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H.R. 212, THE DRINKING WATER PROTECTION ACT
THURSDAY, FEBRUARY 5, 2015
House of Representatives,
Subcommittee on Environment and the Economy,
Committee on Energy and Commerce,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:10 a.m., in Room 2123, Rayburn House Office Building, Hon. John Shimkus, [chairman of the subcommittee] presiding.

Present: Representatives Shimkus, Harper, Whitfield, Pitts, Murphy, Latta, McKinley, Johnson, Bucshon, Flores, Hudson, Cramer, Upton (ex officio), Tonko, Schrader, Capps, McNerney, and Pallone (ex officio).

Staff Present: Nick Abraham, Legislative Clerk; Gary Andres, Staff Director; Charlotte Baker, Deputy Communications Director; Sean Bonyun, Communications Director; Leighton Brown, Press Assistant;

Jerry Couri, Senior Environmental Policy Advisor; Brad Grantz, Policy Coordinator, O&I; Brittany Havens, Legislative Clerk; David McCarthy, Chief Counsel, Environment and the Economy; Chris Sarley, Policy Coordinator, Environment and the Economy; Joe Banez, Minority Policy Analyst; Jeff Carroll, Minority Staff Director; Jacqueline Cohen, Minority Senior Counsel; Rick Kessler, Minority Staff Director, Energy and Environment; Tim Robinson, Minority Chief Counsel; and Ryan Schmit, Minority EPA Detailee.

Mr. Shimkus. The hearing will now come to order.

We will start with opening statements, and I will start first. We are still waiting on the ranking member, Mr. Tonko, and I think Chairman Upton. We will then give them the opportunity to give their opening statements when they arrive. So I will recognize myself for 5 minutes.

Today we examine legislation that creates a framework for better understanding and addressing the risks posed by algal toxins and can show up in some drinking water. I thank Representative Latta for his efforts on this issue and for bringing it to the subcommittee's attention last fall.

Some folks maybe be tempted to think there are easy solutions to this problem, but, from our hearing this past November, we learned we have a long way to go to understand it. The diversity of algae and their habitats only complicate the problem.

The legislation we are reviewing moves in the right direction. First, the legislation requires the EPA within 90 days to develop and submit a strategic plan to Congress for assessing and managing risks from cyanotoxins in drinking water provided by public water systems.

This plan will detail the six critical steps as well as the timelines EPA intends to use: identify information gaps to be filled and evaluate human health risk; publish a comprehensive list of algal toxins that are harmful, as well as what those harmful efforts are;

identify what makes these algae harmful; determine how to use public health advisories to inform testing and monitoring of these algal toxins, as well as look at where EPA needs better information for testing and monitoring; and then suggest treatment options; and, finally, provide technical assistance to States and public water systems.

Most importantly, this strategic plan is a living document and can be updated as warranted after the deadline expires. H.R. 212 also calls on EPA to consult with other Federal agencies, States, and others actively analyzing cyanotoxins and their impact on public health and to publish the information possessed by the Federal Government.

Finally, H.R. 212 requires the Government Accountability Office to inventory and report to Congress on Federal spending between fiscal years 2010 and 2014 on analysis and public health efforts of the Federal Government on cyanotoxins, including the specific purpose for which the funds were made available, the law under which the funds were authorized, the Federal agency that received or spent the funds, and recommended steps to reduce any duplication and improve interagency coordination of such expenditures.

[The bill follows:]

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This is a preliminary, unedited transcript. The statements within may be inaccurate, incomplete, or misattributed to the speaker. A link to the final, official transcript will be posted on the Committee's website as soon as it is available.

Mr. <u>Shimkus</u>. I want to welcome and thank our witnesses who are joining us or rejoining us today, as the case may be. We look forward to hearing from them on what happened this past August in Ohio and what lessons were learned and whether H.R. 212 helps. We will also get a better sense of what drinking-water treatment professionals need to better prepare to handle these events.

We are all eager to hear from our witnesses. And, with that, I would yield -- I have some time remaining. Seeing no -- the gentleman from Ohio.

[The prepared statement of Mr. Shimkus follows:]

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Mr. <u>Latta</u>. Well, thank you, Mr. Chairman.

And, first, I want to thank you for calling this hearing today, and, also, I want to thank our witnesses for being here.

I really appreciate working with Dr. Grevatt and Mr. Baker and their office over the past months on this issue. Their expertise and guidance has been an immense help in putting together the quality bill that is before us today in H.R. 212, the Drinking Water Protection Act, that will help ensure our citizens' public drinking water and health are protected from the threat of algal toxins. This working relationship has and continues to be a perfect example of how the Federal Government and the States can work together to put forth quality solutions to problems that affect millions of our citizens.

Unfortunately, the cyanotoxins and algal toxins in public drinking water produce some harmful algal blooms that are presenting a serious concern for our Nation's citizens. Last August, over a half a million people in the polluted area, many of which are residents of my district, were unable to utilize their water for over 2 days without risking potentially negative health effects due to a high level of the cyanotoxin Microcystin-LR detected in the city's water supply.

During that time, both concerns and questions were raised about the testing protocols, treatment processes, and appropriate responses on how to respond to the problem in the short term.

I know from my personal experience that the State, including Mr.

Baker and the Ohio EPA Director Butler, worked tirelessly with the U.S. EPA and with the city and other local officials to get this situation under control. I commend their hard work and the steps they have taken since to try to ensure that this does not occur again.

Furthermore, while Microcystin-LR is believed to be the most common and toxic variant, countless other microcystin variants and other algal toxins threaten the health and safety of public drinking water. Unfortunately, scientific and health data and research has not kept up with this growing, complicated problem.

I believe H.R. 212, the Drinking Water Protection Act, which will put forth a strategic plan for assessing and managing risks associated with cyanotoxins in drinking water provided by public water systems, takes the robust and strong scientific approach we need to protect the health and safety of our public drinking water and better understand this issue in the short term and in the long term.

Again, I want to thank you all for being here today. I greatly appreciate all your hard work on this and the testimony that you are going to give today.

And, Mr. Chairman, I would also like to thank the committee staff and my staff for their hard work on this legislation.

And, with that, I yield back.

[The prepared statement of Mr. Latta follows:]

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Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the ranking member of the full committee, Mr. Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman.

Harmful algal blooms are a serious and growing threat to public health. The toxins they produce threaten communities that draw their water from coastal areas in the Great Lakes, and they also pose risks to those who swim in contaminated waters or eat contaminated fish.

Health impacts include skin and eye irritation, gastrointestinal illness, cancer, paralysis, and even death. Economic impacts are also serious, affecting fishing, recreation, and tourism. Estimates of annual costs in the United States are in the billions.

This summer, Toledo, Ohio, experienced a profound disruption when citizens woke to a do-not-drink order. And as we will hear from the second panel, the impacts were significant and widespread.

But the problem -- and I stress -- is not limited to Ohio or Lake Erie. Harmful algal blooms have been a recurring problem in my home State in New Jersey for decades. And so I appreciate that the majority is taking up this bipartisan legislation to begin to address this important environmental problem.

I am happy to say that language we will consider later today reflects several changes sought by Democratic members of the subcommittee, and I thank the chairman and the majority staff for

working with us to improve the bill. For too long, Republicans in Congress have been more interested in attacking EPA than supporting the important work the Agency does to protect human health, and safe drinking water should be a bipartisan issue.

So I hope this bill can be the start of broader drinking-water work to address important threats like climate change, fracking, security, an aging infrastructure. My colleague from New York, the ranking member, Mr. Tonko, of the subcommittee has been a leader on drinking-water infrastructure issues. And I hope we can all work together on his legislation to reauthorize the SRF resources essential to the conversation about safe drinking water.

Much of our Nation's drinking-water infrastructure is well beyond its useful life and in desperate need of replacement. Algae and other emerging threats spurred by climate change and other factors add to the challenge. Investing in drinking-water infrastructure protects public health, creates jobs, and boosts the economy, and this is something that we should all support.

I did want to say one thing on process, though, Mr. Chairman. The majority's insistence on scheduling the markup of this bill for the same day as the legislative hearing is unfortunate and undermines regular order. And I think these are important issues that should be given due consideration under regular order. So, Mr. Chairman, I hope that you will support regular order moving forward.

And I just thank the witnesses today and yield back the balance of my -- I don't think anyone else on our side wants the time?

Thank you, Mr. Chairman.

Mr. <u>Shimkus.</u> And I thank the colleague. It is still regular, but I would admit it is fast.

Seeing that the chairman is not here or the ranking member of the subcommittee, what we will do is we will turn to Dr. Grevatt from the EPA. And then, of course, those Members will be allowed to give their opening statement when they arrive.

Sir, you are recognized for 5 minutes. Your whole statement is into the record. We thank you for coming.

STATEMENT OF PETER GREVATT, PH.D., DIRECTOR, OFFICE OF GROUNDWATER AND DRINKING WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. <u>Grevatt.</u> Thank you very much.

Good morning, Chairman Shimkus and members of the subcommittee. Thank you for the opportunity to be here to testify on EPA's activities to address harmful algal blooms and their impact on drinking-water supplies and on H.R. 212, the Drinking Water Protection Act.

The administration has not taken a position on this piece of legislation. And today I will provide an update on EPA's current work relevant to the bill.

Cyanobacteria are found naturally in surface waters and can rapidly multiply, causing harmful algal blooms. Factors that enhance bloom formation include light intensity, nutrient availability, water temperature, and water column stability.

Some species of cyanobacteria produce toxic compounds known as cyanotoxins. High levels of cyanotoxins in recreational waters and drinking water may cause a wide range of adverse health effects in humans, including fever, diarrhea, vomiting, and allergic reactions.

EPA expects that community drinking-water systems will continue to be vulnerable to emergency shutdowns from harmful algal blooms.

H.R. 212 would direct the EPA Administrator to develop a strategic

plan for assessing and managing risk associated with cyanotoxins in drinking water providing by public water systems.

Under the bill, EPA would be directed to identify steps and a timeline for evaluating human health risks from drinking water contaminated with harmful algal blooms, create a comprehensive list of the cyanotoxins determined to be harmful to human health, develop a summary of the state of the science on human health effects of cyanotoxins and causes of cyanobacterial harmful algal blooms, recommend treatment options, and establish cooperative agreements with States and public water systems for technical assistance.

Additionally, the bill would direct EPA to determine whether to publish health advisories for such cyanotoxins as well as whether to establish guidance on analytical methods and monitoring.

Providing technical assistance on harmful algal blooms to States and public water systems is a priority for the EPA. The EPA actively seeks opportunities to work collaboratively with States and public water systems, and the Agency has several existing programs for providing technical assistance on drinking-water issues.

Currently, there are no U.S. Federal regulations concerning cyanotoxins in drinking water. The Safe Drinking Water Act establishes a number of tools, including health advisories, the Contaminant Candidate List, and the Unregulated Contaminant Monitoring Rule, to develop regulatory and nonregulatory approaches to addressing

contaminants in drinking water.

EPA is preparing health advisories for Microcystin-LR and Cylindrospermopsin, two cyanotoxins commonly associated with harmful algal blooms. The health advisories will establish concentrations of drinking-water contaminants below which adverse health effects are not anticipated to occur as well as provide States, municipalities, and other local officials with technical guidance on sampling, analytical procedures, and drinking-water treatment recommendations to protect public health. We expect to finalize these health advisories in the spring of 2015.

EPA's Contaminant Candidate List identifies unregulated contaminants that are known or anticipated to occur in public water systems and which may require regulation. The EPA uses this list to prioritize research and data collection efforts. The fourth CCL was just published yesterday, and EPA has listed several cyanobacteria or cyanotoxins on all four drinking-water CCLs.

EPA uses the Unregulated Contaminant Monitoring Rule to collect data for contaminants that do not have primary drinking-water standards and are suspected to be present in drinking water. A lack of standardized analytical methods for individual cyanotoxins has prevented EPA from including them in the current and previous rounds of UCMR. The Agency is currently developing specific analytical methods for microcystins, Anatoxin-a, and Cylindrospermopsin. EPA

expects to publish these methods in the spring of 2015, in time to consider including several cyanotoxins in the fourth UCMR. Monitoring for the fourth round of the UCMR will begin in 2018.

Many communities across the United States have faced issues with cyanotoxins in drinking-water sources. For example, last year, Toledo's Collins Park Water Treatment Plant detected high levels of algal toxins resulting from a harmful algal bloom in western Lake Erie.

U.S. EPA worked with the State of Ohio and the city of Toledo around the clock throughout the course of the weekend to confirm the concentrations of algal toxins and to optimize controlling of the toxins at the utility.

Shortly after the Toledo incident, EPA redirected \$12 million in Great Lakes Restoration Initiative funding to Federal and State agencies to strengthen ongoing efforts to target harmful algal blooms in western Lake Erie.

While monitoring and treatment are critical for providing safe drinking water, continued source-water protection efforts and adequate investment in our Nation's water infrastructure will be necessary to prevent events such as the one in Toledo in the future.

Once again, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee, thank you for the opportunity to discuss the Drinking Water Protection Act and EPA's work on cyanotoxins in drinking water. I look forward to answering any questions you may have.

[The prepared statement of Mr. Grevatt follows:]

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Mr. Shimkus. Thank you very much.

I will recognize myself for 5 minutes for the first round of questioning.

And I only have two questions, Dr. Grevatt.

Does this legislation raise any red flags because it complicates what the Agency is trying to accomplish?

Mr. Grevatt. No, not at all.

Mr. <u>Shimkus</u>. Aside from cyanotoxins, how many other algal toxins do you believe are of concern to the health and safety of public drinking water?

Mr. <u>Grevatt.</u> So there are many cyanotoxins out there, as we have discussed previously. There are two that we haven't talked about, the euglenophycins and the prymnesins, which we haven't seen widely, but that is something that we need to keep our on. I know the State of Ohio, along with EPA, is thinking about, you know, looking forward to the future in terms of how do we prepare for the potential emergence of these cyanotoxins.

Mr. <u>Shimkus</u>. And I think in my opening statement when I was, you know, weaving the narrative, I kind of mentioned this was a living document, by which, you know, we can add to or subtract as we go through this process as we use good science to identify that.

So, with that, that is all the questions I have. I would look to my colleagues to see if anybody wants to ask a question on my time.

The gentleman from Ohio.

Mr. <u>Latta</u>. Well, thanks, Mr. Chairman, for yielding.

And, again, Dr. Grevatt, thanks very much for being here. And thanks again for last fall for being at our committee hearing back in November. I know you had to come back up from New Orleans from a conference.

But when we had our discussion, especially early on when all of this was occurring up in my area, one of the things that you were talking about was how the EPA is working on the plans to release a health advisory, especially when we are talking about, like, the Microcystin-LRs and -- I hope I pronounce this right -- the Cylindrospermopsin -- am I close on that? -- in the spring of 2015.

And after you have completed that independent review that you are working on right now -- and I think this is a very technical, high area out there. I think there are three different peer reviewers on it right now.

So I guess my first question is, are you on track right now to make that late-spring deadline that we had talked about last year?

Mr. <u>Grevatt.</u> Yes, sir, we are.

Mr. Latta. Okay. That is great.

And can you also discuss the importance of the independent scientific peer review that is going on?

Mr. Grevatt. Yes. As you mentioned, Congressman, there are

many complicated aspects to these questions about cyanotoxins and looking at, in particular, the toxicity literature. We don't have data that tells us about exposures to humans and human health effects. We mostly have data that relates to exposures in animals that we then have to translate to what that might mean for humans.

So the peer review really helps to make sure that we are approaching this properly, that we have selected the right studies to base the health advisory on, that we have considered uncertainties appropriately, that we are thinking about potential exposures and to the life stages, children in particular, appropriately.

So this is really a quality check, independent of EPA, to make sure that we have taken the right steps in developing the health advisory.

Mr. Latta. Thank you.

And, also, when we are looking and talking about the health advisory, are you looking at the recommended contaminant levels? The testing? What exactly is going to be in that health advisory?

Mr. <u>Grevatt.</u> Thank you. Yes, Congressman, the health advisory will include information about sampling and analytical techniques. It will include information about treatment technologies to remove algal toxins from drinking-water supplies. And it will also include the health information, identifying a level below which we believe that humans will be safe from exposure.

Mr. <u>Latta</u>. And, also, I think it was also interesting in our discussions and also when you testified last year, if you could maybe just briefly touch on, I think Ohio and five other States are really the only States that are out there using surface water. And the whole question about health advisories, and there is not really a standard, because Ohio uses the World Health Organization. I believe Minnesota uses it, too, but at a different level.

And so why is it so important that we have a health advisory that would be equal across the country that people can look to?

Mr. <u>Grevatt.</u> Right, certainly. There are two aspects of this that I think that are particularly important.

One is development of the health advisory from the United States Government, because, as you mention, we don't have that. States have been relying on the World Health Organization value, a 2003 value, that is based on studies that go back to the late 1990s. A number of other countries that have taken steps in algal toxins also rely on that World Health Organization value.

There is new data that have come in since the WHO produced their value, and we are considering that in partnership with the Government of Canada. We are working very closely with the Canadians to make sure that we have a coordinated approach to this. So it will update the toxicity information.

And then the second part of this that I think is equally important

is, once we publish the health advisory, we are going to be reaching out to States and local communities to talk about the implementation of that health advisory.

So when there is value that is identified in the health advisory, we need to think about, if something occurs like happened in Toledo this past summer, how do we think that health advisory value should be used. Is that a not-to-exceed level for 1 day or for a week or for something different?

These conversations, I think, are equally important to make sure that we have a common approach across the country for dealing with this issue.

Mr. Latta. Thank you.

Mr. Chairman, the time that you yielded to me has expired, and I yield back.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the ranking member of the full committee, Mr. Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman.

Protecting America's waters is one of EPA's priorities laid out in the President's budget for this next fiscal year. And I quote, he says, "The responsibility for communities and public water systems to continuously provide safe drinking water is a key component of the Nation's health and their wellbeing."

And I agree that goal is incredibly important, and I don't think it can be achieved without significant resources. Because harmful algae blooms are just one example of the threats that could drive significant treatment and capital costs for water utilities.

And so my point is we have to invest in drinking-water infrastructure. There are two areas of the President's budget that I believe move us in that direction. One is the \$1.1 billion allocated for the Drinking Water State Revolving Fund, a significant increase from last year.

So, Dr. Grevatt, we have not had a hearing on the SRF in this subcommittee in several years, so could you briefly explain how the SRF works? And how might a State like Ohio address harmful algal blooms with their SRF funds? And could these resources benefit public water systems who have to undertake infrastructure projects to address contamination, such as moving intakes or improving treatment capabilities?

Mr. Grevatt. Certainly. Thank you, Congressman.

So EPA, through the State Revolving Loan Fund, provides grants to each of the States, allocates moneys to each of the States every year, and the States, in turn, develop an intended-use plan that is designed to fund projects that are identified by local utilities to improve infrastructure at those facilities.

In addition, the Drinking Water State Revolving Loan Fund

provides set-aside funds for States to provide activities like technical support to local communities who are dealing with these challenges.

So the drinking-water SRF very much can support responses to harmful algal blooms. And I know, in fact, after the Toledo event, the State of Ohio directed some of their funding that they had received from EPA through the State Revolving Loan Fund to help communities on Lake Erie to address some of the challenges with harmful algal blooms.

Mr. <u>Pallone</u>. The budget also creates -- this is the second point -- a new tax-except qualified public infrastructure bond program that is intended to help small communities track capital for infrastructure investment. And 97 percent of public water systems in the U.S. serve fewer than 10,000 people.

So what are some of the unique challenges faced by small community water systems? And would the tax-exempt bond program help these small systems keep up with infrastructure needs and rising treatment costs?

Mr. <u>Grevatt.</u> Thank you very much.

So we often have talked in this hearing, the previous hearing as well, about the city of Toledo, and we talk less about Carroll Township, nearby Toledo, who was shut down in 2013 as a result of a harmful algal bloom. And there are particular challenges that small systems face, in terms of both technical capacity, financial capacity, and managerial capacity to address issues like harmful algal blooms.

So it is important through the SRF and other funding opportunities for us to focus on the needs of small communities as much as we can to make sure that they are supported in these efforts. So, certainly, we think that the new authority, as well as the drinking-water SRF, can help small communities to address these challenges.

Mr. <u>Pallone</u>. And so the tax-exempt bonds specifically would help them is what you are saying.

Mr. <u>Grevatt.</u> We believe so, yes.

Mr. <u>Pallone</u>. Okay.

I mean, I just think that this funding could make all the difference for small communities struggling to provide safe drinking water. And I just wanted to say I think what the President has included for both of these items in his budget is important, so hopefully we will get support for it in Congress.

The other thing, you know, I have to say is we can't keep cutting EPA's budget and expect our water to get cleaner. And real progress on these very serious health and environmental problems takes a sustained commitment of time and money. And I think we owe it to our constituents and to the long-term health of our communities to make the necessary investments.

I mean, if you read the President's budget, so much of it is just talking about investment in the future, on this and other issues. And, you know, it is also very obvious, I am sure everyone realizes, that

when you make these kinds of investments and you upgrade systems, you know, you create a lot of jobs.

Also, you know, it brings money into the local communities. So it not only impacts the health and, you know, the drinking water but also is an economic boost, as well, that makes a lot of sense, in my opinion.

Thank you, Mr. Chairman. I yield back.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes, well, the gentleman from Kentucky, if he would like to ask questions.

Mr. Whitfield. I will pass.

Mr. Shimkus. You will pass.

The gentleman from Ohio, did you get your questions done?

Mr. <u>Latta.</u> I think I got them, Mr. Chairman. Thank you very much.

Mr. <u>Shimkus</u>. Anyone else on the Republican side wish to ask any questions?

The gentleman from West Virginia is recognized for 5 minutes.

Mr. McKinley. Thank you, Mr. Chairman.

I remember hearing the testimony from last year. I guess it was in November of last year, I believe, you were making that. I don't have all my notes from that meeting, but there was some discussion about the uniqueness of that situation up there, that there had been some

dredging going on, and perhaps some of the leached material and sediment in the bottom maybe had triggered some of that.

I think, if I recall your testimony, you said, yeah, you were aware of this, but -- we are going on over a year now since this issue occurred. You know, how close are we getting to where the algae blooms -- there will be a standard at the Federal level?

Mr. <u>Grevatt.</u> A standard health advisory, sir?

Mr. McKinley. Yes.

Mr. <u>Grevatt.</u> We will have that done by late spring of this calendar year.

Mr. McKinley. I thought I heard you say that. Why that long? I mean, the people are still out there struggling with it. And, with all the resources you have to put that out, I don't understand why there is such a delay at the bureaucratic level to get something out.

Mr. <u>Grevatt</u>. The primary issue is to make sure we get it right. So, as others have discussed, we are in the midst of an independent scientific peer review of our health advisory focused on the toxicity levels we are identifying, which will be a level below which we believe that humans are not at risk from exposure to cyanotoxins. And we view that as a tremendously important level to identify and make sure we have confidence. So --

Mr. McKinley. Well, was that the first reporting in the Toledo area that -- Lake Erie, was that the first time that we have had a

problem with it?

Mr. <u>Grevatt.</u> With cyanotoxins? No. That is certainly not the first time we have had problems with cyanotoxins.

Mr. McKinley. Okay. So, based on that, I am saying, how long does it take to develop a standard when we know we have a health hazard out there? When little communities that don't -- that they don't have the ability, the resources, to be able to do all the testing that you mentioned back in November, how are these little communities going to do it?

They need your standard, and I don't understand why it is taking so long. Because last year wasn't the first time this has come up.

Mr. <u>Grevatt.</u> Yes, sir. And we are, as I said, committed to having this ready before the next algal bloom season in the Great Lakes region. So we expect that this is going to be coming in time to assist those systems, large and small, with addressing algal toxins going forward.

Mr. McKinley. Okay.

What about -- you were going to get back to us -- I didn't get any -- about the contribution from the zebra mussels. I know that was potentially a factor in that. Have you been able to determine in the past year whether or not they have been any contribution to that?

Mr. <u>Grevatt</u>. There is not scientific agreement at this point on the contribution of zebra mussels. There certainly are scientific

studies that suggest that invasive species, such as zebra mussels, may contribute, as well as dredging of sediments. We know there are quite a bit of nutrients in the system, including in the sediments, and the dredging may, some believe, contribute to the growth of algal blooms. But there is not scientific agreement as yet on those questions.

Mr. McKinley. So when you come up with the standard, with the little communities, Toledo being much larger than many, and you talk about getting its surface water from ponds and the like, how are they going to be able -- what costs are they going to face, a small community of 5,000 people or 2,000 people, compared to Toledo, to be able to achieve the standard? Is there going to be any assistance you are going to recommend?

Mr. <u>Grevatt.</u> Yes, sir. In particular through the State Drinking Water Revolving Loan Fund, we will be providing resources through the States to communities. And the drinking-water SRF is focused, as I said, primarily on small communities.

Mr. McKinley. And you are talking through the State Revolving Fund?

Mr. <u>Grevatt.</u> I am sorry?

Mr. McKinley. The State Revolving Fund?

Mr. Grevatt. Yes, sir.

Mr. McKinley. Yeah. But I haven't dissected the President's budget, but last year he took that and cut that almost in half, the

amount of money coming through the SRF. So I haven't seen his -- do we have a reduction in the SRF this year?

Mr. <u>Grevatt.</u> There is an increase in the drinking-water SRF in the President's budget.

Mr. McKinley. Good. Thank you very much.

I yield back the balance of my time.

Mr. Shimkus. The gentleman yields back his time.

Just a note for the public and my colleagues. It looks like they will call votes in a few minutes. We will try to get through this panel and maybe the opening statements of the second panel. We will have to come back to move the bill after votes.

So, with that, I would like to recognize the ranking member of the subcommittee, Mr. Tonko.

Mr. <u>Tonko.</u> Thank you, Mr. Chair. And I had a opening statement that, with your indulgence --

Mr. <u>Shimkus.</u> Yeah. Let me ask unanimous consent that all opening statements can be submitted for the record. I got that request from the chairman, too.

So, without objection, so ordered.

[The prepared statement of Mr. Tonko follows:]

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[The prepared statement of the chairman follows:]

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Mr. Tonko. Thank you so much.

And, Dr. Grevatt, thank you for being here today to testify again on this very important topic.

The problem of algal toxins touches on the biggest challenges facing our water utilities today: source-water protection and infrastructure funding.

H.R. 212 would require EPA to identify the factors that cause harmful algae to proliferate and express toxins. Can you identify some of those factors for us?

Mr. <u>Grevatt.</u> Certainly. Among the most important are nutrients in the system, availability of light, light intensity in particular, warmer temperatures. Water flows are also very important in promoting the growth of toxic algae blooms.

Mr. Tonko. Thank you.

And the President's budget describes multiple efforts that the administration will undertake to address these factors, including funds for EPA to enhance its efforts to address nutrient pollution through partnerships with USDA and States in the high-priority watersheds.

Excessive levels of nitrogen and phosphorous in water sources create prime conditions for excessive algal growth. Nutrient pollution has been identified by your agency, the International Joint Commission, and other stakeholders as one of the key factors driving

proliferation of harmful algal blooms.

Can you describe briefly what EPA's efforts to address nutrient pollution would entail?

Mr. <u>Grevatt.</u> Yes, sir. So we will be working with partners at the State and local level to make sure that we are addressing nutrient pollution comprehensively, thinking about the various sources of nutrients, both in large communities and small, in rural communities and urban communities, to make sure that we are minimizing the inputs of nutrients into systems like western Lake Erie that promote the growth of algal blooms.

Mr. <u>Tonko</u>. Thank you.

And is addressing nutrient pollution important if we are indeed to address harmful algal blooms?

Mr. <u>Grevatt.</u> We believe so, yes.

Mr. Tonko. Okay.

And H.R. 212 would also require EPA to identify feasible treatment options to address and manage the risks posed by harmful algal blooms.

You testified in November that preventative measures are the preferred and most effective approach to managing harmful algal blooms. Do you think it is important that preventative measures be included in EPA's consideration of tools to address and manage these risks?

Mr. <u>Grevatt.</u> We think it is very important that we at EPA think both about treatment at drinking-water supplies as well as prevention

of the growth of algal blooms in the first place. Yes.

Mr. Tonko. Thank you.

And later today I expect that the subcommittee will adopt an amendment to clarify that treatment options include those preventative measures. As we will hear from the second panel, treatment options to address harmful algal blooms can be very expensive. Some water systems may have to move their intake pipes or find alternative water sources -- a very expensive undertaking. This will only exacerbate the high cost of replacing our crumbling drinking-water infrastructure nationwide.

H.R. 212 envisions EPA entering into cooperative agreements with States and affected water systems, though it does not provide funding for such agreements. The President's budget request includes significant funding for drinking-water infrastructure, but that funding is already far outpaced by need.

My question: Does EPA currently have funding for cooperative agreements and other activities to address the risks of harmful algal blooms?

Mr. <u>Grevatt.</u> We have funds, particularly through the State Drinking Water Revolving Loan Fund, to support small communities. We don't currently have a funding source that would support cooperative agreements as identified in the bill.

Mr. Tonko. Well, let me just state that this bill addresses an

important problem, but its impact will be indeed limited if we don't provide funding. I hope my colleagues will join me later today to ensure that funds are available to implement the strategic plan and enter into cooperative agreements.

And I thank the chair for calling this hearing.

And, Mr. Chair, I yield back.

Mr. Shimkus. The gentleman yields back his time.

We have had a few other Members join.

Anybody on the Republican side wishing to ask additional questions?

Mr. Murphy is recognized for 5 minutes.

Mr. Murphy. Thank you.

Appreciate you being here, Doctor.

With Toledo, you said it was forced to go without tap water for 3 days because of the algal bloom. And what was the economic impact of shutting down that drinking-water system for that period of time? Do you know?

Mr. <u>Grevatt.</u> So I am not familiar with an estimate for the city of Toledo. I can say that in Charleston, West Virginia, which was a very different situation and a longer duration, the Governor of West Virginia, Governor Tomblin, estimated the economic impact of that incident as over \$70 million.

Mr. Murphy. I heard that for Toledo it was \$1.5 million just in

that water system alone.

Now, do you know that Bowling Green, Ohio, also obtains its municipal water from Lake Erie?

Mr. Grevatt. Yes, sir.

Mr. Murphy. And they were able to maintain that tap water. You are aware of that. Do you know why?

Mr. <u>Grevatt.</u> So we know that conventional treatment technologies, if optimized, are effective in removing algal toxins from source waters for drinking water. And it may be that in the case of the Toledo last summer the concentration simply overwhelmed what they could deal with at their intake.

Mr. <u>Murphy.</u> But they have a different system for water purification than the Bowling Green facility has. What was the technology? Do you have any idea what that technology difference was that they had at bowing Green?

Mr. <u>Grevatt.</u> I am not familiar with the technologies that were present in Bowling Green, so --

Mr. Murphy. Okay. It was activated carbon.

And you may be aware -- I have some here -- 3 to 5 grams of this, so about a sugar packet, has as much surface area as a football field. And this is much more than 3 to 5 grams.

I am wondering if this is something that EPA is studying at all, in terms of looking at activated carbon as a source to help us with

clean water systems?

Mr. <u>Grevatt.</u> Absolutely. And the Toledo system also used activated carbon last summer during the event.

Mr. <u>Murphy</u>. And this is something that, as we review these issues -- for example, Mr. Latta's bill -- that the EPA will continue to look at, of how we can use activated carbon more in this process?

Mr. Grevatt. Absolutely.

Mr. Murphy. Good.

Then that is all I have to ask, Mr. Chairman. Thank you.

Mr. Shimkus. The gentleman yields back his time.

Is there anyone else on the minority side seeking time to ask questions?

The gentlelady from California is recognized for 5 minutes.

Mrs. <u>Capps.</u> I wanted to say thank you first for holding this very important topic as a hearing.

Mr. Shimkus. You are very welcome.

Mrs. Capps. And thank you, Dr. Grevatt, for your testimony.

And as has been said and I just want to state, a growing body of scientific research is pointing to toward global climate change as a primary factor in the emergence and proliferation of harmful algal blooms. Warming waters, elevated carbon dioxide levels, ocean acidification, rising sea levels, extreme weather events are all linked to manmade climate change, and all contribute to harmful algal blooms.

Addressing these risks is going to require both mitigation and adaptation. EPA is working with States to help address the many facets of this problem.

Dr. Grevatt, could you describe just briefly -- I have a series of questions -- some of these efforts?

Mr. <u>Grevatt.</u> Certainly.

So, within my office, we support efforts on climate adaptation, in particular for the water sector, helping both storm-water utilities and drinking-water utilities to prepare for things like flood events, drought events, extreme weather events, whether it be hurricanes or other things. So very much we are focused on helping to build resiliency of local drinking water and wastewater treatment systems.

Mrs. <u>Capps.</u> In your testimony, you mentioned there are effective water treatments available to remove these toxins but that these techniques are very expensive to implement. Am I correct on that? Just a "yes" or a "no."

Mr. Grevatt. Some of those, yes, can be expensive.

Mrs. <u>Capps.</u> And with climate change expected to make these events more frequent and severe in the future, will these adaptation costs increase or decrease over the coming years and decades?

Mr. Grevatt. They are likely to increase for many systems.

Mrs. <u>Capps.</u> And following along that, do you think the current level of Federal funding and resources is adequate to properly mitigate

the future impacts of harmful algal blooms?

Mr. <u>Grevatt.</u> We very much are going to focus on using the available resources we have as efficiently as possibly to meet this challenge.

Mrs. <u>Capps.</u> Well, but would you say the next sentence if you can?

Do we have enough? Are we going to need more as time goes on?

Mr. Grevatt. I can't comment on that.

Mrs. <u>Capps.</u> Okay.

While developing a strategic plan would certainly be helpful, I am concerned that H.R. 212, our House resolution, does nothing to help local communities actually implement the changes necessary to prevent these events in the future.

And, Mr. Chairman, I am going to be introducing the Water Infrastructure Resiliency and Sustainability Act soon. And it would increase funding for local water agencies so that they can actually implement mitigation and adaptation strategies. They know what needs to be done, but if you don't have the wherewithal, you can't do it.

H.R. 212 only takes the first step, and I believe there is much more that needs to be done. That is not by way of saying that I don't agree with this hearing, but I hope this is just the first step, because we need to have further hearings on the issue as to implementation. And that is a direction I hope we can go, because, as has been stated, this is a problem that is only expected to get worse in the years and

decades to come. And I think our next generations, we owe it to them to start doing this now.

Thank you, and I yield back.

Mr. Shimkus. The gentlelady yields back her time.

Anyone else on the majority side seeking time?

And for my colleagues, we are going to recess after the first panel. And then we will come back and we will empanel the second panel, finish that testimony. Then we will move into the markup, just for information.

The chair recognizes the gentleman from California, Mr. McNerney.

Mr. McNerney. Thank you, Mr. Chairman.

I am going to change the subject slightly and talk about groundwater in California, if you don't mind too much. We are in the third year of a very severe drought. At the same time, California is the third largest oil producer in the United States, but a recent article in the San Francisco Chronicle highlighted that California aquifers have been contaminated by drilling operations.

It is my understanding that the EPA has given California until tomorrow to present additional plans on how to fix the problem. EPA Regional Administrator Jared Blumenfeld said, and I quote, "If there are wells having a direct impact on drinking water, we need to shut them down now."

Are there any wells that the EPA is targeting to shut down?

Mr. <u>Grevatt.</u> So EPA is working very closely with the State of California as they develop this plan that you just mentioned that they will be submitting tomorrow, which is designed to make sure they are fully in compliance with the Safe Drinking Water Act on their underground injection control program within 2 years.

Mr. McNerney. Okay.

Is there anything that triggers the EPA to be more involved in overseeing and monitoring the Safe Water Drinking Act funds in areas that are experiencing drought?

Mr. <u>Grevatt.</u> We certainly are working, as I mentioned, with communities both large and small that are facing drought challenges. And so we are focused on trying to support those communities in becoming as resilient as possible to drought, yes.

Mr. McNerney. Okay.

And last December 2014, there is a letter that also mentions the EPA has strengthened oversight of the oil and gas underground injection control program. What has the EPA done with that new authority?

Mr. <u>Grevatt</u>. So there is not a new authority, but we have been working, as I said, with the State of California to make sure that their program that they are implementing, underground injection control program, is in full compliance with the Safe Drinking Water Act. We have been working very cooperatively with them on that.

Mr. McNerney. Okay.

Well, apparently, there is a 1983 agreement between the EPA and the California regulators, and the agreement listed some specific aquifers considered exempt. By "exempt," that means the process can inject wastewater into the aquifer. But there are two signed copies of this agreement; one has a list of 11 aquifers that are exempt, and the other doesn't have those aquifers listed.

Could you explain that or give me some insight?

Mr. <u>Grevatt.</u> Yeah. So that 1983 document is actually the original primacy application from the State of California, which -- EPA granted primacy for them to implement the underground injection control program.

And so, as we have worked with the State of California, we have discovered there has been some confusion with the historical record on this. So the focus of our work with the State of California going forward has been to make sure that the aquifer exemptions are implemented properly in the State of California.

Mr. McNerney. Okay. This is an area that I think needs a lot more scrutiny, and I appreciate your consideration.

I yield back.

Mr. Shimkus. The gentleman yields back his time.

Now I will recess this hearing and return -- we will ask my colleagues return as promptly as possibly after the last vote, and then we will empanel the second panel.

And we want to thank you, Dr. Grevatt, for being here. We have seen you now, you know, what, twice in the last 4 months. And we look forward to working with you. Thank you very much.

[Recess.]

## RPTR DEAN

# EDTR HOFSTAD

[11:50 a.m.]

Mr. <u>Shimkus</u>. We are going to call the hearing back to order and welcome our second panel and continue to move through the process.

So thank you for coming. Thank you for many of you or your associations being here, you know, last fall or last November, I guess.

And we will go in order of the table. I will do the introduction and then ask you to do your 5-minute opening statement. Your full statement is submitted for the record.

So I would like to first introduce Mr. Mike Baker, chief, Division of Drinking and Ground Waters from the Ohio Environmental Protection Agency.

Thank you for your service. We look forward to hearing your testimony. You are recognized for 5 minutes.

STATEMENTS OF MICHAEL BAKER, CHIEF, DIVISION OF DRINKING AND GROUND WATERS, OHIO ENVIRONMENTAL PROTECTION AGENCY, ON BEHALF OF THE ASSOCIATION OF STATE DRINKING WATER ADMINISTRATORS; AUREL ARNDT, CHIEF EXECUTIVE OFFICER, LEHIGH COUNTY AUTHORITY (PENNSYLVANIA), ON BEHALF OF THE AMERICAN WATER WORKS ASSOCIATION; AND KRISTY MEYER, MANAGING DIRECTOR, AGRICULTURAL, HEALTH, AND CLEAN WATER PROGRAMS, OHIO ENVIRONMENTAL COUNCIL

#### STATEMENT OF MICHAEL BAKER

Mr. <u>Baker.</u> Thank you, and good morning, Mr. Chairman, Ranking Member Tonko, and subcommittee members.

My name is Michael Baker. I am administrator of the public drinking-water program in the State of Ohio and also a recent past president of the Association of State Drinking Water Administrators, on whose behalf I am testifying here this morning.

Ohio EPA Director Craig Butler testified before this subcommittee in November of 2014 on the subject of harmful algal blooms and, in particular, Ohio's experience with the August 2014 incident in Toledo, when nearly a half a million people were told they could not drink the water due to elevated levels of microcystin.

Today I will frame my remarks in the context of the various

components of H.R. 212 but in consideration of the lessons learned during the events in Toledo and the activities we have undertaken since that event.

We support the bill's emphasis on a strategic plan. It has become abundantly clear that solving the problems associated with harmful algal blooms needs to be done holistically and thoughtfully rather than piecemeal. It is appropriate to establish and update a list of harmful cyanotoxins and associated information on their toxicity. Such a list will drive the work undertaken in other parts of the strategy, such as refining the health assessments, analytical methods, and treatment effectiveness. We also think it is reasonable that priority be placed on those toxins most likely to occur in drinking water at levels of concern.

Assessing adverse health affects from cyanotoxins is the most critical element of the bill. At present, individual States are forced to develop their own health benchmarks. We need a national approach based on sound science and welcome EPA-derived health advisories.

There are a host of assumptions and policy ramifications that need to be considered in establishing an advisory level, and States need to be engaged in those considerations before a number is finalized. And I want to knowledge Dr. Grevatt and EPA for their support of Ohio and for recently engaging a small group of State representatives for deliberation on these important decisions.

Additional information on the ecology of cyanobacteria, including what triggers them to produce toxins, is needed. Guidance is needed on strategies for early detection of blooms and the appropriate frequency of monitoring at public water systems. This is also an area in which consultation and coordination with agencies such as NOAA and NASA is essential.

We agree with the bill's emphasis on analytical methods. More work is needed to evaluate the capabilities and applicability of all appropriate analytical methods and how they can be used in tandem with one another. The determination of appropriate analytical methods also relates to how health advisories are expressed -- for example, if the level for a single category for microcystin, Microcystin-LR, or if it includes Mycrocystin-LR and equivalents.

We are fortunate that cyanobacteria and associated toxins are generally removed with conventional surface water treatment at our public water systems. But it is costly and in no way a straightforward problem, and ongoing research and guidance on treatment technologies is needed.

We appreciate the bill's emphasis on EPA providing assistance to affected States and water systems through cooperative agreements. This is an essential role and one I believe EPA strives to fulfill with available resources. We would respectfully point out that there is an important role for Congress in this regard to adequately fund EPA,

States, and water systems in support of our collective efforts.

The bill properly includes a requirement for consultation with other Federal agencies, State public water systems, international agencies, research and academic institutions. My experience with the Toledo water system this past summer showed that it is a team effort comprised of Federal, State, and local experts as well as academic institutions, and that was needed to address the challenges we faced in Toledo.

Finally, I will note that the most reliable and, in the long run, the most protective of public health is a multibarrier approach. That starts with protecting sources of drinking water. We believe it is extremely important that we collectively stay focused on the root cause of algal blooms. These problems are ultimately the result of point and nonpoint sources of nitrogen and phosphorus pollution.

In conclusion, we strongly believe that Federal, State, and local leaders need to work closely together in partnership to quickly advance the science, to detect and effectively treat cyanotoxins in drinking water, to scientifically derive safe levels. We also need to stay focused on the root cause of the problem.

We believe the steps articulated in H.R. 212 are an appropriate series of actions to be taken at this time, and ASDWA and the States look forward to working with you in tackling this challenging issue.

Thank you for the opportunity to testify, and I look forward to

Mr. Shimkus. Thank you very much.

Now I would like to recognize Mr. Aurel Arndt, the chief executive officer of Lehigh County Authority in the State of Pennsylvania, on behalf of the American Water Works Association.

And before I recognize you for 5 minutes, he was accompanied early this morning by a colleague of ours, Mr. Charlie Dent, so we don't want to hold that against him as he gives his testimony.

But it was good to see Charlie walking through our chamber to say hi to you. So, with that, sir, you are recognized for 5 minutes.

### STATEMENT OF AUREL ARNDT

Mr. Arndt. Thank you, Mr. Chairman.

Good morning, members of the subcommittee. My name is Aurel Arndt. I am chief executive officer of Lehigh County Authority, based in Allentown, Pennsylvania. I am also chair of the American Water Works Association's Water Utility Council. I deeply appreciate the opportunity to offer input on the critical issues surrounding algal blooms, cyanotoxins, and drinking-water sources and H.R. 212, the Drinking Water Protection Act.

As the chairman said, I am here on behalf of the American Water Works Association today. Established in 1881, AWWA is the word's oldest and largest nonprofit scientific and educational association dedicated to water. Our utility members provide safe and affordable water every day to more than 70 percent of the American population. My remarks today reflect the experiences and perspectives of AWWA's nearly 50,000 members.

As you know, we are brought here today largely due to the algal bloom in Lake Erie last August that resulted in the formation of a toxin known as microcystin, requiring the city of Toledo to issue a do-not-drink advisory to its customers. We also know that other water systems that rely on lakes and reservoirs for their drinking-water

supplies have also had to wrestle with algal blooms.

The formation of algal toxins is very complex and not fully understood. Similarly, the same can be said for the possible human health effects of cyanotoxins. But one thing is very clear: The problem is always associated with excessive amounts of nitrogen and phosphorus in the water.

According to the U.S. Geological Survey, nonpoint sources, predominantly runoff and deposition from the air, account for 90 percent of the nitrogen and 75 percent of the phosphorus in our waters. We believe the most sensible strategy for reducing the scope and severity of this problem is bringing nonpoint sources of nutrient pollution under more effective management.

There are some Federal programs that have a bearing on nutrients in our water, such as the conservation title of the farm bill. However, these conservation programs are largely voluntary in nature.

Drinking-water treatment technology exists to allow utilities to remove toxins produced by algal blooms; however, this technology is very expensive to install and maintain. In addition, removing these toxins after they occur does nothing to protect the ecosystem and the people within the watershed.

As a utility manager, the protection of public health is always my most important priority, as it is for American Water Works and all of its membership. Even before this summer's event, AWWA had taken

steps to help water systems at risk from algal events. They include the following: first, developing and distributing information to assist water systems in anticipating and responding to source-water challenges, including cyanobacterial blooms and cyanotoxins. Also, AWWA is preparing a water utility manager's guide to cyanotoxins, which will be published later this month.

Having said these things, utility managers can't solve this problem on their own. We do need Federal help. Federal agencies, including EPA and USDA, should use existing authorities to give much higher priority to nutrient-reduction projects that protect downstream drinking-water supplies. For example, the Clean Water State Revolving Loan Fund and the farm bill conservation programs could be targeted and used more effectively to reduce nutrient pollution and protect our drinking-water sources.

With regard to drinking-water regulation, we support the methodical, science-based standard-setting process in the Safe Drinking Water Act. EPA has already placed some cyanotoxins on its Contaminate Candidate List and has indicated that it will use the Unregulated Contaminant Monitoring Rule process to help determine whether regulation of cyanotoxins would afford a meaningful opportunity to protect public health. We certainly support these efforts.

We applaud the goal of H.R. 212 to have EPA develop a strategic

plan to protect people from cyanotoxins when they appear in source waters. EPA has already begun work on developing health advisories for two of those, as we heard earlier. We also commend the bill's author, Congressman Latta, for not disrupting the effective, established processes in the Safe Drinking Water Act for determining whether or not a substance should be regulated.

We have offered the technical expertise of our membership to Congress and EPA, as we all continue to work to protect the public from potential health threats in the environment. However, I must emphasize, we also ask that Congress consider ways to increase the effectiveness of nonpoint-source pollution programs.

They should include discussing whether nonpoint pollution should be brought under the jurisdiction of the Clean Water Act and, if so, the appropriate way do so. To reemphasize what we said in similar testimony last fall, we believe it would not be equitable to put an additional burden on water systems and their customers to solve problems if the most significant sources of nutrient pollution are not also asked to do more.

In closing, I would like to thank the subcommittee for the leadership it is taking today in holding this hearing. I would be happy to answer any questions, both today and in the future. Thank you.

[The prepared statement of Mr. Arndt follows:]

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Mr. Shimkus. Thank you very much.

Now I would like to turn to Ms. Kristy Meyer, who is representing the Ohio Environmental Council.

Again, you are recognized for 5 minutes. Your full statement is in the record.

#### STATEMENT OF KRISTY MEYER

Ms. Meyer. Thank you. And good afternoon, Mr. Chairman, Mr. Ranking Member, and members of the subcommittee. I want to thank you for allowing me to testify before you today on the Drinking Water Protection Act, introduced by the Honorable Bob Latta.

My name is Kristy Meyer, and I am the managing director of agricultural, health, and clean water programs with the Ohio Environmental Council. Our organization, the OEC, is a 46-year not-for-profit advocacy organization whose mission is to secure healthy air, land, and water for all who call Ohio home.

On behalf of the OEC, I would like to thank Representative Latta for introducing this piece of legislation and this subcommittee for holding this hearing today. I have with me an updated version of my testimony. I apologize that you don't have it, but I was given very little time to turn it around.

I will never forget Saturday, August 2, 2014. At 8 a.m., my good

friend from Toledo called me. She was talking so fast. She told me that Toledo area residents weren't able to drink their water. She told me she had a cup of coffee that morning and used tap water and asked me if she would be okay. My head started spinning thinking about this news -- all those people without drinking water. And boiling that water would further concentrate those toxins.

Imagine parents telling their children that they can't drink the water or that they should not touch the water, or hospital staff trying to ensure the safety of their patients, or local mom-and-pop businesses temporarily closing their doors to protect their customers. While thankfully nobody was hurt during this emergency, some small businesses unfortunately paid the ultimate price.

How could this be? A modern American city in a first-world nation dealing with third-world water problems. This news spread like a wildfire, reaching the furthest parts of the globe, giving the U.S., Ohio, Toledo, and Lake Erie a black eye.

Clean, potable water is essential to life. And, according to the U.S. EPA, there is not one State in this Nation that has not experienced a harmful algal bloom. And, in fact, in Ohio, Lake Erie is not the only lake that has experienced a harmful algal bloom. In 2010, more than 10 inland lakes also experience a harmful algal bloom.

So if this bill is enacted, as the U.S. EPA moves forward in developing this report it is essential that the Agency take into

consideration the whole-body burden of these toxins when establishing recommendations for standards, which should, along with recreational activities, consider fish and shellfish consumption as part of what is considered for other purposes.

It is vitally important to ensure safe drinking water, but we cannot continue to diagnose the symptoms and expect this problem to go away. According to the Ohio Phosphorus Task Force, we need to, in Ohio, slash nutrients flowing into Lake Erie by 40 percent at least. Members of the Ohio Phosphorus Task Force included the Ohio Environmental Council, Federal and State local agencies, the Ohio Farm Bureau, Ohio AgriBusiness Association, and the Ohio Certified Crop Advisors.

Achieving this 40-percent-reduction goal means that we need to protect our waterways and wetlands. Meandering streams can help assimilate nutrients, allowing nutrients and sediments to fall out of the waterway as it flows down the river, whereas straightened ditches move the nutrients quickly into the next receiving body -- and in Ohio, such as the Maumee and then Lake Erie.

We also must slash phosphorus from all sources, such as wastewater treatment plants and sewer overflows and farm-field runoff. We cannot, however, allow for the wastewater treatment plants to bear the burden of this reduction alone, especially when, according to the Ohio Phosphorus Task Force, the major culprit in Ohio in Lake Erie is

farm-field runoff. We must ensure that each farmer samples their soil using precision soil-sampling techniques for the appropriate amount of fertilizer to be applied as well as develop and implement a nutrient management plan, at the very minimum.

So, in conclusion, in Ohio, we always say that Lake Erie is the canary in the coal mine for the Great Lakes region. The weekend-without-water crisis is a wakeup call not just for Ohio but for our Nation. Our waterways are at risk from excessive nutrient pollution. We must address this problem for the health and safety of our children and grandchildren. And this bill will help ensure safeguards are in place to protect our families and future generations. But without the end goal being the protection and attainment of water quality in our own waterways, I fear we will only continue to treat the symptoms.

The OEC thanks Representative Latta once again and this subcommittee for holding this hearing today and allowing me to testify before you. I am happy to answer any questions you may have.

[The prepared statement of Ms. Meyer follows:]

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Mr. Shimkus. Thank you very much.

And I would like to recognize myself 5 minutes for the questions of the panel, and my first question will go to Mr. Baker.

Based on the lessons learned from this event last fall, do you perceive this bill to be helpful to improve protocols for testing and data analysis?

Mr. Baker. Thank you, Mr. Chairman.

Yes, I do think that it will. As I stated in my testimony, it covers all the bases of needs that we have identified, first off, by establishing a national health advisory number so that States aren't developing those numbers on their own; developing, analyzing, giving us robust analytical methods and further information on treatment technologies. So yes.

Mr. <u>Shimkus</u>. What are the analytical methods that you see that are critical from the previous experiences with algae and source water?

Mr. <u>Baker</u>. I think that there are a couple that we want to be looking at. The State of Ohio has utilized the ELISA ADA methodology, which looks at total microcystin, which we believe is important. And it is also relatively quick and relatively inexpensive method so that public water systems can monitor what is in their source water, the effectiveness of their treatment, and the water that they are producing.

But we also believe that there may be more robust methods that

are appropriate when making determinations on final safety of water.

Mr. Shimkus. Thank you.

And, Mr. Arndt, in your testimony, you state that drinking-water utilities would also appreciate technical assistance and cooperative agreements provided for in H.R. 212 to aid in managing the cyanotoxin risk.

Can you elaborate a little bit more?

Mr. <u>Arndt.</u> Yes. We would value and welcome any new research findings with regard to detection, monitoring, and practical and affordable treatment technologies. Some of our utilities and research entities associated with our association would be very interested in helping to pilot-test such technologies and methods.

We also would be appreciative of additional research to develop a more thorough understanding of why and how these blooms occur. There are multiple moving parts that have an effect on the generation of cyanotoxins. Such information could perhaps, in turn, lead to the development of early-warning technologies that could be applied by water systems across the country.

Mr. <u>Shimkus</u>. So the association considers this bill helpful in moving the ball forward on the problems addressed?

Mr. <u>Arndt.</u> Say it again. I am sorry.

Mr. <u>Shimkus</u>. So your association considers this as a helpful legislation to move us forward in trying to obtain the goals that you

have outlined?

Mr. <u>Arndt.</u> Yes, we do. It is not by itself the solution to all of the issues, but certainly it is something that should facilitate answering those needs.

Mr. Shimkus. It is a step in the right direction, let's hope.

That is all the questions I have. Does anyone want to use the balance of my time for a question or two?

If not, I will yield back my time, and then I will ask the ranking member, Mr. Tonko, for 5 minutes.

Mr. <u>Tonko</u>. Thank you, Mr. Chair.

Welcome to our panel.

Last November, we discussed the crisis in Lake Erie, where a toxin-producing algal bloom forced the closure of a major drinking-water system. Half a million people in Toledo, Ohio, had no safe tap water for several days. Treating pollution after it has entered our drinking-water sources is obviously costly and inefficient.

Mr. Baker, what funding did the State of Ohio provide to water utilities to respond to the cyanotoxin emergency of last year?

Mr. <u>Baker</u>. Thank you, Ranking Member.

Immediately following the events in Toledo, we made \$50 million available for zero-interest loans for water systems to install additional treatment or avoidant strategies, such as new intakes or

storage, and we received applications in weeks to exceed that amount.

Another thing that we did was we made up to \$1 million available in grants for water systems to improve their early-detection and analytical capabilities.

Mr. <u>Tonko</u>. So \$50 million, and you said you received applications in excess. So that amount wasn't limited by the need of water utilities, but it was more about what the State had available?

Mr. <u>Baker</u>. It was based upon what we had available and what we could make available out of existing SRF funding.

Mr. <u>Tonko</u>. Okay. Thank you.

And Ohio is far from the only State affected. Next year, Ohio or other States may not have that funding available.

Mr. Arndt, without funding from States or the Federal EPA, would it be difficult for water utilities to absorb the cost of treating for cyanotoxins?

Mr. Arndt. Water utilities use a multiplicity of sources to fund their infrastructure and technology that is necessary to provide treatment, and a key part of that is the Federal funding that is made available through the State revolving loan funds. And so, yes, it is an important tool, particularly for smaller systems, as was stated in the earlier hearing.

And what AWWA has supported is developing a broad array of financing tools, recognizing that not every tool fits every need.

Mr. <u>Tonko</u>. Uh-huh. But in terms of that funding mechanism, the difficulty remains in terms of treating the water supply. So would that be passed on to consumers?

Mr. <u>Arndt.</u> Water systems are largely funded by borrowed funds which need to be at some point retired, and interest needs to be paid on that funding. And the source of revenues for most every water system -- and it has been the policy of our association to support the cost of running water systems from the revenues derived from users. So, yes, those revenues would ultimately be derived from customers.

Mr. <u>Tonko.</u> Unfortunately, the algal toxins are just one of the contamination issues associated with nutrient pollution. Nitrate is another serous concern. Nutrient pollution required a municipal water utility to invest over \$4 million -- millions of dollars in a nitrate-removal facility. Operating that facility at peak capacity costs the utility some \$7,000 a day. This summer, the utility spent over \$500,000 on nitrate removal alone.

And the problem is only getting worse. That utility has now said that they will be able to meet their customers' water demands without regulation of pollutants in their source water.

So, Mr. Arndt, as nutrient pollutant levels continue to rise, should we expect treatment costs to go up for many of our municipal water utilities?

Mr. Arndt. I think it is clear that there is a correlation

between enhanced or increased treatment requirements and the investment in facilities, not just in the capital but also for the operation of those facilities, that the result of that is increased user charges.

Mr. <u>Tonko.</u> Uh-huh. And can huge capital costs like building a new \$4 million plant be absorbed by water utilities?

Mr. <u>Arndt.</u> Again, please?

Mr. <u>Tonko.</u> Sure. Can huge capital costs, like that of building a new \$4 million plant, be absorbed by our water utilities?

Mr. <u>Arndt.</u> That is very much a question which is unique to each individual system and its circumstances. Certainly, there are systems that have challenges because of the affordability of water rates already, and so, in those cases, any added costs are certainly just going to add to that burden and make it more onerous. And there are other systems that certainly may be able to handle it.

Mr. <u>Tonko</u>. Has AWWA done any estimates on what might be needed over the next decades or 2?

Mr. Arndt. Yes, we have. We prepared a report a couple years ago called "Buried No Longer" which evaluated the water-main replacement costs that we will face in the country over the next 25 and 40 years. And the estimate for the next 25 years was that we would have to spend across the country approximately \$1 trillion for the replacement of aged water mains, and over 40 years that number would

be about \$1.7 trillion.

Mr. Tonko. Thank you very much.

I yield back, Mr. Chairman.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes, I think, the gentleman from Ohio for 5 minutes.

Mr. <u>Latta.</u> Well, thanks again, Mr. Chairman. Thanks again for holding the hearing today.

And, again, thanks for our panel for appearing today and presenting testimony.

And, Mr. Baker, if I could ask the first couple questions to you. But, first, I just want to again thank Ohio EPA and the great coordination that went on, again, as I mentioned to Dr. Grevatt early this morning, about what had happened with U.S. EPA working with Ohio EPA and, of course, all the departments and agencies in Ohio working together, from the Department of Natural Resources, Department of Agriculture, and of course the city of Toledo and all the other local governments that were involved. So I just want to thank you again.

And my first question is on -- Microcystin-LR is believed to be one of the most common and toxic of the algal toxins. Given the current gaps on health-effects data, is it possible there may be other algal toxins or variants that are of even greater health concern that aren't known yet due to these gaps?

Mr. <u>Baker</u>. Thank you, Representative Latta.

We know that there are a number of different types of cyanotoxins. We know that there are tens of different types of variants of each of those toxins, of which there is research out there that indicates that some of them are more toxic than LR.

We do think that there are significant gaps that need to be filled on that. I think that is why the approach in H.R. 212 of establishing a list of these potential toxins and collecting information, compiling information on their relative toxicity is a critical first step.

Mr. <u>Latta</u>. Thank you.

And, also, can you discuss how you believe the bill tackles and helps these long-term issues that we could have, especially with these unknown and these gaps that could be occurring out there?

Mr. <u>Baker</u>. Well, as I mentioned, the first step is just understanding what the total universe is of the toxins that are out there and what the potential health effects are, and then using that as a basis for developing further information on what their actual human health toxicological impacts are, analytical methods for even testing for them to see if they are present in our water supplies, and then certainly advancing treatment technologies to address them.

So I think, logically, those are the approaches that we should be taking to address toxins in drinking water.

Mr. <u>Latta</u>. And, finally, how do the water treatment facilities

and the Ohio EPA treat drinking water in which testing samples indicate multiple variants of microcystin, given that different variants have different toxin potency?

Mr. <u>Baker</u>. Thank you, Representative.

Our approach in accordance with Ohio's strategy is that we look at the total microcystin, and we know that there is research out there that indicates that some of the variants of microcystin may be less toxic than LR, but there are studies out there that would indicate that there are some variants that are more toxic than LR.

So our recommended approach is that, where we have standards and we have analytical methods to look for those variants, we should be looking at not only Microcystin-LR but their equivalents and looking at those as a whole so that we are most protective of public health.

Mr. Latta. Thank you.

Mr. Arndt, in your testimony, you state that it was wise in the legislation that we have today to ask for a strategic plan for addressing cyanotoxins rather than requiring a specific date for final human health effects findings, monitoring analytical methods, and desired treatment options, and the like.

Could you expound on that a little bit, why you think that is important?

Mr. <u>Arndt.</u> I would love to, but I have to acknowledge that those areas are not my area of expertise. But our association would be happy

to provide you with information that will expound on that and explain that further.

Mr. <u>Latta.</u> Okay. Well, thank you. If you could get that to the committee, we would appreciate it.

[The information follows:]

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Mr. <u>Latta.</u> And then, Ms. Meyer, if I could just in my remaining time ask, you know, as you heard this morning with Dr. Grevatt and what they are looking at on establishing the health advisories and getting the information -- because, of course, with Ohio using the World Health Organization and other States doing the same -- what do you see as the importance of having that standard set by the EPA for the health advisory instead of having the World Health Organization?

Ms. Meyer. Thank you, Congressman.

Well, I certainly think it is very important that the U.S. EPA sets that standard. They are the ones that are consistently looking at the pollutants and the toxins that are in our air and in our water and determining what a healthy level is for our body.

And recognize that right now they are taking a look at some health criteria and looking at the whole-body burden. So I think it is essential that the U.S. EPA be the leader in establishing these standards.

Mr. Latta. Thank you.

Mr. Chairman, my time has expired, and I yield back.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the ranking member of the full committee, Mr. Pallone, for 5 minutes.

Mr. Pallone. Thank you, Mr. Chairman.

I wanted to ask some questions of Mr. Arndt.

First let me say, harmful algal blooms and cyanotoxins present a significant threat to safe drinking water. And I recognize that working to overcome this issue has not been easy or cheap for both States and drinking-water systems, and I applaud the efforts you have made.

The bill, H.R. 212, would continue us on this path forward, requiring EPA to draft a strategic plan for addressing the problem, providing important guidance to States and water systems, and entering into cooperative agreements.

So, Mr. Arndt, do you see these as positive steps forward, first of all, you know, the bill and what the bill is suggesting?

Mr. <u>Arndt.</u> I am a firm believer in developing a plan whenever attempting to address any complex undertaking. And it seems to me that the framework that is established within H.R. 212 represents an outline of a good plan and effort that can help us to answer the unanswered questions and obtain the information necessary to deal with these threats.

Mr. Pallone. Okay. Thanks.

But the plan is only going to be effective if it is implemented.

And, as we heard from the first panel, the EPA will need funding to implement the plan and enter into cooperative agreements.

So would you agree that EPA will need resources to implement this plan and enter into these kinds of agreements with States and water utilities?

Mr. Arndt. Well, I think that ultimately rests with the determination that comes out of the effort that is pursued as a result of the plan. There is no presumption in this legislation that there is a need for a specific regulation on cyanotoxins or cyanobacteria. That is the outcome of the work that would be accomplished under that plan. And so to state at this point that there will be a necessary investment is, I think, premature.

Mr. <u>Pallone</u>. Did you want to say something, Mr. Baker, on that?

Mr. <u>Baker</u>. I think that EPA is expending a lot of resources to address several of the key elements that are identified and they would be required to address in the strategy.

And doing the science behind health advisories and analytical methods -- I guess I would equate it to a bandwidth-type issue, as, you know, they can only do so much with the resources that they have available. And given the critical nature of the health threat that we face with this, more resources to advance the science quicker, I think, would be advantageous.

As well, as they enter into the real cooperative agreements with States and public water systems and providing direct technical assistance, it takes a substantial amount of resources, both at the Federal level, State, and the local level.

Mr. <u>Pallone.</u> Okay. I mean, I mentioned it because the President's budget includes significant funding for drinking-water

infrastructure through the State Revolving Fund and a new bond measure.

Let me go back to Mr. Arndt, and then I will ask Mr. Baker.

Would you think that the increased funding -- I mean, what would that kind of increased funding that the President's budget proposed mean for water utilities like yours, if that was made available?

Mr. <u>Arndt.</u> I would concede that there is certainly a significant need for water infrastructure funding in order to meet all of the challenges that are before us, including dealing with new and emerging contaminants that are going to be regulated. And, certainly, any sources the Federal Government can bring to bear can certainly assist in meeting that need.

Mr. Pallone. Do you want to answer that, too, Mr. Baker?

Mr. <u>Baker</u>. I would agree with Mr. Arndt that, you know, there are tremendous infrastructure needs at our public water systems, including specific needs to address harmful algal blooms. And the money available through the SRF is a tremendous tool to assist public water systems with doing that.

Mr. <u>Pallone</u>. Okay.

Well, the budget also calls for more concerted efforts to address nutrient pollution. So let me just ask Ms. Meyer, do you think that funding is important, as well? I will ask you the same question.

Ms. Meyer. Thank you, Congressman.

Certainly, I do think that the funding is important to address

the nutrient pollution. But there is always more need than there is funding. And so, you know, certainly, we have been doing a really good job at targeting that funding in the most, I would say, nutrient hotspots, but we need to continue to fully fund these programs to make sure that we are protecting our water quality.

Mr. <u>Pallone</u>. All right.

I mean, I would just say, Mr. Chairman, that I guess my concern is that we can't expect new work, like the strategic plan under this bill, to come out of existing funds that are already stretched thin. I mean, that is my whole point here.

Thank you, Mr. Chairman.

Mr. Shimkus. The gentleman yields back his time.

The chair now recognizes the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. McKinley. Thank you, Mr. Chairman, and also for Congressman Latta for bringing this to our attention and really shedding light on this whole subject of funding for our clean water and drinking-water programs.

I have heard now several people testify that the SRF actually got more money. And I just heard from the ranking member say that increased funding -- but I have here a report from the ASCE, the American Society of Civil Engineers, that the funding has been reduced to the SRF.

So I am just curious, did I -- Mr. Chairman, did I hear wrongly

that he said that they increased the funding for the SRF?

Mr. Shimkus. If the gentleman would yield.

Mr. McKinley. Yes.

Mr. <u>Shimkus</u>. I think the issue was there was a reduction in the last budget year, and the President has proposed an increase in this budget year.

Mr. McKinley. But the report I am getting from the American Society of Civil Engineers says it has actually been reduced by 2 1/2 percent over the previous amount that was put in. Because the President had markedly reduced the money for the SRF last year, and it was the Appropriations Committee who put it back in, put money back in, to get it to a higher level, and he has reduced it again, the President has reduced it again.

So I am concerned whether or not they understand the problem we are facing here. The American Water Works Association has already indicated they have over a trillion dollars -- they have identified over a trillion dollars of water infrastructure problems, but yet they keep reducing the amount of money available. Because most communities rely very heavily on the SRF. And, once again, we are going to have to see if we can pump money back up into that.

So, again, representing small communities -- I don't have a town in my district over 30,000 people. And when they are facing some of the problems that are going to be having to be addressed, with Latta's

issue or others', how are we going to get the money? What are some of the projections of how we might be able to find the money if the administration keeps slashing money out of the SRF?

Mr. Baker. Do you want --

Mr. McKinley. I don't care. Whoever wants to take that on.

Mr. <u>Baker</u>. Thank you.

Well, I think as I have indicated, our experience is that the SRF has been an extremely valuable tool in helping particularly small, medium-size public water systems and addressing their infrastructure needs and being able to provide them below-market funding and other incentives to address highly needed infrastructure repairs and replacements.

So we continue to support the funding of the SRF at levels that support that, and we appreciated seeing the increased level proposed this year.

Mr. McKinley. Yeah. I am glad the Congress put the money back in, but I hate seeing the fact that the administration now has reduced it and trying to represent through Dr. Grevatt that that was increased.

You know, when you look at the sheer numbers, we are talking about 50,000 to 55,000 treatment facilities across America, not all of which are getting surface water, but probably a great number of them are. And I am just concerned how we are going to address this long-term issue of funding, especially if it is a trillion dollars that is out there

in that requirement.

Mr. Arndt?

Mr. <u>Arndt</u>. The American Water Works Association has long supported funding to the SRF programs. And I think it is accurate to say that the SRFs have never been funded to the full level of the authorization for those programs. And yet, at the same time, the need for funding has grown not just with inflation but with the aging of facilities and increasing regulatory requirements and other needs.

So I think your point is very well-made that additional funding is necessary. And there is no one, single source that is going to resolve that shortfall. We need to look at a multiplicity of sources that can be applied to making those infrastructure investments that we need to make sure that we have safe water and we continue to provide the services that are needed to support our economy.

Mr. McKinley. Thank you.

I yield back the balance of my time.

Mr. Shimkus. The gentleman yields back his time.

The chair recognizes the gentlelady from California.

Do you have questions?

Mrs. Capps. No.

Mr. Shimkus. Thank you.

Turning to my side, would anyone like time for questions?

Seeing none, we want to thank the panel for joining us today, and

we look forward to working with you.

This is a step in the right direction. Are there more actions required in the future? Maybe. And we will address those as we move forward.

I want to thank my colleagues for bearing with us on the hearing today.

And I ask unanimous consent to include letters from the American Water Works Association and Clean Water Action -- oh, I am sorry, the Association of Metropolitan Water Agencies. Is there objection?

Hearing none, so ordered.

[The information follows:]

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Mr. <u>Shimkus.</u> And we will adjourn this hearing and reconvene promptly for the markup.

[Whereupon, at 12:35 p.m., the subcommittee was adjourned.]