Then the last few sections we acknowledge the reports, the report authors. Again, I made a little short shout out to them, and they certainly deserve a section because without their work this couldn't be done. And then the references that they utilized were mentioned as well in another section. Like I said, the 15



1	HEARING-LICAP
2	reports provide raw material. They were
3	sort of reedited. So the main section,
4	section eight, recommendations, probably is
5	the most important thing to come out of the
6	plan. The 15 reports give a total of 143
7	recommendations, and I know that's an awful
8	lot. So all of those recommendations were
9	assembled and given to the LICAP voting
10	board members to rank; as you see here, A,
11	B, C or even another category E for
12	elimination, because not all recommendations
13	were considered. A lot of these were very,
14	very specific, one particular report for the
15	overall groundwater scheme of things
16	possibly not. Some reports, some
17	recommendations were eliminated, and similar
18	recommendations that may have appeared in
19	different reports were combined in the
20	recommendations section.
21	So this is the top 15
22	recommendations. They are in no particular
23	order. So these are the A list as voted on
24	or as ranked rather by the LICAP voting
25	board members. They're available in the



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2 | handouts that you have that you might have

3 gotten in the lobby. Also, the full

4 reports, all 15 reports are available in the

5 appendix, and the whole thing is going to be

posted if it hasn't already on the LICAP Web

7 | site, LI aquifer commission dot com.

8 So we're open for public comment

9 until this coming Friday, December 8th, and

10 | we anticipate that the final plan will be

11 | adopted at the full LICAP meeting on

12 | Wednesday, December 13th. We consider

comments on the Web, via e-mail, telephone

14 or old fashioned snail mail on all the

15 addresses and numbers shown on this slide.

16 | Just going forward, we're going to complete

17 | the update to the state of the aquifer

18 | report probably in the next couple of

19 | months. Then we're going to continue to

20 | budget for LICAP based on funding received

21 | from New York State. Depending on how much

22 | funding is received, depends on things we do

23 | in the future, but we hope to expand the

24 data for use in Water Trag and expand the

25 data for use in the USGS sustainability and



1	HEARING-LICAP
2	groundwater study. So with that in mind,
3	I'll stop my presentation, and we'll open it
4	up to comments. I've been told to please
5	identify yourself before you make comments,
6	and I'll put the mic around this way.
7	MR. CAREY: Thank you, Steve.
8	I just want to recognize, we're
9	joined by LICAP member Chris Ostuni and
10	Steve Terracciano over to the right from
11	USGS. They came in a minute or two late.
12	Again, when I call you up to speak,
13	if you can spell your last name clearly for
14	the stenographer, make it easier for our
15	record. They're bringing up the cards. We
16	have one up here so for, and that is Chuck
17	Savinetti from the Long Island Water
18	Conference. Chuck, come on up.
19	MR. SAVINETTI: Good afternoon,
20	everyone. My name is Chuck Savinetti,
21	S-A-V-I-N-E-T-T-I. I'm the superintendent of
22	the Locust Valley Water District and first
23	vice chairman of the Long Island Water
24	Conference. Thank you for the opportunity
25	to speak today about our support for Long



1	HEARING-LICAP
2	Island Commission for Aquifer Protection
3	proposed groundwater resources management
4	plan and the important work LICAP continues
5	to do to protect Long Island's sole source
6	aquifer for all of its residents. There are
7	not many things more important than access
8	to an uninterrupted supply of clean drinking
9	water. While water providers across Long
LO	Island pride themselves on the high quality
L1	drinking water provided to customers, there
L2	is no shortage of obstacles in providing it
L3	in its purest form. The draft GRMP compiled
L4	by LICAP and the recommendations offered
L5	within the plan are essential for ensuring
L6	the sustainability and quality of Long
L7	Island's water supply, therefore, we
L8	recommended their complete adoption.
L9	With that being said, there are a
20	couple of points made within the document
21	that we would like to pay special attention
22	to. The first is in the continuation and
23	expansion of Water Traq, a comprehensive

database providing access to water quality

reports across Long Island to water



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1	HEARING-LICAP
2	providers and the public in an open forum.
3	Water Traq is essential for monitoring
4	potential trends and threats impacting our
5	sole source aquifer, and it provides an
6	invaluable resource to water providers and
7	health officials. For this reason, among
8	many others, the Water Traq program should
9	not only be continued, but it should be
10	expanded and funded so its full potential
11	can be further explored. At a time when
12	hazardous waste and industrial discharge
13	sites continue to pop up across Long Island
14	and the various threats to our aquifer
15	continue to grow, it is of vital importance
16	that groundwater monitoring programs remain
17	intact and fully funded. Without continuous
18	monitoring and sampling it will become
19	harder to identify potential risks facing
20	our aquifer, and it will have a negative
21	impact on the overall public health. This
22	is particularly true in Nassau County for
23	plans to reactivate wells just west of the
24	Nassau border to increase daily pumpage from

the aquifer by more than 60 million gallons.



1	HEARING-LICAP
2	This is one of the many reasons for
3	continued monitoring of the groundwater so
4	that we have baseline data in evaluating
5	water quantity and quality. Since its
6	inception in 2013, LICAP has been a powerful
7	tool and resource for the water suppliers,
8	health officials and the public. As a
9	result, the Long Island Water Conference
10	recommends the commission's responsibilities
11	and mission continue in its current form.
12	The creation of a new state or regional
13	entity would not have any notable impact,
14	and would only take resources which are
15	already limited away from the great work
16	completed by LICAP and its members, the
17	greatest minds in water in our region.
18	In addition, the New York State
19	Department of Health and the Department of
20	Environmental Conservation already possess
21	the power to implement actions for drinking
22	water quality and protection. Through these
23	already established entities partnerships
24	can be strengthened and results can continue

to be achieved. To this point, it's the Long



1	HEARING-LICAP
2	Island Water Conference's hope and desire
3	that LICAP's ability to operate is extended
4	and the role it sets out to play is
5	expanded. LICAP and its members already
6	have the institutional knowledge and
7	frameworks in place for success, but the
8	lack of funding is in many ways stifling
9	progress. We encourage our Suffolk and
10	Nassau County legislature to seriously look
11	into providing any level of funding for
12	LICAP so its current programs can be
13	expanded and new endeavors can be explored.
14	All of this is in the name of continuing to
15	ensure Long Island's drinking water remains
16	of the highest quality for our future
17	generations.
18	Thank you for the opportunity to
19	speak here today and provide this important
20	testimony on the future endeavors for LICAP.
21	If you have any questions hopefully I can
22	answer them.
23	MR. CAREY: That's fine. Thank you
24	very much, Chuck. Appreciate it.
25	Our next speaker is Senator Elaine



1	HEARING-LICAP
2	Phillips.
3	SENATOR PHILLIPS: Good afternoon.
4	How are you all today?
5	First and foremost, I want to thank
6	LICAP for your time and effort for putting
7	together this extremely necessary and
8	important plan. So thank you, gentlemen,
9	thank you, lady, excuse me. Thank you very
10	much.
11	As a representative in the New York
12	State legislature I look forward to working
13	with you, continue to working with you
14	collaboratively on this plan. I also want
15	to thank you for allowing me to speak today
16	and address the body regarding the future
17	health and safety of Long Island's
18	groundwater. As all of us are very aware
19	of, Long Island is unique from the rest of
20	the New York State in that it is without
21	access to large lakes, streams or reservoirs
22	and relies entirely on its groundwater
23	aquifers for its supply of drinking water.
24	It's because of this that I would like to
25	address a particular issue that my colleague



1 HEARING-LICAP 2 brought up right before me, and that I am 3 with the rest of my senate majority 4 colleagues here on Long Island have been 5 working diligently to address, and that's the re-permitting of the Jamaica wells in 6 7 Oueens County. So upon taking office and 8 really prior to taking office in my role as 9 mayor, I was active with the Western Nassau 10 Water Committee, but it really was upon 11 taking office that I was immediately made 12 aware of the New York City DEP's intention 13 to re-permit and reactivate the 68 water 14 supply wells that had lain dormant since the 15 mid 1990's. Reactivation would carry unknown 16 consequences, including the potential for 17 increased saltwater intrusion and the 18 diversion of the toxic plumes that we're 19 well aware. In response, I sponsored and 20 the Senate passed Senate Bill 6716, Senate 21 Bill 6716 which would have placed a 22 permanent moratorium on the re-permitting of 23 the Oueens wells unless there was an 24 emergency situation. Unfortunately, the 25 bill did not pass in the assembly, but I



1	HEARING-LICAP
2	continue to work with the New York City DEP,
3	the New York State DEC, and the office of
4	the chair of the assembly committee on
5	environmental conservation to come to an
6	agreement on the safe and appropriate use of
7	these wells. We developed a framework in
8	principle that would limit the use of the
9	wells to emergency situations, including
10	drought situations. The final language is
11	being drafted into a letter of intent that
12	would be signed by New York City DEC and
13	placed on file with their re-permitting
14	application. I anticipate that this issue
15	should be finalized by the end of the year,
16	but it is absolutely imperative that LICAP
17	and every other organization that is here
18	today and that cares about the drinking
19	water here on Long Island that they reach
20	out to the New York State DEC and support
21	this letter of intent and make sure that not
22	only do we have verbal agreements between
23	the organizations, but we have something in
24	writing that says what New York City's DEP,
25	which I believe is their intent. So I



1	HEARING-LICAP
2	encourage everyone here today and LICAP in
3	particular to reach out to the DEC. Really
4	it has to be done in the next two or
5	three weeks to encourage this letter of
6	intent. So thank you again. Thank you all
7	for what you do. It is truly appreciated.
8	Thank you.
9	MR. CAREY: Thank you very much,
10	Senator Phillips.
11	Our next speaker is Rachel Brinn
12	from the Town of North Hempstead.
13	MS. BRINN: Good afternoon. I'm
14	Rachel Brinn, B-R-I-N-N. I'm the director
15	of intergovernmental affairs for the Town of
16	North Hempstead. I'm here on behalf of
17	supervisor Judy Bosworth to share her
18	thoughts and comments on the draft
19	Groundwater Resources Management Plan. We
20	want to thank the Long Island Commission on
21	Aquifer Protection for all of the work
22	they're doing to safeguard Long Island's
23	precious groundwater resources as well as
24	for allowing me to share the supervisor's
25	comments. The Town of North Hempstead feels



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very strongly about the protection of our sole source aguifer, and we are constantly striving to conserve water and protect water quality. So the town's initiatives includes coordinating with the suppliers that control water distribution, work with the Great Neck, Port Washington Aguifer Committee, partnering with the EPA water sense program to promote the use of water-efficient appliances and fixtures. We use reclaimed water at our Harbor Links golf course and encourage our residents to do the same for our rain barrel education program. The Town of North Hempstead has reviewed the draft report put out by the commission and have comments on a few of the recommendations in the report.

One, we strongly support your recommendation that the public supply wells in Queens County remain closed. Any plan to reopen the Queens wells would be a threat to our drinking water here on Long Island. We were encouraged last year when Governor Cuomo announced the water sustainability



1 HEARING-LICAP 2 study, which will provide a scientific 3 assessment of the status of Long Island's 4 groundwater resources and a road map for our 5 The New York City DEP's attempts to 6 reopen the wells before the completion of 7 the state's study is of great concern. 8 Without this study, we will have no way of 9 verifying the city's assertions about the 10 potential impact to Long Island's water 11 supply, and we will have no way of 12 predicting the impact of such large 13 sustained withdrawals. An additional 14 concern is the potential of irreversible saltwater contamination in our coastal 15 16 wells. Alterations in the course of 17 existing groundwater contamination plumes 18 and new chemical contaminations from sources 19 in Queens are all potential impacts of 2.0 reopening the Queens wells. Without a 21 quarantee from New York City to mitigate 22 these threats and provide a means to 23 replenish the supply of water to our 24 aguifers we cannot support the reopening of these wells. 25



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Two, one of the major issues of water quality on Long Island is the use of water for irrigation at peak times in the It is estimated by the United States EPA that 50 percent of water used for landscaping is wasted, and a reduction in this use is an important way to cut down on pumping during the summer months. The Town of North Hempstead is working on developing regulations of automatic sprinkler systems such as the mandatory use of rain sensors and testing for functionality. We believe it is important that New York State irrigation contractors be certified and follow standards that promote the conservation of water when installing and monitoring these devices. We also support the recommendation that water efficiency programs be mandatory during the summer months to reduce peak pumpage. Three, another important

recommendation was the use of scientific data to establish caps on pumping by public suppliers. The current caps are not being



1	HEARING-LICA

adhered to, nor do they accurately reflect
the current supply of water. New caps must
be established by using the most recent
information on sustainable yield as well as
the needs of public water suppliers to serve
their communities.

The final recommendation we would like to comment on is the protection of the North Shore aquifer. Many communities have been affected by over pumping in the North Shore aquifer which has led to saltwater intrusion and peak levels of chloride in public supply wells requiring them to be closed. This is a pressing issue for us, as many of these communities such as Great Neck and Manhasset are within the Town of North Hempstead. It is vital that the North Shore aquifer be protected as the Lloyd aquifer has been in order to preserve the aquifer for the future.

In closing, the Town of North

Hempstead would again like to thank the Long

Island Commission on Aquifer Protection for

their diligent work in protecting our



1	HEARING-LICAP
2	aquifers and for including us in the
3	process. Thank you.
4	MR. CAREY: Thank you, Miss Brinn.
5	Out next speaker is John Mirando,
6	City of Long Beach.
7	MR. MIRANDO: Good afternoon. I'm
8	John Mirando, M-I-R-A-N-D-O.
9	I'm presently serving as
10	commissioner of public works for the City of
11	Long Beach. One of my responsibilities is
12	the management of the Long Beach water
13	supply system. I have been involved in the
14	management of public water since 1980. I
15	have served as chairman of the Long Island
16	Water Conference, I have served as chairman
17	of the New York section of America
18	Waterworks and have been a national director
19	to the National AWWA. I have also managed
20	the operation of several water systems on
21	Long Island, including 14 years as chief
22	engineer for two of the largest water
23	systems on Long Island, Jamaica Water Supply
24	and Long Island Water Corporation. I'm here
25	to speak on behalf of the City of Long



1 HEARING-LICAP

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First I would like to applaud LICAP for a comprehensive plan on the Long Island aquifer which is strong on water quality protection. Of particular importance to the City of Long Beach are the items directed at the protection of the Lloyd aguifer and particularly the concerns of saltwater intrusion. We strongly support efforts to develop predictive groundwater models that can accurately predict the actual movement of the saltwater in the face of the Llovd as well as expected concentrations. Presently, eight public water supply wells in the city use the Lloyd aguifer and have exhibited chloride levels less than eight parts per million. The city has been active in the Western Nassau County Aquifer Committee and is a strong supporter of the current USGS study being conducted on Long Island for Nassau and Suffolk Counties. This is being done thanks to the efforts of Governor Cuomo and the state legislature. We want to see the necessary coordination between the USGS



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HEARING-LICAP

study and any additional work. We strongly support the prohibition by New York City -- can you actually hear me? This sounds like it's cutting in and out. Okay.

We strongly support the prohibition of New York City from use of the former Jamaica water supply Lloyd wells in Queens County. We believe, however, there should be further study on the use of the Magothy wells in Queens and their impact on Nassau and Suffolk Counties. Consideration should be given to exploring an option for those wells where the City of New York treats those wells drinking water standards and by using safe field of those wells recharges areas of Nassau County by supplying north shore suppliers, particularly the North Shore aquifer that may be using their safe field which would impact the Lloyd aguifer and the saltwater, freshwater interface. While the city is in favor of construction of additional outposts monitoring wells to accurately monitor the saltwater, freshwater interface we believe that this cost should



1	HEARING-LICAP
2	not be borne by the City of Long Beach or
3	any other supplier that uses the barrier
4	beach wells. If constructed, the suppliers
5	on the barrier island should have no
6	objection to covering the cost of ongoing
7	monitoring. The city also supports more
8	vigorous research on more economical methods
9	of desalination. The cost of desalination
10	may be more economical on freshwater than
11	building facilities to transport water from
12	New York City or Suffolk County. The
13	recommendation on conservation pricing needs
14	to be studied in depth. The first gallons
15	of water produced by suppliers are the most
16	expensive, as they cover capital carrying
17	costs, labor, power, chemicals and O&M
18	costs. Once these costs are covered the
19	cost of water only covers power and
20	chemicals making the last gallons the least
21	costly. So price structures need to
22	adequately fund the many infrastructure
23	improvements public water suppliers are
24	facing.
25	Additionally, we need to look at the



1	HEARING-LICAP
2	elasticity of conservation pricing. When
3	these conservation rates first went into
4	effect they worked well, but as time goes on
5	property owners become used to the cost and
6	are less vigilant. We do support greater
7	conservation efforts to reduce water usage
8	through education and stricter water use
9	laws. This includes irrigation for
10	landscaping requiring low-cost technology
11	and newly renovated buildings. The city
12	supports efforts to fully fund the Nassau
13	County Department of Public Works updating,
14	adding and monitoring the existing
15	monitoring well system as well as employing
16	the best and most knowledgeable hydro
17	geologists to work with public water
18	suppliers in their long-range planning
19	process.
20	There are some areas that were not
21	covered in the report in enough detail which
22	I believe need to be explored further. They
23	include the following: Reclamation of
24	wastewater. In Nassau County approximately

360 million gallons a day of wastewater is



1	HEARING-LICAP
2	discharged to the bay or the ocean.
3	Technology exists to treat this final
4	effluent to drinking water standards which
5	would allow for some recharge back into the
6	Magothy aquifer either through direct
7	recharge or a supplemental supply. Use of
8	rainwater needs to be studied more by
9	developing transport use of existing
10	wastewater treatment plant effluent at the
11	secondary level as an example for golf
12	courses or for certain agricultural uses
13	such as sod farms.
14	Finally, we respectfully request
15	that LICAP add 16 immediate recommendations
16	to advocate for the redistricting of DEC
17	regions regarding water issues. We believe
18	for the sake of improved coordination and
19	cooperation that DEC region one should
20	encompass geographical Long Island,
21	including Kings and Queens Counties with
22	Nassau and Suffolk Counties, as water
23	resources do not know political boundaries.
24	The environmental issues these two regions
25	address separately, especially water, have



1	HEARING-LICAP
2	an effect on the entire island and should be
3	dealt with in such a manner.
4	In closing, we would like to
5	congratulate the members of LICAP for a very
6	comprehensive and a well thought-out
7	document. As the city digests the document
8	further we will be available to supply
9	additional written comments. Thank you.
10	MR. CAREY: Thank you, John.
11	Next speaker is Jane Thomas.
12	MS. THOMAS: Good day. My name is
13	Jane Thomas, and I'm a resident of Port
14	Washington. I realize that this is a public
15	comment hearing, but I am hoping that before
16	any decision is taken on whether or not to
17	extend the shelf life of LICAP that the
18	following question be answered, and I see
19	only when I picked up the piece of
20	information outside that number 15 in your
21	list says that you do not create any new
22	state or regional entity to provide
23	oversight of drinking water because the
24	power to regulate and protect drinking water
25	on a regional basis is already vested in New



1	HEARING-LICAP
2	York State Department of Health and the New
3	York State Department of Environmental
4	Conservation. I'm thinking that I
5	definitely disagree with that, and my
6	question is just more intricately what basis
7	you have placed in rejection of a regional
8	groundwater management entity, which in my
9	view would be staffed with scientists and
10	water management experts so that those in
11	the know and not just individual water
12	purveyors are making those overall decisions
13	on a regional basis.
14	I ask this because LICAP was
15	initially charged with providing a strategy
16	that included recommending a regional
17	management entity, and rejecting such a
18	foundational responsibility on Long Island,
19	not just the overseers, seems so basic. And
20	I think that before any decision on granting
21	an extension should really address that
22	issue, otherwise we're just looking at
23	studying the issue further. I don't know
24	what conclusions, I mean it's a wonderful,
25	long dogument you have produced but I'm not



1	HEARING-LICAP
2	sure where we're really going to get action
3	and something actually done. Otherwise we
4	might as well all just go home. Thank you.
5	MR. CAREY: Thank you, Miss Thomas.
6	Our next speaker is Marilyn Hametz.
7	Hopefully I pronounced that correctly.
8	MS. HAMETZ: Good afternoon. The
9	name is Marilyn Hametz, H-A-M-E-T-Z. I'm
10	from Massapequa, and I'm with Water for Long
11	Island.
12	Since 1978, just a drop in history,
13	in the publication of the Long Island 208
14	study there have been approximately 15 major
15	groundwater studies on Long Island. They
16	have identified the problems of their day,
17	not now, and proposed ways to improve
18	groundwater quality and sometimes quantity.
19	But very few of these recommendations were
20	eventually carried out and fully
21	implemented. The LICAP report, Groundwater
22	Resources Management Plan report, which is
23	under discussion today, includes the 15
24	recommendations we got in the handout, which
25	are for immediate implementation, and the



1	HEARING-LICAP
2	report also has more than 90 recommendations
3	for short-term and long-term implementation.
4	But how long is short term? How long is
5	long term? And as you read the
6	recommendations for improvement there are
7	questions. How are they going to get
8	accomplished? What is the strategy?
9	Unfortunately, as was said, LICAP's
10	recommendation 15 is do not create any new
11	state or regional entity, and they do say
12	that the power is in New York State
13	Department of Health and the New York State
14	Department of Environmental Conservation.
15	But this has been a 40-year situation, and
16	there are increasing, not decreasing,
17	increasing problems in our aquifer, and
18	these are discussed in the LICAP document.
19	Change is needed, and models do exist that
20	actually succeed in accomplishing effective
21	water resource stewardship.
22	Now, Long Islanders, and that's
23	pretty obvious, it's been stated many times,
24	do want a sustainable and a reliable source
25	of clean and healthy drinking water now and



1	HEARING-LICAP
2	for the future. Failure to take action now
3	guarantees that Long Islanders will come to
4	regret it, and I emphasize the now. A
5	strategy for protecting and managing the
6	groundwater supply for Nassau and Suffolk
7	County sole-source aquifers has been
8	prepared by Sarah Meyland, the Nassau County
9	legislature minority leader representative
LO	to LICAP, and Jared Hershkowitz, the Suffolk
L1	County legislature's presiding officers
L2	representatives to LICAP, as well as Water
L3	for Long Island. There is a realistic
L4	approach that finally moves beyond the
L5	status quo and puts Long Island on a
L6	successful path for effective groundwater
L7	management. This minority report should be
L8	appended to the LICAP Groundwater Resources
L9	Management plan report.
20	You may have noticed that they were
21	distributed to the people on the dais. I
22	have copies here, which I will give to
23	whoever would like them. And it's also, of
24	course, on the Water for Long Island Web



25

site.

1 HEARING-LICAP

2 LICAP was specifically charged with 3 providing a strategy that included 4 recommending a regional management entity. 5 While LICAP has officially rejected the 6 concept, and that was discussed by Miss 7 Thomas, there is a reasonable and rational 8 path to regional groundwater management 9 available, and working in New York and 10 Single-purpose water around the nation. 11 management agencies in the form of water 12 management contacts are managing the major 13 source, major water sources across New York 14 State which serve approximately 70 percent of the state. Ours is different, but we 15 16 need management. Long Island does not have 17 a comprehensive system of oversight 18 regulation management and protection of its 19 groundwater. New York DEC, the agency 20 responsible for regional groundwater 21 oversight, is very limited in its ability to provide services. It's underfunded, and it 22 23 has these huge, wide-ranging 24 responsibilities which go from fishing 25 permits to super fund fights to air quality.



1	HEARING-LICAP
2	We need an agency that focuses on
3	groundwater. The agency would have a local
4	board of directors, it would have enabling
5	legislation passed at the state level
6	authorizing it to perform some duties. Now
7	the job has been with New York State DEC and
8	other duties that are not currently being
9	attended to.
10	Now, this minority report, which was
11	distributed here, and as I said is
12	available, which will be distributed here
13	and available on Water For Long Island's Web
14	site, provides a brief outline of the
15	actions and priorities that a regional
16	organization would provide. It presents the
17	priority actions needed and the timeline for
18	these efforts. It is an action plan. It
19	would take years to fully implement programs
20	addressing priority problems, so this
21	strategy is a specific 20-year program that
22	would be implemented in stages. At the end
23	of each five-year phase the successes,
24	lessons learned and needs for change and or
25	additional actions will be assessed and



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1 HEARING-LICAP

2 | incorporated into the program.

Now, just briefly, the goal and the strategy, and as I said, it's here, and the people on the dais have it; the goal of the strategy is to change groundwater use from unsustainable to sustainable, to stop degradation in groundwater quality both from old sources of pollution and new ones that keep coming up, to implement, and this is so important, the implementation, to implement programs to tackle the highest priority issues first, to provide leadership in groundwater management oversight and implementation of science-based policies, and very important, to provide accountability and measurable benchmarks for progress and change without falling into the trap of annual budget fights that have largely crippled the DEC and various other local agencies. This type of compact, they are usually self funded, and the numbers sort of look like for Nassau and Suffolk County to do this it would actually cost as

little as 350 per person, which would be



1	HEARING-LICAP
2	collected as water usage. Thank you.
3	MR. CAREY: Thank you, Miss Hametz.
4	Our next speaker is Jerry Ottavino.
5	MR. OTTAVINO: Good afternoon. My
6	name is Gerald Ottavino, that's
7	O-T-T-A-V-I-N-O.
8	I would urge everyone here today to
9	study the strategy for protecting and
10	managing the groundwater supply of Nassau
11	and Suffolk Counties, as it is the only
12	proactive plan presently being submitted to
13	both county legislatures that after three
14	full years of waiting will actually provide
15	a viable plan for saving, protecting and
16	managing Long Island's drinking water.
17	Simply, the LICAP Groundwater Resource
18	Management Plan will not accomplish this,
19	its primary objective, nor will it serve to
20	accomplish most of its own, I think it was
21	said, 134 recommendations. In fact, the
22	LICAP plan is not a water plan at all. It
23	provides no timeline for implementation, as
24	was stated before, it provides no budget,
25	and provides no viable agency capable or



1	HEARING-LICAP
2	empowering to effectuate such
3	recommendations. In particular, fully
4	contrary to its assigned goal to create such
5	an agency, LICAP advisors do not create any
6	new state or regional entity to provide
7	oversight of drinking water because the
8	power to regulate and protect drinking water
9	on a regional basis is already vested in the
10	New York State Department of Health and the
11	New York State Department of Environmental
12	Conservation. Of these two agencies just
13	mentioned DEC is the one most responsible
14	for Long Island's current groundwater
15	failure. If you think I'm being too harsh
16	and critical, I urge everyone here to read
17	the New York State Office of Budget and
18	Policies 2014 report on environmental
19	funding in New York State; recites an abject
20	lack of funding and personnel for the
21	department's inability to protect the
22	environment, and with even greater cuts
23	projected for the future it will never be
24	able to stave off the drinking water crisis
25	at hand Therefore a compact-like agency



1	HEARING-LICAP
2	must indeed be created to execute the
3	exigent, remedial oversight DEC is incapable
4	of performing on its own. The strategy I
5	just mentioned will do just that.
6	As an aside and being a little more
7	specific, back in 2010 there was a reading
8	in a Long Beach well of 110 parts per
9	million chlorides. The United States
10	Geological Survey indicates that it deems a
11	threshold of 50 parts of chloride is the
12	point at which saltwater contamination
13	becomes inevitable, yet no emergency
14	measures have ever been taken by any agency
15	to halt, slow or even address this impending
16	contamination.
17	I live in Point Lookout on the same
18	barrier island as Long Beach and share the
19	same Lloyd aquifer. Who or what will
20	protect my drinking water? As I read it the
21	LICAP plan offers nothing that will, but the
22	strategy I referred to just previously
23	before certainly will.
24	Thank you for your time.

MR. CAREY: Thank you, Mr. Ottavino.



25

1	HEARING-LICAP
2	Our next speaker is Joseph Fragola.
3	DR. FRAGOLA: Hello. My name is Dr.
4	Joseph Fragola. I'm a resident of
5	Oceanside. It's F-R-A-G-O-L-A. I don't have
6	any formal comments. I just would say my
7	experience based for the last 40 years has
8	been in risk assessment. And I do believe
9	that this committee ought to take a more
10	formal approach towards risk, looking at the
11	diversity of risk that is saltwater
12	contamination and depletion of the aquifers,
13	and ranking those risks according to time
14	and severity using some of the more modern
15	available tools for risk assessment. I
16	worked 40 years with NASA and the Nuclear
17	Regulatory Commission, and I honestly
18	believe that these techniques will help you
19	formulate a more reasonable plan for the
20	future. Thank you.
21	MR. CAREY: Thank you, Dr. Fragola.
22	I do not have any more cards. Did
23	anyone else wish to speak at the hearing, or
24	are there any other cards? Anyone else? No
25	other speakers, okay. So we're going to



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                    HEARING-LICAP
 2
     recess.
              If anyone else wants to come up
     just let us know, otherwise we will
 3
     reconvene at 6 o'clock for the second
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     portion of the public hearing. Thank you.
 6
            (Time noted 4:00 p.m.)
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1 CERTIFICATE

I, KEVIN JONES, a Shorthand Reporter and Notary Public, within and for the State of New York, do hereby certify that I reported the proceedings in the within-entitled matter on the 5th day of December, 2017; that the minutes were taken stenographically by myself and transcribed by myself; and that this is an accurate transcription of these proceedings.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of December, 2017.



KEVIN JONES



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