

US EPA ARCHIVE DOCUMENT

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1 U. S. ENVIRONMENTAL PROTECTION AGENCY  
2  
3 RE: PROPOSED WATER QUALITY STANDARDS FOR THE STATE  
4 OF FLORIDA'S LAKES AND FLOWING WATERS  
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11 LOCATION: CLARION HOTEL AIRPORT  
2101 DIXIE CLIPPER DRIVE  
JACKSONVILLE, FLORIDA 32218  
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1 P R O C E E D I N G S  
2 MR. KING: Good afternoon, folks. Welcome to  
3 this meeting which is to discuss EPA's proposed  
4 numeric nutrient standard for inland waters in the  
5 state of Florida. Thank you for coming out. My  
6 name is Ephraim King. I'm director of the Office  
7 of Science and Technology, EPA's Office of Water,  
8 Washington, D.C.  
9 AUDIENCE: We can't hear you. Do you have a  
10 mike?  
11 MR. KING: I do have a mike. It's a very  
12 fancy one. It doesn't seem to work very well.  
13 Let's see what we can do.  
14 How is that? Can everybody hear me? This  
15 room must have different -- try this.  
16 Now can you hear me? All right. Okay.  
17 We're going to go to a modified sound system.  
18 Good afternoon. Welcome. My name is Ephraim  
19 King. I'm director of the Office of Science and  
20 Technology, EPA's Office of Water. With me is Jim  
21 Keating who is one of EPA's nutrient experts and  
22 technical scientist. We're delighted to be here  
23 with you today to discuss EPA's proposed numeric  
24 nutrient standards for inland waters in the state  
25 of Florida. These numeric standards will apply to

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1 springs and to lakes and to rivers and streams and  
2 to canals. And we have some information we'd like  
3 to share with you this morning. I want to explain  
4 to you the background of this proposed rule, and

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Jim will give you an overview of the rule itself.

But first I just want to let you know and introduce Jacqueline Smith who is with Representative Congressman Crenshaw. Is Ms. Smith in the room? I just want you to know she's here and joining us.

Ms. Smith, do you want to give any remarks or thoughts?

MS. SMITH: Pardon?

MR. KING: Do you want to give any remarks or thoughts?

MS. SMITH: Well, I do when it's -- do you want me to do it now?

MR. KING: Sure. Come on up. Because I think you're an important person and you represent an important part of the process.

MS. SMITH: I represent an important person. I'm really not important.

This is the statement of U.S. Representative Ander Crenshaw: Make no mistake about my voice of opposition to this proposed rule. Water is the

lifeblood of Florida and we must do everything within our power to protect it. The ecological health of our waters is tied directly to the economic vitality of our state. Successful long-term water management of our precious natural resources requires continuous conservation, cooperation, and communication.

I believe Florida is a leader in water quality programs that include ongoing cooperative efforts to limit nutrient loads through its total maximum daily load program. There is a reason why 30 percent of the national water quality data is from Florida. It is because the State of Florida has been working head to protect its rivers and streams, contrary to misinformation that has been presented in the media. Businesses, local governments, the State of Florida, and the federal government have invested millions to restore impaired watershed and protect healthy rivers and streams. We need continued coordinated efforts through federal, local, state partnerships to protect our waters from contamination and restore our local ecosystem. The EPA should support the efforts made by the State of Florida who have developed a scientifically defensible numeric

nutrient criteria instead of singling out Florida for scientifically flawed federal standards.

Here are the facts: Nutrient pollution can damage drinking water sources; increase exposure to harmful algal blooms that can cause damage to the nervous system or even death; form byproducts in drinking water from disinfection chemicals, some of which have been linked with serious human illness like bladder cancer. Phosphorus and nitrogen pollution come from stormwater runoff, municipal wastewater treatment, fertilization of crops, and livestock manure. Nitrogen also forms from the burning of fossil fuels like gasoline.

The most cost effective way to reduce pollution is to phase out wastewater discharges.

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I understand this and that is why I've been fighting in Washington to ensure our local communities have access to EPA, state and tribal assistance grants that match local contributions to build state of the art and higher capacity wastewater treatment systems. Throughout my service in government, I have tried to maintain a balanced approach to all issues including those regarding our environment. I believe that we must be good stewards of our natural resources and pass

along a healthy environment for our children and grandchildren.

The regulations being proposed will impact every citizen, local government, and the business community. Working with the EPA, Florida has worked to develop EPA approved nutrient total maximum daily loads and has utilized site specific alternative criteria to develop numeric criteria for its vast and different water bodies. Further, the EPA has its own science advisory board that is well regarded for the expertise of its members.

It is my hope that this board will review the numeric nutrient criteria to verify its sound scientific basis. In attempting to understand the totality of this proposed rule, I believe it is important for the EPA to submit its proposed numeric nutrient criteria rule for the review to the Congressional Budget Office. The CBO will be able to assess its economic impact on the State of Florida, local governments, small businesses, and the public. It is important that we get this right. Our state's most valuable resource is riding on the coordinated efforts of federal, local, state partnerships to protect our waters from contamination and restore our local

ecosystems. Thank you.

MR. KING: Thank you very much. And I understand that State -- Maryanne Marshall representing State Representative Janet Adkins is with us. I don't -- just over here in the corner. I don't know if you want to say anything or -- just wanted to welcome you and thank you for joining.

MS. MARSHALL: I'm here to listen and take the information back to Representative Adkins.

MR. KING: Thank you so much.

I think that EPA and Representative Crenshaw have many, many points in common. We agree that clean and safe water is indeed the lifeblood of this state, and virtually every single person who has spoken to us in this second series of public hearings has affirmed that. There may be some different views on how we get there, but there is absolutely a common strongly held view about the importance of clean and safe water to the state of Florida and the economic prosperity of this state. And I think we also agree on the real importance of coordinating closely with the Florida Department of Environmental Protection, and I'm happy to report to this group that indeed that is

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1 something that EPA has done and continues to do,  
2 and we're very pleased to indicate that all of the  
3 information that's been provided to EPA by the  
4 Florida Department of Environmental Protection has  
5 been considered by the agency, as Jim will go into  
6 a little bit later, that is well over 800,000  
7 different nutrient related data points at  
8 different times of analyses, and the folks in the  
9 room will indeed be both confident and proud of  
10 the work that the Florida Department of  
11 Environmental Protection has brought to this  
12 process, both in terms of collecting data in the  
13 first place and in terms of the science that they  
14 have undertaken.

15 So, again, I think we have together,  
16 everybody in this room, we have a common objective  
17 of doing the very best we can together to assure  
18 clean and safe waters and to assure cost effective  
19 and reasonable and common sense steps toward  
20 getting to that goal. And the strength of this  
21 rule, I think, the proposal, is that by taking  
22 existing Florida nutrient standards, and  
23 translating those standards into numeric and  
24 measurable targets and expectations, this process  
25 will greatly facilitate and expedite the state's

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1 efforts and commitment to addressing the impaired  
2 waters which exist.

3 So with that, what I'd like to do is just  
4 briefly frame for you what we're doing here today,  
5 explain to you a little bit of the federal  
6 rulemaking process that we're engaged in, and the  
7 really important and central role people in this  
8 room play in that process, and then turn to Jim  
9 and have him give you an overview of the proposal  
10 itself. We think it's helpful to just review some  
11 of the key points to make sure we're all starting  
12 in the same place.

13 In terms of sort of formally opening up this  
14 public hearing, the first great pleasure I have is  
15 to officially welcome you and to thank you for  
16 joining us here today. I thank you for taking  
17 time away from your jobs, from your other  
18 activities, from your other commitments. EPA  
19 regards this public hearing process, which is in  
20 the middle of a public comment process by which we  
21 hear from as many folks as possible, we regard  
22 this process as being vital and essential to the  
23 most balanced and effective and common sense  
24 numeric nutrient standards we can put out. So  
25 thank you for being here. We really appreciate

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1 it.

2 The goal today is to get your feedback. And  
3 we regard as a success just to have you here and  
4 just to have you share your thoughts, whatever  
5 they may be. That, for us, is the success of the  
6 public comment period. So we look forward to  
7 hearing your comments, for, against, is there data  
8 that we have forgotten, is there data that we need  
9 to consider, do you believe analysis we have  
10 conducted needs to be revised, do you have an  
11 additional perspective that you believe we should

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be considering, these are all different aspects of the rulemaking that we look forward to hearing from you today, and your providing that information to us will result in a stronger and more defensible and a -- just a better balanced, more effective rule.

In terms of the general rulemaking process what we're all now part of, by stepping into this rule you are part of something called an informal rulemaking process under the Administrative Procedures Act. This is the process by which EPA developed most of its regulations. And under that process, EPA starts with a collection of data, all available data they can find and literature

review. It puts together scientists, technical experts, and develops a proposed approach to a particular problem.

In the case of the January proposal, the proposed approach is a set of numeric nutrient criteria to help define in the state of Florida what the numeric measurable targets are that are associated with clean and safe water. And by creating those numeric baselines, what we create is a much clearer sense of both where we are in different parts of the state and then what options are available for moving forward toward the goal that we all agree on which is clean and safe water.

Part of this process is we propose a rule and we then through go a comment period, which we're in right now. This comment period will end on April 28th. Which reminds me to share with you that if for any reason when you get up and speak today, we can only give each speaker about five minutes because of the number of folks here, but if in five minutes there's something you aren't able to cover, or in listening to your colleagues and friends and associates you're reminded of additional information you'd like to share, we

want to emphasize to you that following this meeting, you can provide written comments directly to EPA, either by email or in hard copy, and we look forward very much to anybody here who wants to do that.

Following the close of the comment period on April 28th, EPA reads and considers every single comment received. Everybody who speaks today, we will be asking for your name and for your affiliation, because every single comment that you give to us will be transcribed and it will be listened to today but also read again two or three times before the final rule. And we'll be reading every comment, considering all information thoroughly as we move forward toward developing a final rule which incorporates all of the new information, all of the perspectives that people share with us.

So when you come up to the mike, please give us your name, your affiliation, and understand that what this is for is that we'll return to these comments and these points of views today and



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we'll visit them at least a couple of times more after we go through the process. At the end of the comment period, we review all of the comments,

we prepare something referred to as a comment response document. That comment response document is available to the public. It will be part of the record for this rule, and it allows you to check and determine if we both understood and heard your comments and then did we do an effective and good job of considering them and responding to them. And we think this process of getting the comments and responding to them on the public record is a really effective transparent process for assuring that Floridians are heard and that all stakeholders are heard in this process.

Once we finish evaluating all the comments and analyzing all the additional data, we're then part of what they call a deliberative process stage of the rulemaking where we move and assimilate and incorporate that new information and then develop a final rule. And that final rule will be promulgated on October 15th of this fall, 2010.

So that's the rulemaking process we're in. You are a very important part of that process, and we are very appreciative of your being here today.

I'd like to ask Jim Keating to start us off with an overview of what the January proposal is

about, the problems it addresses, and how it goes about following up on those problems. So, Jim.

MR. KEATING: Thank you. Thank you, Ephraim. Thanks to everyone for coming. Can everyone still hear me?

I want to briefly talk about three things today. First is nitrogen and phosphorus pollution, which is the subject of our rule. I also want to talk a little bit about water quality standards and what they are. And then lastly I want to talk about how those two things kind of come together in the federal proposed rule that we published in January of this year.

So excess nitrogen and phosphorus does a number of things to our natural water bodies, but one of the things in particular that is of prime concern is that it causes the growth of unwanted and nuisance algae. Now, algae is a natural component of our natural waters, and it has many beneficial aspects to it, of course, but in the wrong species composition and in excess amounts, it can cause some real problems. A couple examples of some algae species that have caused problems in the state of Florida, the first is Lyngbya. Lyngbya is an algae that can smother the

natural grasses that are present in the waterways, and those natural grasses are both habitat and food sources for aquatic animals such as manatee. The Lyngbya algae also produces toxins that is potentially harmful to human and animals.

Another example of algae species that is detrimental in natural waters is Microcystis. It

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has kind of a characteristic green color, and I'll show you some pictures in a moment. And that also produces a toxin that can cause things like liver damage in humans. It can also poison livestock and wildlife.

So we see that excess algae not only discolors the water and destroys natural ecology in that kind -- those kinds of ways, as it dies and decays it can also deplete the water column of the dissolved oxygen that's necessary for the survival of fish and shellfish.

There's also human health concerns associated with drinking water intakes, and excess levels of algae in the process of treating that drinking water supplied for consumption is disinfected and there can be byproducts that form in the presence of organic matter like excess algae, and these byproducts have been linked to cancer and other

illnesses.

Another human health concern that we have is excess levels of nitrate, which is a form of nitrogen, an inorganic form of nitrogen in drinking water supplies. At very elevated levels this can cause some serious issues for infants, and we have a records of exceedances throughout the state of what is the maximum contaminant level for nitrates.

Now, Florida has an abundance of natural waters. There are over 7,000 lakes, 50,000 miles of rivers and streams, a lot of estuary acreage, as well as 700 freshwater springs. Now, a fairly large portion of these waters have already been identified as impaired due to nutrient pollution and not all of them have been assessed, so there's not 100 percent coverage or inventory of what might be the total amount they're impaired.

I am going to go through a series pictures to kind of illustrate what the excess levels of nitrogen and phosphorus and the algae blooms that are produced look like for a series of waters. This is a pictures of Lake Manatee near Bradenton, Florida. This is a Microcystis bloom that's appearing on the fringe of this water supply

reservoir, and there's as closeup of it on the right along with a device we call a secchi disk which is used for water clarity.

This is an old picture. This is from the 1990s, 1995. It's Lake Apopka in central Florida. But I think it's a good illustration of what algal bloom that takes over an entire lake that's fairly sizeable can look like.

This is a lake that's in the panhandle of Florida about an hour west of Tallahassee called Merritts Mill Pond. It's one that been highly touted for boating and kayaking and fishing. And here we see the effects of algal bloom on that water body.

Another lake in the panhandle, Lake Munson, which is closer to Tallahassee proper, and you can see another closeup of a Microcystis bloom that's affecting that particular water body.



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We see that excess in nuisance algae cannot only affect lakes but also affect rivers and streams. This is a picture of the Caloosahatchee River which now starts with discharges from Lake Okeechobee, flows west out to the Gulf Coast near Fort Myers. And this particular water is not only showing the algae here in the passing stream water

but also on the banks and on the rocks that are adjacent to the stream confines.

This is the Caloosahatchee River also in a different bloom, not Microcystis. And this is the Franklin Lock near Olga. And you can see the difference in the water where it's being affected by the algae bloom and where it's not. It's a fairly stark difference.

This is closer to where we now. This is the St. Johns River, a fairly recent photograph of a Microcystis bloom that's affecting that water body. And another picture of the St. Johns River here.

We see that these conditions put a lot of things we care about at risk with our natural waters. It puts at risk ecology, it puts at risk human health, it puts at risk recreational activities and opportunities. It puts at risk tourism business and it puts at risk property values.

Here's a closeup of some houses on a tributary of the St. Johns which are being negatively impacted by this algal bloom.

We see these conditions that occur around the state. This is the St. Lucie River on the east

coast of Florida and, you know, again a characteristic picture of what the algal bloom can look like from an aerial photograph.

In terms of the freshwater springs in Florida, we've seen evidence of impact there as well. This is the Weeki Wachee Spring that's about an hour and a half or so north of Tampa. The image from the left is a picture taken in the 1950s, and it shows the characteristic natural grasses and the clarity. The image on the right is from the past decade and it shows a system that's dominated by Lyngbya algae and it has smothered out the natural grasses and affected the clarity of the spring.

We also see effects of nitrogen and phosphorus pollution and algal blooms in the network of canals that run through the southern part of the state in south Florida. This is one that drains into the Biscayne Bay.

Now, Florida does address nutrient pollution in their water quality standards currently, and they do it through what's called a "narrative criteria," which is a statement of a desired condition of the water body. And the one in Florida expresses that they want to have nutrient

levels that will not cause an imbalance of natural populations of flora and fauna, which is a great statement of desired condition. The issue that we

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see with implementing this narrative criteria is it often leads to a process is that is relatively slow in developing limits and targets for restoration of waters. In contrast, if we have a numeric criteria, then we have an easy ready means of assessment and measurement of water quality, and, more importantly, we think that we will have an ability to act more proactively rather than reactively so that we're able to put in limits on discharges of pollutants before a healthy water would experience conditions along the lines I just showed on the slides.

We know nutrients come from a wide variety of sources. They come from runoff of river landscapes, from cattle and crop fields. Nitrogen, it comes from air emissions. We also have sources from faulty septic tanks, sewage treatment plants, and some industrial discharge. But we also know that better treatment and better management practices can remove nutrients and stop them from flowing into the natural waters that are throughout the state.

Okay. A couple notes on water quality standards that are important. There are two principal important components of water quality standards. The first is the designated use. And the designated use is a statement of what we want from our water. We want aquatic life protection. We want recreation. We want swimming. We want protection for human health. And the second component is water quality criteria. And these are the specific levels of pollutants that can be in water and still maintain those designated uses.

Now, Florida has already established designated uses for all of the waters, and the overwhelming vast majority of them carry designated uses that are in keeping with the goals of the Clean Water Act. These are, for purposes of our rule, Class I water and Class III waters. They share the desired designated uses for maintaining healthy, well-balanced populations of fish and wildlife as well as protection of human health.

The EPA has been recommending numeric nutrient criteria since 1998, and more recently we've had opportunities to discuss the matter with the Florida Department of Environmental

Protection, which I'll call FDEP from here on out in my remarks, and we -- they agreed numeric nutrient criteria were necessary. And in January of 2009 the EPA administrator issued a formal determination that, in fact, we needed numeric nutrient criteria for the state of Florida. FDEP did present draft criteria of their own last summer in a series of public workshops.

Subsequent to those events, in August of 2009 EPA entered into consent to create a legal agreement with several environmental nongovernmental organizations that set us on a path for a couple different rules and efforts. The first is the one we're discussing today, and

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that is our proposal for criteria for lakes and flowing waters, which we are to finalize in October of this year. The second rulemaking is for estuary and coastal waters, and that's scheduled for proposal in January of 2011, to go final in October of that year.

Now, to go forward with these proposals, we rely on the enormous amount of data that Florida has collected and generated related to nutrient pollution as well as a number of their technical analyses that they've done and a few of our own

technical analyses as well. The data base that's already been described is quite extensive in terms of thousands of sampling sites, tens and thousands of samples, all adding up to hundreds of thousands of records that's at our disposal for developing science-based criteria.

For lakes, we classify -- now I'm moving to what we specifically proposed in the rule. For lakes, we grouped them into three different categories based on color and alkalinity. We were able to derive criteria looking at field correlations of chlorophyll a, which is a light pigment that occurs in plant cells, it's a good measure of algal growth, and total phosphorus and total nitrogen levels in each of those lake categories. But we also had a feature of our proposal which allowed the total phosphorus and total nitrogen criteria to be adjusted for an individual lake where there are sufficient data to demonstrate that that particular lake has met its chlorophyll a criteria. And this table summarizes the specific criteria for those different categories of lakes.

For colored lakes and alkaline lakes they would be naturally expected to have higher levels

of nutrients and, therefore, greater productivity, and you can see that in the chlorophyll a target they're identified. For clear, acidic lakes -- those are the real kind of sand filled lakes that are very clear and have very low productivity and expectations for them. The baseline criteria are the values for total nitrogen and total phosphorus that came out of those field correlations. Again using the same field correlations, we identified the range of adjustment that could be possible in those criteria based on the chlorophyll a targets being met.

For rivers and streams throughout the state, we took a somewhat different approach. First we classified them not by type but by geographic location. We have different regions throughout the state that are different based on their natural features and their underlying geology. What we did is we used a tool called a "stream condition index," which was developed by FDEP, to measure the biological health of river and stream systems. It's a biologically based measurement and it can indicate where there are healthy biology present and where there aren't.

We took the data of total nitrogen and total

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1 phosphorus from streams that demonstrated a  
2 healthy biological condition, looked at the  
3 characteristic distribution of those values, and  
4 selected a representative value to be protective  
5 of a designated use.

6 This slide shows the results of that  
7 analysis. On the left is a table of the values  
8 for the various regions. On the right is a map of  
9 those regions. You can see the Panhandle region  
10 is distinct from the peninsula body of Florida.  
11 South Florida is treated in a somewhat different  
12 fashion -- I'll tell you about it in a moment --  
13 and there are two other regions, Bone Valley  
14 region, around Tampa-Sarasota region, and the  
15 north central region that are very highly  
16 naturally enriched by phosphorus in the soils.

17 We know that water in rivers and streams  
18 flows into downstream lakes, into downstream  
19 estuaries, and a feature of our federal  
20 regulations is if we establish water quality  
21 standards, we have ensure they provide for the  
22 attainment and maintenance of water quality  
23 standards in downstream waters. So we took the  
24 approach for downstream lake protection where we  
25 identified a simple modeling equation that relates

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1 concentrations in lakes to concentrations in  
2 streams that feed into those lakes whereby we can  
3 adjust the rivers and streams criteria as  
4 necessary to protect the downstream lake.

5 For estuaries we used a USGS, United States  
6 Geological Survey, model called the SPARROW model  
7 which allows us to do a couple things. It allows  
8 us to estimate the protective load that should be  
9 delivered to a downstream estuary, take that  
10 protective load and distribute it up through the  
11 streams in the watershed to identify protective  
12 concentrations in those rivers and streams and the  
13 watershed that will protect the downstream  
14 estuary.

15 A couple features that I'd like to go over on  
16 this approach for downstream estuaries. One is  
17 the SPARROW model is calibrated using local data  
18 in measurements that are taken in the state of  
19 Florida, and features that they do tend to be  
20 lower than those instream protection values for  
21 total nitrogen owing to the added sensitivity of  
22 the estuary system where that load is delivered.

23 Now, we had indicated in our proposal that we  
24 intended to introduce these downstream protection  
25 values in this rulemaking but go final with them

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1 in the next, the one that addresses estuarine and  
2 coastal systems. And we recently had an  
3 opportunity to reaffirm that position in a letter  
4 that EPA sent to the secretary of FDEP. So those  
5 DPVs will be addressed, repropose in  
6 January 2011, and go forward with that part of the  
7 rule.

8 For springs, we had a wealth of laboratory  
9 and field studies that related levels of nutrients  
10 to points where streams would then tip over into

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those situations where they're dominated by nuisance algae. And these were studies that FDEP had synthesized, they were a large part of their proposal, and we used the same data and information and came up with a very similar proposal, as did the State of Florida, it addressed nitrate and nitrite, inorganic forms of nitrogen.

For south Florida canals, these are highly managed systems largely built for flood control and irrigation purposes but they carry the same aquatic life uses as do other rivers and streams in the state for aquatic life protection, for human health protection and recreational potential. So we took an analogous approach to

rivers and streams where we identified the set of data from canals where we can reasonably infer that the designated uses were being met based on assessments that FDEP had done and identified a representative concentration that would be protective of those uses. And we joined all the canals into one group and came up with a criteria for chlorophyll a, total phosphorus, and total nitrogen.

A couple other provisions of the rule I'd like to make sure that everyone is aware of. One is allowance for Site Specific Alternative Criteria, and this would be using a federal process whereby the state could work with local communities and perhaps identify, where there's additional information available, a different concentration or different level of nitrogen and phosphorus and chlorophyll a, it would also be protective of designated uses, submit them to EPA where we go through a streamline process to identify those as the applicable criteria for a specific water body.

We also have a feature we call "restoration standards" that recognizes that in many places it may take many years to achieve these protective

criteria and it may require lots of cooperation and coordination between point sources and nonpoint sources. The restoration standards would allow the state to work with local communities and to identify interim designated uses and criteria in a stepwise fashion that would allow implementation of feasible control actions within specific periods, thereby ultimately achieving where we want to be in an incremental fashion.

We did do an economic analysis where we looked at the cost of implementing the rule. We looked at the cost of upgrading treatment facilities, we looked at the cost of implementation of BMPs on agriculture sources, and we looked at the cost of replacing faulty sewer systems. What we came up with was annual costs in the range of 107 to \$140 million, with total costs over about 20 years ranging from 1.2 to \$1.5 billion.

So, as we mentioned, there are certainly procedures for submitting written comments, and



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there are a couple weeks left to do so. We encourage folks to do that.

In your packets, by the way, are copies of these slides. There's a couple that go over some

key review points, and I'll just leave that to you-all to read in your leisure, because I think now is time to move on to the portion that you've all come here for and that's to hear from you. So thanks very much for your attention and we really look forward to your remarks.

MR. KING: Okay. We're going to suggest a process here that is designed to let everybody speak and by order of the numbers that you have. We're asking people to take no more than five minutes so we can be sure to give everybody a chance to speak this afternoon. We will also be continuing these public hearings into the evening. And so anybody this afternoon that was unable or does not get a chance to speak, we will be here this evening and we will look forward to listening to your comments then.

Here's basically what we do. You see up here a timer and, basically, when you come on up and you speak, that timer is going to start and you get to sort of see where you are in the five minute zone, and when you get down to no seconds remain, it begins to blink at you. So you have both sort of a visual and a color coded reminder of where you are in that process.

We ask people to come on up to the microphone here and give your name and affiliation so the court reporter can take it down and we can keep track of who made which comments. What we'd ask is that people come up by number. I'm going to ask for number 1 to come up and that will be the first person at the microphone. I will then ask two additional people to come up and sit behind the microphone so when the first speaker is done, the next person can get up, good to go, and begins to give their comments and presentations. And we hope very much that this will make the process run smoother and give everybody as much time as possible this afternoon to offer whatever thoughts they have.

And you should know we have the services of a sign language translator here in case anybody needs that. We also have the services of a Spanish translator if anybody needs that, and we would be delighted, both those gentlemen are here, delighted to make those available to anybody for whom that would be helpful.

And with that, I think what I'll do is ask one last thing. If you want us -- you need to have a number in order to speak. If you'd like to

speak and you do not have a number, please, simply go out to the desk, ask them for a number. They will give you one, and then we'll just keep on going. We want to hear from everybody here but the number help us keep track of who is in line.

So with that I'd ask number 1 to come on up



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to the microphone, and I'd ask number 2 and 3 to please come up and sit behind this gentleman so we'll be able to continue the process and keep everybody going. And numbers 2 and 3, feel free to come up in those chairs and we'll be fine.

Good afternoon, sir.

MR. ADAMS: Good afternoon. My name is Ben Williams. My wife Louann is right behind me. We've got numbers 1 and 2, and we're going to do you a favor and only take five minutes.

We've been in the -- I guess I should tell you where I live, 1096 Oak Vale Road. That's in St. Johns County. We've been in the seafood business here in northeast Florida for near on 30 years. We've commercial crabbed in the St. Johns, ran gill nets back when they were legal, owned a shrimp boat, and for the last 25 years or so we've operated a wholesale retail seafood business. In addition, we live on the river; have for over 20

years, and to this day fish the river recreationally. In fact, I was out on the river last night, and this afternoon I'm going to join over 100 other folks fishing the bass tournament down out in Clay County. We do this every Thursday night during the summer.

With that background, we can tell you in no uncertain terms that there are economic consequences to the decisions you're being asked to make. We've seen the river turn green, more than once, actually, folks. We've heard customers question the safety of what we sell as a result of their concerns associated with those ugly green events. We've heard them go so far as to state that they did not want anything that came out of our river.

We've seen our crabbers been unable to sell their catch because people were scared to eat the crabs, and this is even though the state agencies had put out information that the crabs were safe to eat. And, mind you, crabbers are not very well paid people, and when you take their livelihood away from them in the middle of the summer, you've really hurt those folks.

As recreational fishermen we've seen the

river devoid of boats on summer weekends when there should have been hundreds between Lake George and Jacksonville, either fishing or skiing or tossing nets for shrimp or simply enjoying being on the water.

And let us be clear, when all those folks -- and many of them are from out of state -- leave their boats and their beat-up personal water crafts, which I wish they would leave home anyway, but anyway, their right, and their kayaks and their canoes in the garage, it hurts businesses that sell all manner of goods and services.

And let me backtrack to those shrimp for a minute. In my view the shrimp are one small piece of the economic pie I'm talking about. You have no idea how important a clean, healthy, properly functioning St. Johns River is to both the

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commercial and the large recreational shrimp industries here in northeast Florida in the late spring, actually in the next few weeks. The Atlanta white shrimp, which is northeast Florida's and Florida's overall most important commercial species, and the species of shrimp that thousands of recreational fisherman here in northeast Florida call "river shrimp" will start dropping

eggs along our coast. Once hatched, the juvenile shrimp will work their way up the St. Johns, making it as far as Crescent Lake and Lake George. And in case you're unfamiliar with our river, that's 80 miles or more up the river. They'll spend the summer feeding and growing, which, of course, points out the fact that at least that portion of our St. Johns is essentially an estuary. In the fall they will start making their way back to the ocean. Now, the point being that the St. Johns and, for that matter, all of the small rivers along our coast are nurseries, nurseries that nurture not just the shrimp but also the economic activity that surrounds them. And mind you, the shrimp again are only one piece of that economic pie I'm talking about.

Now being small business owners, we're very sympathetic to the arguments posed by the opponents of this proposal. We're quite familiar with useless, burdensome, nanny state government regulations. We know how they can sap energy and reduce productivity. We would never support more lightly any of them. But in this case it is our judgment that they are necessary, and they are necessary to protect and keep a viable and

important traditional part of Florida's economic life alive. It is quite clear to us that to allow other segments of Florida economy to reduce their cost of production by letting them continue to degrade our waterways is not a sound, long-term economic plan. It's way past time to get on with these things, folks. And you used the word earlier "expedite." That's what you need to do. They've drug their feet long enough. Thank you.

MR. KING: Thank you very much.

Speaker number 3. And speaker number 4 and 5 can come up. Thank you.

MR. ARMINGEON: Mr. Keating, Mr. King, I'm Neil Armingeon. I'm the St. Johns Riverkeeper here in Jacksonville. I want to welcome you to the St. Johns River watershed. On behalf of my organization and our over 2,000 members, our first message is to you, thank you, and we welcome you and we welcome your agency's involvement with this.

My organization has been fighting to deal with the nutrient problem in the St. Johns River for ten years, and this is the first time that we have faith that something positive will come. Our river is sick. It saddens me to see a slide

presentation presented across this state which shows the St. Johns River in its impaired state.

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The photo you showed of Christopher Creek has made it across this country as an example of blue-green algae. And as the previous speaker said, there is an economic cost to this that often you do not hear at these hearings.

This past summer yet again small businesses, ecotourism, boat dealers, bait shops, homeowners were once again facing yet another summer with health advisories and opportunities to enjoy our river lost. It is amazing to me that I come -- this is the second time I've come to one of these hearings and after seeing this presentation of these impaired water bodies, countless people will stand before you and tell you "Everything we're doing is successful. We don't need you. The state's plan is working." To that, I say baloney. The state has had 12 years to deal with this problem and we have gotten very little progress.

This past weekend I was blessed. I spent three days on the St. Johns River. We take over 100 people from Palatka to Sanford on a tour to introduce people to the beauty of the river, and it is remarkable, and I hope one day both of you

can see the river not like you see in these slides but in its reality.

We went to Silver Glen Springs, a first magnitude spring that is so clogged with Lyngbya that one of our outboard motors failed because it -- the intake sucked in so much algae, had to get out in Lake George and clean it.

There is the beginning of an algae bloom in Lake George, which is close to 100 miles away, and people in the town of Welaka who I spoke to are already seeing algae blooms yet again. That's after those people suffered through algae blooms from April until January, when we had our first cold spell.

This is a significant problem that is not being addressed at the state level. Anyone who sees those pictures, anyone in this town who sees the St. Johns River every summer, hears those pleas that we're doing the best we can, it falls on deaf ears. We don't need to know about the blue-green algae. We call it the "Green Monster." Every summer for the past five years it has come to our community and diminished the quality of our life. I ask you to stand firm against the political opposition that you face. There are

tens of thousands of people in this state who may not come to these hearings today but support what you're doing and we stand ready to contact our elected officials to tell them what you are doing is correct.

I was happy to see Mrs. Smith here today representing Congressman Crenshaw. I've had the privilege of speaking to the congressman many times about the river, and I do believe he cares deeply about the river. The message I want to send back to the congressman, the worst algae bloom almost in history occurred in his district, where people along the Ortega River and the St.

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Johns River could not, I repeat, could not stand to go out into their back yard in their nice homes to get into their boats because of blue-green algae bloom.

The time for denying is over. Anyone who stands here and tells you we don't have a problem is either driven by greed or economic forces or is total -- in total denial. Florida has a significant water quality problem, and from my organization's standpoint, our hope -- yes, the word "hope," I use it, rests with you. We hope you stand firm and establish meaningful water

quality regulations that will begin a process to restore our waterways. Thank you.

MR. KING: Thank you, sir.

Speaker number 4. And speaker number 5 and 6, if you would please come on up.

Speaker number 4?

MR. LOHMAN: I think I am. I both -- 19. You have me on the list as 19. I've been moved.

MR. KING: That's just fine.

MR. LOHMAN: I'm Donald Lohman. I've lived in Jacksonville except for college and the Army all my life, been interested in the river all my life. I'm very pleased with the opportunity to speak, and I'm particularly pleased that already my subject has come up. It's economics. Guys on the other side will say again and again that they cannot stop polluting because it will cost some money. Yes, it will. I don't have the figures. It will. But it cannot possibly cost as much money as the destruction of real estate values has already cost us.

To give an example, I live on a little creek, not the river, it's a creek, Fishweir Creek. Except for some extra bacteria in the creek, it's otherwise a reasonable little ecology there. We

have every kind of wading bird. We have different kinds of ducks come through in the winter. And, by the way, they eat the good algae. When the river is swollen in the fall, we have red bass a yard long come in there to eat the fiddlers, chase the little fish around.

It's an ideal place to live for me. It is an even better place to have some grandchildren come over and visit. Most of the people I know spend the extra money to be on the river for that reason, just to have the grandchildren there half a dozen times a year. The shame of it is, it's okay for the grandkids to learn to fish a little bit and learn to operate a pair of oars about two-thirds of the year. Then when the Green Monster come, what happens, it coats the inside of the seawall, the outside of the seawall and the mud near it. You saw a similar picture up there. And then the stuff dries, it dies, and in that process it puts off this horrible aerosol.

Now, at that moment you don't want the grandkids out there. You don't them touching a fishing line that might touch the water. You don't even want them to breathe. Breathing is not

a healthy activity over there. And all up and

down my street, people normally jog until summertime. They don't like to jog along near the creek, a nice little bridge going across the creek. Breathing deeply is an unhealthy activity.

What I'm trying to say here very clearly is the value of my property and thousands, I don't know, maybe it's 100,000 people live along this river and its tributaries, and a few polluters have destroyed the value of those properties everywhere. It couldn't possibly cost them that much to stop destroying somebody else's land and value and lifestyle.

I use again the real estate business. I must say it would be impossible to sell a house in the summertime on the tributary or on the river. And it would be hard to sell it in the wintertime because everybody around here knows about it. You'd have to find a Yankee who doesn't know anything about it and catch him in the wintertime to sell a house. I think he already knows.

Well, I'm very serious about this. Let's look at the economics as well as the joy and pleasure of living here. If you want to have a viable real estate business or development business, you're going to have to protect the

thing that brings the people to here. Thank you.

MR. KING: Thank you much.

Speaker number 5. And would speaker number 6 and 7 please come up.

MR. PARSONS: My name is Philip Parsons. I'm speaking again today for the Everglades Agricultural Area Environmental Protection District, and we appreciate your giving us this opportunity.

Our first concern we'd like to address today relates to your proposal for chlorophyll a in south Florida canals at a level of 4 micrograms. This proposal hasn't been made for clear streams or other canals in the state. Lakes are protected by much higher levels of chlorophyll a. In our view, that level of 4 micrograms per liter is not reasonably related to the designated uses of canals in the EAA. We have dark water in our canals. You can't even see 4 micrograms per liter chlorophyll a in clear water, much less dark water, and there's been no link between chlorophyll a levels at 4 micrograms and any adverse impacts on aquatic life. Finally, your statistical analysis shows a negative correlation between nutrient concentrations and chlorophyll a

in canals, particularly with regard to nitrogen.

Let me move to another point. We're concerned also that the frequency and duration components that you've proposed as part of the criteria to south Florida canals are not always consistent with your derivation method for the criteria. And this is a point made by DEP in their review of your criteria for lakes and streams. And what DEP pointed out is that if your



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compliance requirements for duration and frequency are not consistent with the derivation methods, that will always lead to false positives. In other words, it will result in noncompliance when the canals in actuality, in fact, are achieving the level of nutrients that you're trying to achieve. This is what statisticians describe as a type one error. And these error rates will be very high as you move away from the derivation methods and, in our case, that you move away from annual means.

My final point relates to economic impacts. Many others have commented at this and other hearings on the cost of complying with your proposal. And you have statewide a very low estimate of the cost of compliance, because you

conclude that the costs your criteria will impose are limited to the difference between what DEP draft proposal would have imposed and your proposal. But that limitation doesn't apply to south Florida canals, because the DEP never proposed or tried to derive criteria for those canals, so that your justification for the limitation doesn't apply there.

We believe and we'll submit information that the cost resulting from your proposal in south Florida canals alone exceeds the cost that you've estimated for the entire state. And we'll supply that in our written comments. Thank you.

MR. KING: Thank you very much.

Speaker number 6. And would speakers number 7 and 8 please come on up.

MR. PEARSON: I'm Stewart Pearson. I'm here affiliated with the City of Gainesville, its 125,000 residents, and whose stormwater system has been discharging to the environment for 141 years.

First I'd like to speak about the nutrient watershed regions. The City of Gainesville believes that the stream distinct geography that dominates the area around the city and the resulting ecosystems along the streams are much

different than the peninsula nutrient watershed region south of the county. The city believes that additional studies are needed to determine differences and their significance and, if merited, an additional nutrient watershed region should be created to memorialize these differences.

Next I'd like to speak to the topic of nutrient reduction costs in Gainesville's watershed. Gainesville has eight watersheds, six of which are known to have impairments, one of which we're working on right now to reduce total nitrogen on the order of 45 percent. We have three projects in the planning for -- to do this 45 percent reduction. One is a bottom end wetland treatment system that's going to take out about 13,000 pounds. We have a mid base and it's going to take care of about 108 acres of downtown Gainesville. That's going to cost -- that's going to take out about 650 pounds. And then the --



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then there's another upper basin project that we are anticipating also. Combined, they're going to take out between 13 and 14,000 pounds of nitrogen per year. The capital cost averaged over those is \$920 a pound. And the cost for that one basin is

\$9 million.

We had the other five basins, we did a projection on the 45 percent nitrogen reduction there also, and we believe it's going to cost us about \$71 million to do that. Totally, \$80 million. We then compared that number against the EPA estimate of 140 million in their -- published in the Federal Register. We prorated that cost based on population of 125,000 against 18.7 million in Florida. We came up with 950 -- or \$950,000 a year EPA would estimate for the endeavor. Over 20 years, that's \$20 million contrasted to \$80 million for the projects. This seems to be order of -- several orders of magnitude difference in opinion on what this is going to cost.

Gainesville stormwater utility collects \$7.90 a month. One dollar of that is for CIP which yields about \$8 million a year. Over 20 years that means we would have \$19 million in cash plus 3 million on hand right now. So we would -- cash flow there of about \$22 million. If we're constrained to the 20 years, then we're going to have a \$3 a month rate increase starting in October, and that's 38 percent. I guess you

understand the constraints we're up against right now, a very anemic economy, and it's difficult in this instant in time to be able to say that we would have the necessary funding. Conundrum we face, is this going to be money constraint or time constraint.

For the numeric rule, we say first we thought this was guidance, not as an explicit regulatory mechanism. Second, prioritize it into high reading and low priority waters, if necessary. Third, have a five-year planning period for engineering, public outreach and financial planning and then begin the process. And for the second -- second -- second year -- second five-year planning period, go through the same process again and then begin working on the -- on the second group of waters at the end of that period.

On the issue of sovereign immunity, we think the federal and the state legislative bodies need to modify sovereign immunity to limit it so that DOT and schools cannot use their sovereign immunity to avoid participation in stormwater utility and especially in stormwater watershed restoration projects. And one last point, SRF

funding. Some SRF funding cannot be used to match grants. We need to change that rule so that all SRF funding can be used to match funding for grants. Utility managers need flexibility to implement restoration projects, not fiscal

analysts mapping funding to avoid audit infractions. Thank you.

MR. KING: Thank you very much.

MR. PEARSON: And your complete document will be submitted later, probably next week.

MR. KING: Appreciate it.

Speaker number 7. And would speakers 8 and 9 please come up.

MS. MALWITZ-JIPSON: Hello. Thank you for taking the time to hear from me today. My name is Marilee Malwitz-Jipson. I've lived in Florida since 1975. I now live in Fort White along the Santa Fe River. I brought some Lyngbya today to show you what our spring in front of our house looks like today. I just went down and got that out.

I'm concerned about the degradation of water quality in our state. I'm concerned when the Florida Bay is considered dead. I'm concerned when the Florida reefs are following the same

path. I then -- I'm sorry. I've seen firsthand the poor quality of water in the Everglades in and around Everglade City. I've lived in south Florida where builders have built on swampland and poured toxins directly into the waterways such as pesticides, herbicides, and fertilizers. Advanced storage and recovery wells and deep well injections in Brevard County and elsewhere in the state would be unprecedented disaster. Companies such as Koppers in Gainesville, miners of phosphate and aggregates, and any of the tree paper mills who knowingly pollute must be corrected now, and any fines imposed must be utilized to clean up and restore. Farmers must be required to get on board with BMAP, Best Management Agricultural Practices, especially if the government subsidizes their livelihood in any manner. Groundwater storage and recovery must be treated effectively before it's reused. Municipality infrastructures must be updated along with cost effective plans for nitrogen reduction.

As a person with a family, a family of four, we are told by the media to limit our water use and use safe practices in terms of what we put down our drains or lay on our land, and we oblige.

We want to protect our neighborhood and water resources. Try telling the same thing to one of the companies I just mentioned. The rate of pollution they net daily far exceeds the residents.

A few years ago I got involved at a local level because our neighborhood river, the Santa Fe River, a designated outstanding Florida waterway, was awash in water bottlers trying to take water from our public springs for private gain. So far, for the time being, we've stopped the four that recently applied for permits. By the way, for the record, Coca-Cola Dannon has been fully operating out of Ginnee Springs since 1998. So as a result of our citizen participation against this kind of business in our area, I've been on a huge learning

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curve. I have alliances across this great state. All of us are dedicated to protecting our natural resources. I have been in meetings after meetings in the local chambers all the way to Tallahassee. I see how things work here.

I see how permits get issued. I see how much good science gets thrown around a room and then eventually thrown out. The opponents want good science to lead them in this battle of what

appears to me to be a battle of wills or who has the deepest pockets. The water quality in the state of Florida in my opinion has been studied to death. There are so many studies. And I -- the state says they want don't the feds coming in telling them how to manage their water supply. The state has been mandated since 1972 with the Clean Water Act to do the right thing. They chose to allow businesses to destroy the natural systems all in the name of the mighty dollar. Now in 2010 we are all faced with what is left. Our state has a lot of quality problems.

I'm not a scientist but I've lived in many places in Florida and visited a great many more. In my own district we have several scientifically studied problems. We know poop, industrial waste and fertilizers create obvious algae in our river, choking native vegetation, making water unswimmable and making fish uneatable. In our river alone we're only allowed to eat one fish a week. The Lyngbya on the bottom of our river also has decreased the eel -- eelgrass that we have in our river. Fix Koppers, fix Buci (phonetic), fix the farmers using BMAP, fix infrastructure. It's expensive. I hear the opponents complain about

the cost to clean it up. I believe they cannot afford not to. It would be nice to be self-regulated, but even with the Clean Water Act in place, compliance was only as good as the companies charged to do so. That's not enough. It's time to make our state issue strong orders to clean up their act. I want my kids following other generations to have my experiences. I want them to be able to slip into cold, clear water on a warm Florida day without being able to make algae a play toy or get itchy because they brush up against the thriving plant matter in Ichetucknee Springs. I'm here speaking to you today for the right of future generations to be able to drink pure clean water. Protect our water. It clearly needs protection. Thank you.

MR. KING: Thank you very much.

Speaker number 8. And would speaker number 9 and 10 come up.

MR. FREEMAN: I'm Robert Freeman. I live in a riverfront home in the Riverside area of Jacksonville, 1844 Cherry Street. I've lived in Jacksonville since 1950. I'm a third generation Floridian and have always lived within a block or so of the St. Johns River. I have observed from

the bulkhead of our home the algae blooms that

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were so graphically illustrated in the photographs that were part of your presentation.

I wore this green jacket today to illustrate the fact that -- I put this on so people can see me. Its purpose is to get your attention. And when I run into people in a social setting, they say, "Wow, look at the color of that jacket." So it works. It gets their attention. I'd like to suggest to you today that the river is trying to get our attention, that those algae blooms are the river's way of saying to us "I've got a problem." This green jacket for me is a survival mechanism, and I'd like to suggest to you that perhaps those algae blooms are similarly a survival mechanism of the St. Johns River.

The river struggles with human habitation aren't new in my experience. I want to junior high school at Lakeshore Junior High School here in Jacksonville. My eighth grade, Mr. Van Sikes -- this was probably before the word "environmental" was even in the lexicon -- used to plead with us not to go swimming and water skiing in the St. Johns River. This was 1959. And we used to -- we used to laugh about getting knocked

off our water-skis by floating fecal matter in the river and didn't pay a whole lot of attention, but, you know, we were 15 years old. What did we know?

But somebody did know. Congress understood and in the early 1970s passed the National Environmental Policy Act, the Clean Water Act, the whole draft of legislation that helped us not become what some countries in other parts of the world are quickly becoming, and so we managed to start cleaning up the river. But my question is are we there yet? And my answer, when I look at the algae, is no. I'm really I'm no more enchanted with the idea of kayaking in the waters that were shown on your slides than I was -- than I should have been in skiing with the fecal matter floating in the water.

And, frankly, I don't eat -- I don't eat fish or shrimp that come out of this river. I go to the grocery store the look for wild Atlantic or wild Pacific before I buy seafood, and that's a sad thing to me.

I don't know what we do. I'm not a scientist. I'm not an economist. I just know that the river doesn't look healthy to me. I

think it's trying to tell me something. As I understand, NEPA and the Clean Water Act, they basically said -- they basically said, federal government, encourage the states to do what needs to be done, and if they don't do what needs to be done, then EPA, you're going to have to go in and do the job for them. And my perception is that's where we are today in Florida, that, for whatever reason, and I don't think anybody is trying to do anything other than what they think is the best thing to do, but, for whatever reason, our system can't seem to produce results that will eliminate

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the algae blooms in the river and all of the other problems that were highlighted in your presentation. So I encourage you to stick with your -- stick with your plan of imposing numeric standards.

I know there's been a lot of talking about Florida being singled out. My understanding is that these are coming to the Mississippi River basin, they're coming all over the United States. Somebody has got to be first. I think the people in Florida have enough integrity and enough character to be able at the end of the day to stand up and say, you know, we're proud to say we

were the first people to live by these standards and look what it's done to our water. We're predicting -- some people are predicting the economy is going to collapse. Well, some industries may decline, some industries may not be as profitable, some industries may die; that's just natural. That's what happens. You don't see Stanley Steamers on the street anymore. Things change. And this is going to bring about some change but I have to believe it's going to be in the best interest.

I'd like to thank you for being here. I'd like to thank you for taking the time to listen to all of the stakeholders. I'd like to remind you there won't be a stakeholder who won't be at the microphone and it's been wearing something this color for the last several summers. So, thank you. Keep up the good work.

MR. KING: Thank you. Speaker number 9. And then speaker number 10 and 11, and if you'd come on up.

MS. FREEMAN: Hello. I'm Victoria Freeman and I'm at the same address as Robert Freeman. We are the owners of Jacksonville's oldest riverfront bed and breakfast, The House on Cherry Street,

1844 Cherry Street. And I want to speak very briefly to urban landscape pollution and to the bugaboo of economic transition and I want to speak out of personal experience. Seven years ago, Robert and I purchased our bed and breakfast and it had a traditional St. Augustine riverfront of lawn, and it was beautiful. And when we received the first landscaping bill on that lawn for the pesticides and the fertilizers to keep it healthy and emerald green, we paid it, and we paid several other bills of that magnitude. And then the algae bloom lapped up on our bulkhead and it stung my eyes and it stung the eyes of my guests. I have guests from all over the world. And a number of my guests canceled or cut short their stays.

And so I began to read articles about the cause of the algae bloom, and I discovered that I had met the enemy and it was me. Well, it was me and my beautiful lawn. At that point I began the transition to a river friendly lawn helped by the University of Florida. Now I use no pesticides, no fertilizers, and very little irritation, and I still have a lawn. I have a lawn that serves my



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business well. I have a lawn that been featured  
in Southern Living, twice in the New York Times,

the Atlanta Journal, recently in the Cleveland  
Plain Dealer, and in the Delta Sky magazine. From  
my experience I know that we can reduce urban  
point landscape pollution. I know also that old  
ideas die very, very hard. Yesterday, I walked in  
my neighborhood and in the space of ten blocks, I  
counted four chemical trucks spraying lawn  
chemicals on lawns that were both riverfront and  
near riverfront.

Mr. King, Mr. Keating, what we are doing  
right now is not working. We need very specific  
regulations and we need energized enforcement of  
these regulations, and I beg you for help to help  
stop this. Thank you.

MR. KING: Thank you very much. Speaker  
number 10. And speaker number 11 and 12, please  
come up.

MR. MOYER: Hi. My name is Larry Moyer. I'm  
with Bay County Utilities. Just a few points.  
First of all, the fact that humans are on the  
planet impacts our rivers, lakes, and streams, and  
the fact that Florida is one of the most populace  
states in the country leads to that impact.  
Probably not the pristine waters that people were  
used to when they came here many, many years ago,

but we caused our own problem. And anybody -- how  
we're going to go back, I don't think we can. So  
the thing is that I think that everybody has to  
realize that there's moderate -- there's moderate  
changes that need to be made and we have to  
recognize the impact that we have that we're not  
going to be able to fix. We are not going to make  
this a pristine environment anymore, not unless  
you're going to ban people from your state.

I think that EPA is selectively enforcing  
this standard in Florida which puts Florida at a  
distinct economic disadvantage. A lot of people  
have a lot of good ideas. I think that a lot of  
things can happen, but without an economic engine  
to fund that -- those things to happen, it's not  
going to work. If all of our businesses -- we  
can't rely solely on tourism, and if all of our  
businesses pull out because they can't afford to  
do business here, then the people that are  
supporting these measures to fix these things  
won't have the money to do it. And that's --  
that's the way it is.

And I want to point out a couple of things.  
That Chesapeake Bay, which the EPA has been in  
charge of for a long, long time, is a failed

policy, and tried to put nutrient limits on point  
sources. It failed. The bay is still dead. And  
millions, hundreds of millions of dollars have  
been spent there and those people do not see  
anything as a result of your policy and the  
enforcement that was put there. You now have  
given the Chesapeake area 25 years to comply with  
what is called "enhanced nutrient removal." Well,



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enhanced nutrient removal is an order of magnitude higher than what you're proposing for Florida wastewater systems, and you're giving them 25 years to make it there.

And I think that we have to be realistic. You guys couldn't get -- I mean, I hate to be a little bit crude, but you guys couldn't get out of your own chattel in a year and you're expecting all these utilities to comply with this in a very short time frame. We've got a bid process just like you do. We've got to hire engineers, we've got to hire consultants, and we've got to be responsible to our ratepayers. Our ratepayers deserve -- if we spend a dollar of their money, they deserve to see what that's going to get them. And if you make all these wastewater plants in this state comply with this standard, you will not

see one bit of change in the estuaries and river systems. The wastewater systems are not the problem, and until you guys want to face where the problem is and fix it, we're not going to get anything for our money and it's a wasted effort.

And I think everybody here wants to see something including, us. Us who are in the wastewater industry have been environmental stewards for a long time. We've been trying to do the right thing. We've been trying to get our plants on line. Florida has some of the most technically advanced wastewater systems in the country, and we're ahead of where Chesapeake is. So I think the problem is a lot more complex than anybody wants to admit.

Nutrients are necessary for plants. They always have been. And in natural systems, you have runoff that occurs, you have drought that occurs, and these things happen, some of these things that we're seeing. I think that we have to get realistic. We have to put more scientific proof into the study so that we can make the most use out of our dollars and we need to regulate the right components. That's all I've got to say.

MR. KING: Thank you, sir.

Number 11, speaker 11. And would number 12 and 13 come up.

MR. PALMER: My name is Don Palmer. I am with the Emerald Coast Utility Authority in Pensacola, Florida. I'm the water reclamation director for the utility which means I'm in charge of three wastewater treatments, in charge of their environmental compliance and for their operation. I'm not a biologist, I'm not a scientist, and I can't sit here and tell you about the complex relationships of rivers, streams, estuaries, nutrients, the SPARROW model, et cetera, but I am an engineer which has spent many years designing upgrades to wastewater treatment plants. And I've spent six years now involved in the operation of those treatment plants, so I can tell you about the impact of this rule to wastewater treatment plants.

We have three wastewater treatment plants,

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three different outfalls, three different water bodies. In the past 12 years we've upgraded two of these to AWT, and by the end of this year we'll have a third converted to AWT, well sort of. We're currently spending \$300 million to move a plant, a 20 MGD plant. We'll be pulling its

discharge out of the bay and it will be used by industries for reuse.

To put the 300 million that we're spending into perspective, for our utility our typical CIP is about \$10 million. So we're spending 30 years worth of CIP to do this. It took some creative financing and some creative rate increases. Will this new plant meet the new rule? Will any of our plants meet the new rule? First you have to understand I live and work in northwest Florida. Proposed standards there are the tightest in the state, and it's doubtful they can be reliably met with any conventional treatment. We have lower limits as we generally have very clean streams. We have the cleanest water, so, my opinion, we're getting penalized for having that cleaner water.

Limits have nothing to do with the assimilative capacity of the water body. They're not site specific. They're not based in cause and effect relationships.

So back to my new treatment plan. The permits have provisions for short-term limited discharges to the river when one of the industries is down for some reason. The other industry will use it and then discharge it with their surface

water. So it's clear they could be affected by this rule. In our agreements with them, it's clear that they can deny using our water if we cause them to violate their permit. So we would be indirectly affected. What are our options? Is site specific available? Well, the river is very close to the estuary. The estuary has been deemed impaired by what I believe is some suspect chlorophyll data, but that's the status, it is deemed impaired. So site specific alternative criteria does not really provide relief that I can see. The plant has to be upgraded to meet the limits and downstream protection values are added. There's no known technology to get the total nitrogen down on that level, not even AWT followed by RO. Cost impacts you heard so about for wastewater treatment plants are related to using RO. RO is just plain stupid in many issues. It provides no real treatment. It's just a concentrate. You still have the nutrients. We have to find a way to get rid of them.

Is deep well disposal a good option? It's our only option. I don't think it's a very good option. But those are minor issues compared to

the cost impact. We believe the cost for the capital and operation and maintenance required will more than double our current sewer rates.

Other options? Upland disposal. Again the

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costs are staggering. Good land is not available around our plants and where it is, availability is very low permeability. The land alone costs more than 100 million, much less the distribution system, the piping, and all the improvements.

Public access reuse? It rains a lot in northwest Florida. We had 88 inches of rain last year. We need a backup, which gets you back to your surface water and discharge limit. Site specific criteria, even if you could determine it, it's not cheap, three different plants, three different water bodies, three different studies. Even if we did develop it and were able to meet them, would that solve the problem? What stops future septic tanks? What stops stormwater runoff? What stops more nonpoint source? We do not have that authority. We spent millions and still haven't stopped the problem.

And while we're talking about money, I cannot fathom where EPA and DEP get their cost estimates for implementing this rule. The costs are

staggering. If we were to upgrade the standards and spend hundreds of millions, what would this gain us? If you look at our Main Street plant that we're moving, by removing its discharge from the bay we're removing about 1 percent of the total nutrients coming to the bay. Our current results even without AWT in the boil of the discharge from our Main Street plant is usually within a couple hundreds of a milligram per liter of the background in the bay.

Are there issues with water quality in Florida? Certainly, but this rule will also require vast sums of money to be thrown on problems that don't exist and on solutions that won't make a difference. This rule is too broad a brush for nutrients and leaves too many unknowns. There should not be a one size fits all even for northwest Florida.

Florida Fish and Wildlife Service says there's anecdotal evidence of red tide in Florida dating back to the 1500s. It also says it's always been with us and probably always will be. Let's not spend a bunch of money and not solve the problem.

In summary, E2A (phonetic) is not opposed to numeric nutrient criteria. We currently have them on all our treatment plants. We have nutrient limits. We are opposed to limits that are so low that it wastes our ratepayers' money and provides little or possibly not even a measurable environmental gain. However, once the rule becomes effective, we have to comply. We do not have a printing press as the federal government. The cost must be passed on to our ratepayers. These ratepayers are the same ones that fund FDEP, the water management districts, and the EPA. Please treat them right by not implementing this rule as written.

Thank you. Apologize for going over.

MR. KING: Thank you, sir. Speaker

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number 12. And speaker number 13 and 14, if you would come up, please.

MR. GRISWOLD: My name is Richard Griswold. I'm with Destin Water Users and I'm a professional engineer.

My first comment is I want to say that I listened patiently to the opening comments you two made. I could only conclude that you're very confused right now. We hope through this process that we can help you out with the mess that you

have made. Earthjustice has made public statements that estimates of cost of compliance running into the billions are ludicrous. Their statements come from a place of extreme ignorance. Their spokesman, David Guest, is not a scientist or an engineer. He is not trained, equipped, or knowledgeable to understand the treatment of the water, nor can he support his statements.

I think that billions might not be the word that we should be using. I think we need to talk more in the terms of trillions. The Florida Department of Transportation in the development operates the most extensive stormwater management system in Florida. Their investment to comply with the water quality criteria in the proposed rule could easily run to half a trillion dollars. Cities and counties will easily need a half a trillion dollars to meet the water quality standards being imposed.

Wading through the smoke screen purposely thrown up by the EPA, the rule requires that stormwater drains discharging to a water course cannot discharge water that does not meet the standards in the proposed EPA rule. This means that at some point prior to discharge the water in

these systems has to be captured, transported to a treatment facility, most likely reverse osmosis plant, where it can be stripped of the nutrients it contains. These plants are expensive to build and to operate and they are extreme energy hogs. I'm not for sure where Florida will get the electricity needed to power these treatment facilities.

Reading comments made by some of these -- these are comments in the docket made by the special interest groups represented by Earthjustice reveals a lack of understanding of the proposed rule. Many of the comments made by members of the Sierra Club point to their support of the rule because of runoff from the land and discharge from septic tanks which are polluting the water courses. This rule is not going to regulate either one of those sources of pollution. So it appears that just as EPA has misled the Congress of the United States, possibly lied to a federal judge, it appears that you've now misled your co-conspirers.

Other comments made by organizations such as the Clean Water Network of Florida are bogus. It's been my experience that their leader in

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1 Florida is very good at not letting facts stand in  
2 the way of a good story. I read comments from a  
3 few members of these special interest groups that  
4 are in the docket who say they support the EPA but  
5 then state that each water body is different and a  
6 standard needs to be set for that individual water  
7 body. They're absolutely correct in that. This  
8 rule does not accomplish that. Addition, many of  
9 the individuals making these comments recognize  
10 that all contributors to nutrient balance should  
11 work together. Again, the EPA rule does not  
12 recognize this as important. It is prescriptive  
13 in nature.

14 Pretty much what the people from these  
15 advocacy groups are stating is what Florida is  
16 already doing, using the TDML program to  
17 methodically analyze each water body, establish a  
18 specific nutrient limit that is protective of that  
19 water body, and then collaboratively working  
20 together with all contributors to decrease the  
21 amount of nutrients entering that specific water  
22 body. The proposed mandate on the citizens of  
23 Florida is a poorly thought out rule that will not  
24 be protective of the waters of Florida and have as  
25 much chance of doing harm as of doing good. Next.

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1 MR. KING: Thank you, sir. Speaker  
2 number 13. And would speakers 14 and 15 come up.

3 MR. SAWYER: Thank you very much. My name is  
4 Bill Sawyer. I'm the president of a company  
5 called Hydromentia in Ocala, Florida. We are a  
6 technology company. We have a natural nutrient  
7 removal system called the Algal Turf Scrubber.  
8 And while algae is the problem, it is also the  
9 solution.

10 Governor Buddy McKay, a former governor of  
11 Florida and a member of our board of directors,  
12 just wrote a book called "How Florida Happened,"  
13 and in that book he says that back in 1968, when  
14 he started his career, he realized that Florida  
15 more than almost any other state needs to figure  
16 out how to balance concerns for the environment  
17 with the desire for growth. And he goes on to say  
18 that here, 42 years later, we're still in the same  
19 predicament and not much has happened.

20 Florida depends on clean water for tourism,  
21 agriculture, and fishing. It's the entire basis  
22 almost of our economy. These standards you're  
23 suggesting may be painful but it's time for us to  
24 embrace the change and try new technology rather  
25 than just keep pushing the problems onto our

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1 children and our grandchildren.

2 Our economy is already suffering because of  
3 this. And while excess nitrogen and phosphorus  
4 are harming our rivers and streams, it doesn't  
5 make sense for us to ask farmers not to use  
6 fertilizers, because less fertilizer means lower  
7 crop yields and higher food prices. So we need to  
8 find a way to continue using these things and then  
9 overcome the bad parts of their use. The expense  
10 is probably going to be huge, but so is the loss  
11 that we're going to see if we don't do anything.



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So we need to open our eyes to new technologies that have been ignored in the past, and we have to look at new ways of combining those technologies. We also have to find innovative ways of funding it and investigate ways of making the problem pay for itself.

Our technology, the Algal Turf Scrubber, is very simple. We grow algae in a controlled environment and that algae reuses the nitrogen and phosphorus that goes into that river, stream to grow. And then we harvest it when it reaches its peak growing cycle, and then it can be reused for things like biofuel and renewable organic fertilizers.

The Algal Turf Scrubber has the ability to restore waters to natural background levels. It's been developed over 30 years. It's cost effective, it's scalable and sustainable. In fact, in looking at our technology versus the spray field, we use 10 percent as much land for the same removal rates, which is -- which is important. It's commercially available today for most stormwater and wastewater applications. It is not a silver bullet, there are no silver bullets, but it has great applications in a number of areas. We cannot replace the wastewater treatment plant, but we work pretty well in secondary and tertiary applications in some plants. We're doing tests in Georgia and New York right now. We have others under discussion.

The Chesapeake Bay was mentioned. I think one of the problems with the Chesapeake Bay is the technology they chose, not the fact that they spent all that money. We're part of the Chesapeake algae project, which is a consortium of ourselves and William and Mary and VIMS and the Smithsonian Institution that is really working on their problems.

And when you look at the Mississippi River,

we estimate that if we put 600,000 acres of the Algal Turf Scrubber up and down that basin we can remove 40 percent of the phosphorus, which is your goal, and we could reduce enough algae to create 2 billion gallons of biofuel per year.

So in order to make -- people make this all happen, we have to work together. We have to embrace new technologies and we should have to find new funding mechanisms. One way of doing that is to look at privatization, making it attractive for investors to carry part of the burden. If we want to pay a performance model, we could pay for nitrogen and phosphorus removal and then also sell off the byproducts and make it a win-win for the investors as well as for the environment. It would require a change in the way things are done today. We would have to have longer guarantees but as long as those guarantees are based on performance, it makes sense.

In North Carolina, you also have a fund where real estate developers pay in for this kind of work, and that's working well. And we shall also



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look at a fertilizer fee earmarked for water pollution. If we do those things, over time we'll be able to return our rivers and streams to near

background levels, we'll have a thriving economy, and we'll even an environment that we're proud of to our children and our grandchildren. Thank you.

MR. KING: Thank you very much. Speaker number 14. And will speakers 15 and 16 please come up.

MS. AHLERS: Good afternoon. How are you today? I'm very glad to be here. My name is Karen Ahlers. I'm representing the approximately 400 members of the Putnam County Environmental Council today.

I am proud to say that I am a native of Florida and have swam in many of its springs and rivers and live on a beautiful sand filled lake, and water is a very, very important thing to me, both water quality and water quantity. I'm not so happy to admit, though, that in Putnam County we have a paper mill which contributes quite a lot of pollution to the St. Johns River. In fact, it's one of the largest polluters on the river. But the other side of that is that Putnam County has been designated a county of rural economic concern, and so those jobs at that paper mill are very important to us.

We'd like some help in protecting our river

and saving those jobs. There are technologies that exist. Big corporations don't like to spend that money unless there's somebody kind of pushing them to make them do that, and we would really appreciate your help in that.

One of the saddest things that I witness in and around Putnam County are the poor folks who depend on the river for their living too. You heard from Ben Williams and his wife, the first speaker today. They were talking about their commercial venture. I'd like to tell you about the poor people who fish almost every single day in the St. Johns River, sometimes with two or three small children in tow. Whether or not there's an algae bloom or not, they're there. They're at that pier, they're throwing their nets or they're dropping their hooks because they have to do that to put food on their table. And I know these people. I love these people. And they need to be heard. They're not represented by consultants or attorneys and they often get left out of this discussion.

The other point that I'd like to talk to you a little bit about is the nutrient pollution in Silver Springs, Florida's original tourist

attraction. Its flow is down by 25 percent. Its nutrient levels have skyrocketed in recent years. Silver Springs feeds into the oldest river on the Florida peninsula. It's called the Ocklawaha River. The Ocklawaha historically was the largest tributary of the St. Johns River. It delivered as much of one-third of flow of the St. Johns River.

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Putnam County is fortunate to have this river available to us. It's got a big dam on it. The justification for keeping that dam is to protect the St. Johns River from the nutrient laden waters from Silver Springs. Now, something is wrong here. You are our hope. That river has been dammed since Buddy McKay got active in 1968, is when that dam went in. We're still working very hard to see that river restored as it should be, because it contributes so much to the health of the St. Johns River, not to the detriment of the St. Johns River.

Silver Springs needs to be cleaned up. I hope that you guys will help us. We've tried working with DEP. We continue to work with the DEP, and we look forward to working with DEP in the future but we look forward to also having a partner in getting this job done. Florida's

future depends on it.

I'm a grandma. I've got a beautiful little three-year-old granddaughter that is just learning how to swim. She's been in the Ocklawaha. I've been there. It's -- our water is critical to Florida's future. It's what our past was based on, and it's what we look forward to having plenty of in good quality in the future.

I thank you very, very much for being here and I have hope that this is all going to work for the best. Thank you.

MR. KING: Thank you very much. Speaker number 15. And speaker 16 and 17, if you'd come up, please.

MR. FROST, JR.: Good afternoon. My name is Jack Frost, Jr. I work in the ag industry. I graduated from the University of Florida with a BS in ag in 1976. Way back when, there was a required course called Ag and the Environment. Limits to growth and all that jazz was taught. I subsequently got a master's in horticulture from the University of Florida. I'm a CCA. I've lived in Florida all my life. And I've worked in ag for 34 years, mostly in the fertilizer industry. I've seen change in the last 34 years in Florida's

increasing population and ag's decreasing presence.

Does anybody know what this is? A circular slide rule. Ever heard of a slide rule? Ask James. That's what I started college with, right there. We've had change in technology. I have, rather than a slide rule, I don't even remember how to use this, but I have a laptop in my truck now. But I can remember when there wasn't any air conditioning in Florida, and most of you folks probably wouldn't have wanted to live here then. But smaller population. I graduated from the University of Florida and there wasn't any air conditioning in a lot of the buildings.

But I've seen the change in my industry. There's 23 less fertilizer blend plants than when I started. There's been a significant decrease in ag fertilizer in the last two years. I've also

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seen an increase -- a change in the educational level of my customers. 100 percent of the decision makers that I call on have at least a BS, a bachelor of science. Some of them have a master's of science. Sales force has changed too. All of us have a BS at least. Some have a master's level.

AUDIENCE MEMBER: In sales?

MR. FROST, JR.: No, not in sales. In science.

The Certified Crop Adviser Program, national certification, came into Florida. It's voluntary. We also joined up. We took the national test, which is college level test. We passed the state level exam. We're required to get 20 CEUs a year. That's where I was yesterday or I would have been at the Tampa meeting. We've voluntarily imposed it on ourselves and the standards administered by the University of Florida and Iowa State. In 1980 I can remember when IPM, Integrated Pest Management, started at Florida. Scouts were employed by growers. These guys had BS degrees in entomology or master's level. The result was they didn't spray as often. They didn't need to because they were doing only what they needed to do. Precision ag started. Okay. We've taken a hard, hard look at nutrient use efficiency, how can we do better with less.

MR. KING: Mr. Frost, you're confusing me. Are you talking to us or are you talking to them? This is all about talking to the federal government and giving us comments, if that's okay,

on the proposal. We'd appreciate --

MR. FROST, JR.: We have the written BMP issue which one of you gentlemen talked about in Orlando, and nitrogen was found in groundwater on the ridge. And a study group was put together with podox (phonetic), University of Florida, and the water management districts. And they set up their monitoring sites, and they came up with a proposed interim rule, and the growers adopted it. And at those monitored sites where the interim rule was adopted, the groundwater nitrogen decreased. The final rule was adopted in October of 2002. Technology came along at the same time. Tree seed technology, where you have an eye system on the spreader, turns the spreader on and off where there is no tree, it applies different rates to different size trees, and it reduced the amount of fertilizer applied to orange groves by 25 percent on average across all the acres. So less fertilizer was put on the ridge. Fertilizer wasn't applied to where there weren't any trees.

BMP has been developed for Indian River citrus lagoon, Peace River basin, Manasota basin, gulf citrus, the fern industry in Putnam County. It's applying science, fadatx (Phonetic), it's a

state law. It's aimed at reducing fertilizer. It's cooperative in nature, interaction between DEP, water management districts, University of

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Florida, and growers. We're trying to do our job.  
Have you guys funded any research in Florida  
on water pollution?

MR. KING: We're here to hear your comments,  
and if that's something you'd like us to respond  
to on the record, we'd be happy to.

MR. FROST, JR.: But I'm for rules, I'm just  
for the process that DEP was following. And I was  
under the impression that you guys, they were  
communicating with you-all through a series of  
meetings starting in the 2000 time frame as they  
did their research working towards a numeric  
criteria, and there was an agreement in -- a year  
ago about coming -- you know, their final rule for  
numeric standards was going to be in place and  
this was all before the lawsuit. So I don't  
understand. I mean, they were working towards a  
numeric rule. It's their research. I don't get,  
you know --

MR. KING: Appreciate your comments.

Speaker number 16. And would speaker 17 and  
18 come on up.

MR. JONES: Good afternoon. My name is  
Harold Jones. I represent the Duval County Farm  
Bureau. I'm a native of Florida, having grown up  
in Clewiston on Lake Okeechobee, and have always  
been concerned about water quality. I spent 33  
years as an extension agent in the Duval County  
extension office, and since retirement have owned  
and operated Southern Horticultural Consultants  
for six years.

One concern that I have with the proposed  
standards is the fact that they ignore the  
variability of Florida waters. Florida's rich in  
phosphates. Much of the world's phosphate  
fertilizer is mined in Florida. And our lakes  
that naturally contact the phosphate rich bedrock  
or depend on groundwater that contacts those  
bedrock, those lakes are going to have naturally  
high levels of phosphate. There's no provision in  
these standards to -- to address that. And the  
University of Florida Lake Watch Program has  
documented that we have some lakes with natural  
high nutrient levels. They're going to be listed  
as impaired even though that's their natural  
state.

In addition, my concern, I have a little

concern, and we have federal drinking water  
standards of 10 parts per million nitrogen and yet  
under your standards we have -- the highest amount  
is 1.8 parts per million. That to me is a -- is a  
concern that I would like to see addressed.

These standards as they are proposed are  
going to cause economic harm to Florida. Every  
Floridian is going to have to pay higher prices  
for their utilities, they're going to pay higher  
fees. And one thing that we as a nation and as a  
culture have not really realized is how cheap our  
food is. And because of our concerns for water --  
and we're all concerned for water. We want to do  
our part, but we're going to have to give up some

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things, and part of it may be the cheap food. If these standards go in, Florida is going to be at a economic disadvantage. We're going to have agricultural commerce industry that are going to moving out of state. Food production may actually move out of the U.S. to foreign countries. And people say, well, that's not necessarily bad. It's not bad until you have a natural national disaster or national crisis that occurs or international transport in shipping becomes an issue. The reality is, Florida cannot exist

without food, and if we start depending on others to produce our food outside the U.S., it's going to be a major problem for us.

Agriculture producers in Florida have adopted Best Management Practices, they've adjusted their production techniques and managed their farms much better than they used to. We are also working with Best Management Practices in the urban areas, and we're beginning to address the urban runoff and situations that we face there.

These nutrient standards need to be adjusted to recognize the variability of our surface waters and work that's being done already in the state. One thing we need to all realize is that ultimately we, all of us, are the problem, and what we need to do is work together to reduce our impact on the environment amount, all of us. Thank you.

MR. KING: Thank you, sir. Speaker number 17. And would speaker number 18 and 19 please come up.

MR. SCHWAB: I'm Richard Schwab. I live in Perry, Florida. I have run a third generation logging business in Perry. We employ almost 50 people. We've been -- like I said, we've been

logging since 1960, and we've seen a lot of changes in our industry, whether it be on the production side of a product that we produce in the woods or whether how we handle and what we do. We follow Florida Best Management Practices for silviculture which was developed in 1979, shortly after the EPA came out -- or Congress passed the Clean Water Act. We realize in the forest industry as well as in agriculture in the state of Florida that we have to do what we can do the very best of our ability to ensure sustainability for our environment, because without clean air, without clean water, without clean ground, we're not going to have a good environment to be able to grow the products that we need to be able to harvest.

As a matter of fact, the Florida Best Management Practices for silviculture wasn't just developed by industry or state agency. It was a conglomerate of 22 entities in 1991 that developed the latest writ of our Florida Best Management Practices. We work along with the University of Florida, the Florida Department of Environmental Protection, Florida Defenders of the Environment, Florida Audubon Society, the Nation Conservancy,



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1 and the Sierra Club. So we work very closely with  
2 environmental groups to be able to write the rules  
3 that's going to make what is best for the land,  
4 for water, and for air in the state of Florida.

5 As a matter of fact, the 2009 report has just  
6 came out on -- implement survey report, and we  
7 have passed with a 98 percent compliance in the  
8 state of Florida, Florida Best Management  
9 Practices in the -- in the woods. In other words,  
10 what we're doing is we're following our manual  
11 which is the guideline that we have. And these  
12 are self-imposed rules. This isn't a state agency  
13 saying you have to do this. This is an industry  
14 being conscious about what we're trying to do and  
15 following our own set of rules to ensure the  
16 sustainability for our environment, and that's  
17 what we do best. We don't need an overreaching  
18 government agency coming in here and explaining to  
19 us what we need to do. We know what to do. We  
20 applied science, we applied -- provide common  
21 sense and what's best for the environment.

22 See, when BMPs are applied, water quality is  
23 protected. See, this is even studied as -- and  
24 then even studied it along with Florida -- excuse  
25 me, the Florida Department of Environmental

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1 Protection and they found that even fertilizer  
2 impact on stream and pond and lake water feed was  
3 not affected when Florida silviculture BMPs were  
4 in place.

5 In conclusion, my family and myself has been  
6 practicing sustainable forestry and agriculture  
7 for over 50 years. We're environmental stewards.  
8 We self-recognize what good air, good water, and  
9 good ground does. It equals trees. And trees  
10 make Florida green. When you have less  
11 restriction, that means it's better environment --  
12 environment for your business. And when we have a  
13 better environment for our business, that means  
14 we're going to be able to practice our  
15 agricultural practices in an environmentally  
16 sustainable way. And what that means is we're  
17 going to have Florida green and the air and the  
18 ground and the water is going to be cleaner  
19 because the trees are going to be there growing  
20 instead of people.

21 And, see, the issue that we're not  
22 addressing, I believe, with this rule change is  
23 urban runoff, urban fertilization. There's a lot  
24 of people living in Florida that put a lot of  
25 fertilizer on their grass that the water -- that

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1 the rain comes and washes it right down the street  
2 and it goes to the nearest lake, river, or stream,  
3 and that's not even addressed in these issues.  
4 We're doing it in the right way in industry. And  
5 we're asking that what needs to be changed is how  
6 we do it across the board in the state of Florida.  
7 And I'm asking the EPA to allow more time for  
8 Florida's DEP to work with industry and work with  
9 the public to be able to make this fit and work  
10 for us. And I sure appreciate it. Thank you.

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MR. KING: Thank you, sir. Speaker  
number 18. And would speaker number 19 and 20  
come up, please.

MS. BREMER: Good afternoon. My name is  
Linda Bremer. I am a native Floridian. I've  
lived in Florida all my life. And I like to thank  
the EPA for having this meeting and for  
implementing a rule that has long been needed.

A lot of us here today consider ourselves to  
be stakeholders too. And we feel that when we  
hear the cost to the industry and to  
municipalities is a problem to them to clean up  
their act, that it makes us angry. Because what  
it says is that clean water for Floridians is too  
expensive and that these municipalities and

industries want to continue to do things the way  
they've always done them.

As a person who's lived in Florida all my  
life, I've seen decades of excuse and we've -- the  
result is those pictures that you had up on the  
screen as you began this program. I have lived on  
waterfront where sewage floated by and it came  
from direct discharge into the waterway, and yet  
the city told us that it was too expensive to hire  
enforcement people to check regularly on the  
failing septic tanks in my neighborhood.

I lived on the Florida Gulf Coast when we saw  
the red tide come in, and thousands and thousands  
of fish died on the beaches. And the cost to the  
economy at that time of the loss of those beaches  
to tourism was huge, because the red tide didn't  
just go away when those fish died and were cleaned  
off the beach; the red tide was still there, and  
the cost to the lack of ability to use those  
beaches was gigantic.

I've canoed on the Santa Fe River. And I  
have seen dairy farms and cattle farms right on  
the banks of the Santa Fe River where the cattle  
actually came down into the water and we had to  
canoe around the cattle that were in the water of

the Santa Fe River.

In a city park, completely removed from the  
river, a little tributary goes through -- a little  
stream goes through a city park. And this park  
has a library and a playground in it and yet this  
tributary, this little tiny stream is so  
contaminated that it has to be posted so that  
people do not enter that water, do not touch that  
water, and do not contaminate themselves with that  
water.

We are overdue for this. We are overdue for  
the EPA to come in. We have waited and waited and  
waited decades for the state, for our legislators,  
for industry and municipalities to take control  
and we are tired of it. As sea level rise starts  
to affect water and we lose a lot of our coastal  
wetlands and sea water contamination starts to  
affect our aquifers, we will come in the coming  
decades having to drink some of this water, this  
surface water that is now so contaminated. And if  
you think we are mad now, we are going to be

really mad when we have to start drinking that stuff.

So thank you very much for being here and please stick with it.

MR. KING: Thank you ma'am. Speaker number 19. And speaker 20 and 21 come up, please.  
MR. ADAMS: Good afternoon. My name is Colin Adams. I'm speaking today as a concerned Floridian and an outraged taxpayer. We are sick both literally and figuratively of poisonous and nuisance algae invading our inland fresh waters where they don't belong.

Just as I used to as a kid, our children deserve to swim clean rivers, streams, lakes and springs. And I want to eat the fish I catch without fear. Excuses from agriculture, industry, and municipalities about why we should maintain the status quo are as persistent and as much of a nuisance as the algae blooms in the St. Johns River. Our patience with these putoffs and the blooms has worn thin.

Local farmers have spoken about terrible the impact will be from these criteria but when asked how they would be so directly impacted, only vague and indiscernible muttering is what follows. We're tired of avoidance, we're tired of excuses, and we're tired of you telling us it's impossible. We don't buy it.

Just as an aside, the farmers that are doing the right thing, fertilizer companies that are doing the right thing, this is not about you; it's about the people that are not doing the right thing. Nothing in life is free. In a perfect world, the criteria wouldn't affect even one job and Fort Knox would be turned over to the State of Florida. Well, this isn't a reality. But our economy is also going green in the environmental sense. Green business is the new industry and, when it comes, new jobs. Tourism rides the same rails as does organic farming. People don't visit Florida to see polluted waters, dead wildlife, and lackluster ecology. We are an environmental hotspot in the U.S. This is our past and it must be our future.

You've heard accusations that 85 percent of our pristine waters will be impacted by the regulations. Wrong. 30 percent will be impacted, and this 30 percent represents the problem, not the pristine. You've also heard drinking water will be impacted with having to meet standards. Wrong again. The majority of Floridians get their drinking water from the ground. These are surface water criteria.

How about the idea the BMPS are working?

Both laughable and wrong. Under Florida law, the TMDL statute, once a farmer or rancher claims BMTs are in place, there's a presumption of compliance with water quality standards and an exemption for monitoring.

How about the inflated cost of compliance

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through wastewater treatment? These numbers are greatly exaggerated to cause hysteria and, more importantly, they're wrong. Realistically it's more like \$120 per family for a family of three annually, not \$700.

Then there's the screaming and crying over the one size fits all. Wrong. Considering most the data has come directly from DEP along with information from and with consultation from EPA's regional office, you can't expect us to actually believe that EPA is completely oblivious to the unique hydrogeology of this state. Unlike our own Department of Environmental Protection, EPA hasn't had its head willfully buried in the sand.

Please stop our arguing to maintain current restoration efforts and telling us how wonderful they're working. We know better. We have our own watery eyes, burning noses and itching skin to tell us differently. Only keep the restoration

efforts that are working.

Recreation, commercial fishing, property values, tourism, and the health of our citizens can't take delay or ineffective criteria any longer. It's important to consider the impacts of these criteria but it's critical to consider what happens if the numbers aren't protected. As Ben Franklin famously said, an ounce of precaution is worth a pound of cure.

Thank you so much, and thank you for what you're doing.

MR. KING: Thank you. Speaker number 20. And would speakers 21 and 22 please come up.

MR. GODBOLD: My name is Jesse Godbold. I'm a native Floridian. I have a farm, a tree farm over near Lake City. It's been in my family. My grandson will be the fifth generation to have the farm. It's in the Ichetucknee River basin. My grandfather homesteaded the property in 1878. So I have a lot of roots here in the state of Florida and a lot of concerns for the water in the Suwannee County area, which I live in Green Cove Springs on the St. Johns River.

I'm a member of Farm Bureau, vice president County Farm Bureau and vice chair of our Water and

Natural Resources State Farm Bureau Committee.

And I have been exposed to working with farmers and with this issue my entire career. I retired as a county extension director in Clay County, and I have worked with IFAS University on adult educational programs and on some of the research that has been involved in working with farmers and with these issues. And there is a water problem in the state of Florida. I don't think any of us will argue with this. I think that we need to relook at maybe our approach we're using and look at the value of some of the educational programs, some of the BMPs, the programs that's worked in Suwannee County so well with the volunteer cooperation of the farmers and Farm Bureau and Department of Agriculture and other agencies.

I think we need to look at the standards

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that's been set. Let's make sure there's good science there. Let's look at what our state has done. Let's look at if there's a problem with the state, getting the job done. Let's, you know, look at that. I feel very strongly that we should do this on a state basis rather than having the federal government come in and take over where we have made so much progress, and to come back and

Look at how we can -- rather than use a big hammer and go to the courts, let's go back and look at education, work with the -- after I retired as county extension director, a short time with the St. Johns Water Management District with an educational program they did with volunteers. It was a watershed action volunteer program. I saw a lot of good come from this in working with the farmers and the homeowners. Looking at, you know, the amount of nutrients that's placed on an acre of lawns, it was astounding the amount that was put there compared to what a lot of the farmers do.

There's a lot of education that needs to be done. There should be something done here, and sort of rethink the mandatory big hammer of saying, well, it hasn't worked. You know, let's look at the science. Has it worked, or where it worked and where has it not worked and let's put some efforts in these areas. And I think all of us working together as cooperative effort, all of us affect that drop of rainwater that falls in our back yard and we all have an impact on it and we all are concerned with it and we're all dependent upon it. Thank you very much.

MR. KING: Thank you, sir. Speaker number 22. And would speaker number 23 and 24 come up, please. I beg your pardon, 21.

MR. PUTNAM: Thank you. My name is Tom Putnam and I'm here on behalf of the Langdale Company. Thank you for the opportunity to share our concerns about the EPA's proposed nutrient standards for Florida's waterways.

The Langdale Company has managed forests in north Florida and south Georgia for over 100 years. We're proud stewards of the land and believe our forestry practices have resulted in conservation of the land and water.

Our forestry practices have been developed in partnership with both the Georgia Forestry Commission and the Florida Department of Agriculture and Consumer Services Forestry Division. We are concerned that the EPA's rule could have a negative impact on our ability to balance environmental protection with economic utilization. We share Florida's goal of protecting its water from all forms of pollution. And the silviculture Best Management Practices that we use in our forest lands have resulted in sustainable and diverse habitat for both plant and

animals species. As the Florida Forestry Commission has noted in its comments, a peer



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review published study of streams in five forest sites concluded nutrients were relatively low both before and after harvest. We support the Florida DEP's use of a two-tiered approach in stream evaluation. Numeric nutrient criteria followed bio assessment gives a much best picture of a waterway's overall condition. This is an important component in the evaluation of a stream's impairment, and the EPA's rule does not include this provision.

Finally, we have a vested interest in keeping Florida's streams healthy and have made significant investments to achieve that end. The rule that the EPA has proposed would result in some of Florida's most pristine waterways being classified as impaired when, in fact, they're clearly not impaired, and such an approach is counterproductive to protecting Florida's waters. Thank you.

MR. KING: Thank you, sir. Speaker number 22.

MR. BAGWELL: I'm Knox Bagwell. I've lived all my adult life here in Florida; 25 in

Southeast, 30 in North Central, Alachua County, on Lake Santa Fe, where I can put a scuba tank on and go to the Gulf of Mexico. I'm probably also the longest continual blueberry farmer in the state, for over 30 years. I'm on the board of Santa Fe Lake Dwellers 20 years, an outstanding Florida waterway where we prevailed at the cabinet level when a developer appealed a state Supreme Court ruling on a typical dredge and fill development which was approved by the county. I'm on the board of the Suwannee St. Johns Sierra Club where I'm an outings leader, leading a half a dozen paddles a year, allowing others to see firsthand the continual water quality degrading and the ever increasing negative effects of algae buildup. I'm on the board of Alachua County Environmental Advisers Committee, one of the few medium county densities that has a dedicated DEP. I was on the staff of Paddle Florida where twice a year we take 100 people down the Suwannee River for a week so they can experience firsthand the wonders of the waters here in Florida. A small group of us paddlers take a half dozen week paddling camping trips on Blackwater and Chipola rivers in the Panhandle to the Suwannee in the central to the

10,000 islands in the Everglades. These varied experiences always show the continual degrading, decreasing water quality standards throughout the state due to past and ever present political influence at state regulatory levels, city and county commission mindset of new development at any environmental cost, and water management district policies of satisfying ever consumptive use permits, whether it be water bottling permits at the expense of the significant harm to the Florida aquifer, whether running above ground pipes to the ever possible surface water potentials. Having already significantly harmed

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the public meeting TMDLs and alternative water sources, it's a sad state to hear that after overpumping the Florida aquifer they're now trying to take the surface waters.

Recent St. Johns Management Water District meetings at granting of Seminole-Collier's consumption use permit of 500 million gallons a day show that a county that uses three times the national average per consumptive water use is a never ending issue. With reference to ag chemical and fertilizer runoff and the development of BMPs by the universities, from our personal experience

of 30 years of being involved with the University of Florida blueberry breeding and growing programs, BMPs were developed to efficiently use the various inputs of farmers to achieve maximum output and profit. While there are areas that address input levels of chemicals and fertilizers, in no way do BMPs address the suitability of the particular crop to the type of soils being individually used.

Case in point. In Alachua County there's a large blueberry farmer who over the past 20 years has about a thousand acres on three different types of unique soil runoff conditions. While all three locations could be profitably and environmentally sustainable if low to medium farming methods were farmed but, like so many farming operations, whether they be concentrated dairy operations, GMO crops which encourages excessive chemical uses or nonnative blueberry varieties in concentrated use in Florida, where plant breeders at the ever increasing larger financial profit pressures develop BMPs that now have to recommend an intensive varied spray program, at times up to a dozen sprays in four months, essentially replacing Mother Nature with

chemicals, along with more intensive fertilizer inputs to get a profitable crop, at the same time requiring overhead sprinkler and frost protection that at times can run three days constantly, which obviously significantly causes chemical and fertilizer runoff since blueberries require an acid soil which most often is found close to water bodies and have an impermeable clay underlayer, further causing the runoff.

The blueberry farm previously mentioned, which own four to 500 acres, which occupies little more than 1 percent of the drainage area into Lake Newman has been water management district documented to directly contribute to 7 to 10 percent of the phosphorus runoff into Newman's Lake, a seriously impaired water body, that FWC is currently harvesting Gizzard Shad to help the imbalance, they hope. The mere fact that University BMPs are being followed gives no assurance of a sustainable water quality.

Case in point. Urban Turf BMPs refused to stop recommending fertilizer during the heavy rainfall runoff summer months. The lack of life sustaining --

MR. KING: Mr. Bagwell, we'll have to finish

up here.

MR. BAGWELL: Thank you.

MR. KING: Thank you so much. Appreciate it.  
Speaker number 23.

MR. STEINBRECHER: Welcome back to Florida.  
We appreciate you being here and appreciate you  
hearing our comments today. My name is Paul  
Steinbrecher. I'm the director of environmental  
permitting and regulatory conformance with JEA,  
the local utility here in Jacksonville, Florida.  
We are the eighth largest municipal utility in the  
United States providing water, sewer, and electric  
service to the residents of much of northeast  
Florida.

My comments today are focused on a very  
narrow area: Florida's existing numeric nutrient  
standards, the solution that is already under way  
to each of the pictures that you showed earlier  
today. We do have a problem and we absolutely  
must address that in Florida.

As you know, numerous total maximum daily  
loads, or TMDLs, for nutrients have been developed  
for Florida's waters, including nutrient TMDLs  
applicable to the lower St. Johns River basin,  
where you happen to physically be today. These

nutrient TMDLs have already water body specific  
numeric end points, and these nutrient TMDLs have  
been approved by EPA, very specifically approved  
as restoring and protecting Florida's waters from  
nutrient impairment. These TMDLs are being  
implemented right now under Florida's progressive  
program in a manner that goes well beyond what is  
required by the federal Clean Water Act.

Here in the lower St. Johns River basin, I am  
pleased to report to you that wastewater treatment  
facilities are very close, within 10 percent of  
meeting their freshwater TMDL allocations for both  
total phosphorus and total nitrogen as a result of  
that program. With respect to meeting the marine  
TMDL allocation for total nitrogen, we're over  
halfway there. This TMDL as well was just adopted  
in 2007.

There are additional nutrient reduction  
projects being implemented in this basin by the  
wastewater treatment facilities and additional  
projects about to be implemented. In total, point  
sources have identified and are implementing over  
\$500 -- over \$500 million in projects in this  
basin to meet TMDL obligations. EPA's proposed  
regulation as currently stated appear to signal

the end of this highly effective nutrient loading  
reduction process in Florida. If EPA's proposed  
numeric nitrogen -- excuse me -- numeric nutrient  
criteria go into effect as currently stated,  
planned water quality improvement projects will  
need to be suspended, unfortunately, perhaps for  
several years, as previously EPA approved TMDLs  
are then resubmitted for EPA's reapproval, this  
time as site specific alternative criteria. This,

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unfortunately, will needlessly delay the imminent restoration of these water bodies based on those \$500 million of projects that are planned and under way.

The bottom line is this: EPA's proposed rules will, I think, inadvertently needlessly thwart historic process in reducing nutrient loading in the lower St. Johns River and elsewhere in the state where there are already EPA approved TMDLs that will meet all applicable water quality restoration and preservation objectives. This part of the rule is bad environmental policy. Waters that have EPA approved nutrient TMDLs right now do not need new numeric standards and, therefore, EPA's proposed rule must incorporate these existing TMDLs and sags (phonetic) as the

scientifically provide nutrient criteria. Failure to adopt these TMDLs as site specific standards would mean that EPA's numeric nutrient criteria rule would represent a giant step backward, not forward. Under EPA's rule as proposed now in the Federal Register, site specific and numeric nutrient requirements previously approved by EPA under the TMDL process will be scuttled in favor of less specific regional criteria, and nutrient reduction projects will be put on hold.

So, respectfully, I would ask you to do one of two things in your rule: Either adopt -- in addition to everything else you're doing in the rule, either adopt the existing EPA approved TMDLs as site specific standards for those water bodies or, two, exempt those water bodies that have EPA TMDLs from your rule.

And again, gentlemen, I thank you for being here and for considering these comments.

MR. KING: Thank you very much.

Why don't we take a break, or we'll just take this one gentleman here and then we'll take a break for 15 minutes.

Speaker number 24.

MR. SMITH: Thank you. My name is Jeb Smith.

I'm a farmer, fifth generation grower from Hastings. My family was solely involved in the production of potatoes for over 80 years before diversifying into grass fed beef cattle, hay, sod, and organic vegetables. We have been settled upon the same property since 1920s, and four generations reside within its parameters this very day.

For decades and generations we have strived to be innovative, creating -- maximizing the use of our resources and desiring to be the best stewards of the possessions we have, knowing that the best use of these resources results in maximum productivity and benefit to the environment.

Farmers have been cooperative. We have endeavored to cooperate with land grant university, water management district, Natural Resources Conservation Service, Department of Environmental Protection, and other governing bodies. Such collaborative efforts or labors have

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yielded benefits both economically and environmentally to my farm, to my community, and my state. We have entered into such projects as test wells in production areas, benchmark farms collecting rainfall data and irrigation amounts,

numerous evaluations that cover crop influences on erosion, soil building and crop quality, collection of yield data on various fertilizer rates, including the use of the slow release fertilizers, the construction of a prototype state of the art chemical mixing and storage facility, voluntary construction of a water retention area for over 90 areas of field runoff, and a variety of studies in different cultivars and property responses to fertilizer rates, environmental stresses and yields. We were in the forefront of the establishment of the Best Management Practices, working intimately with authorities on the matter of installing water control devices, leveling land, protecting sensitive areas, maximizing the use of irrigation water, and limiting the timely application of fertilizer.

Is it now, after decades of cooperative involvement, that this has been in vain?

Likewise, have the tireless efforts of our visionary governmental agencies been futile?

Seemingly the efforts of all parties to maintain a harmonic balance of productive industry and fragile ecosystem are proving to be wasted. And now the vocation I love, the lifestyle I

enjoy, the beautiful green space we have dutifully conserved and preserved, are now threatened or in jeopardy of losing its most proven caretakers.

I'm concerned about the cost of that I will accrue to comply with the new ruling. It is hard to imagine Florida without its most steady and reliable economic engine, agriculture. I just can't phantom the certain depiction of our local grocery stores being stocked with produce from Mexico, Brazil, Chile, Canada and other countries that do not have the stringent restrictive regulations prohibiting viable food resource for its own citizens. It is truly beyond my comprehension that anyone would suggest jeopardizing the largest supplier of fresh fruits and vegetables to the eastern United States, but the implementation of this regulation here suggested will threaten our state with such reality.

Will the United States become more dependent on foreign food? If we think dependence on foreign energy is bad, I cannot imagine the cry for our most necessary sustenance.

What do we tell our progeny about the certainty of a safe, affordable and abundant food

supply for the future and what do we tell our children that have hungered for an opportunity to farm?

I am certain with the numeric nutrient proposals of the Environmental Protection Agency,



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targeted solely upon the state of Florida, will most certainly seal such a fate for the future, at least if not for all agriculture. Please help us to change the direction of this regulation. And I ask you to consider the tremendous efforts already diligently and tactfully arranged and acted upon our state government and growers.

Thank you for hearing my heartfelt concerns, and I pray your decisions will be positively far reaching.

MR. KING: Thank you, Mr. Smith. Mr. Smith, if you have an opportunity, you don't have to, but if you -- and you wanted to submit written comments helping us to understand what the -- what costs are associated with what particular activities, that would help us immensely to better understand the nature of the cost and what the implications might be.

MR. SMITH: Absolutely.

MR. KING: Thank you so much.

Okay. We're going to take a 15 minute break and come on back at 3:40.

(Thereupon, a recess was taken from 3:26 p.m. until 3:44 p.m., after which the following proceedings were held:)

MR. KING: Welcome back. We're on speaker number 25, and welcome.

MR. PARADISE: Good afternoon. My name is Brian Paradise. I'm a resident of the Jacksonville area. I've lived here for 33 years and I'm a private citizen, but I am not a native Floridian.

During the time that I've lived here, I've had the great pleasure of being able to commune with nature by visiting the -- the lovely rivers, springs, lakes and streams that bless the northeastern part of our state. I've been able to sail on the St. Johns River, canoe and kayak on many of the rivers, snorkel in many of the springs and just -- I generally enjoy the waterways that have found here.

And, unfortunately, I've found that the quality of our waters has diminished very significantly since I've lived here. We've had algae blooms, as you well know, on the St. Johns

River and other waters, and the St. Johns River and other rivers have been degraded by fertilizer and sewage and construction runoff and other sources.

We simply cannot afford, in my opinion, to continue with this continued degradation of our waters. We must reverse the trend if we're to preserve and recapture our quality of life and the health and economic benefits that result from clean water.

I realize that the proposed improved standards will impose a cost on certain industries and on citizenry in general, but these costs must be paid in one way or another. If we do not reverse the present course of degradation, then we will impose greater costs in the future on our

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entire citizenry in terms of deteriorating human health and in deteriorating economy through the adverse impacts on tourism and fishing industries.

I would urge the EPA to impose and enforce strict nutrient standards for Florida's waters as our past and present systems have obviously not been working.

Thank you for your consideration of this.

MR. KING: Thank you very much. Speaker 26.

And speakers 27 and 28 come up.

MS. LONG: Hello. My name is Annette Long. I'm here today to speak in favor of the proposed EPA Florida numeric nutrient criteria. I wish we didn't have to be here today. This should have been done a long time ago.

The nutrient problem I'm addressing today is nitrate nitrogen. In the Suwannee watershed, there are few permitted point sources of nitrogen, but there are numerous, almost uncountable nonpoint sources all over the Suwannee watershed.

I live near the Suwannee River in the Manatee Springs shed. Many home wells in my own neighborhood have dangerously high levels of nutrient solution. Four wells regularly exceed the safe drinking water standard for nitrate nitrogen, and my own personal well is very high in nutrients. No one even warns you, no state agency, no one warns you when you move into the neighborhood that you might have dangerous water.

The two first manatee springs in my neighborhood, Manatee and Fanning, already have high nutrient levels and have significantly impaired ecosystems. And that's according to the Department of Environmental Protection. What used

to be lush, diverse subaquatic vegetation with varied invertebrate and vertebrate communities is now a biological desert of nuisance filamentous algal mass.

The Suwannee system has been plagued with water quality problems for many years; however, neither Florida policymakers nor the Florida Department of Environmental Protection has taken substantive action to halt the decline despite the Clean Water Act. Even now the Total Maximum Daily Load Basin Management Action Plan consists of voluntary Best Management Practices, and that's according to a Basin Management Action Plan meeting that I went to.

I want to start with the worst victims. The following springs have exceeded the EPA safe drinking water standard of 10 milligrams per liter of nitrate nitrogen. In the recent past they vary from -- depending on rainfall and season. Convict Springs, Trail Springs, Fanning Springs. And it's so sad, these other springs have no name, they just have numbers. SUW 718971, SUW 725971, GIL 107972, and GIL 917971.

The drinking water standard is 29 times the proposed criteria, and many of these dangerously

polluted springs are used as swimming holes.

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Individual homes have wells in their spring sheds.

Those seven springs are virtual point sources of pollution, but there are also ten springs on the Suwannee between 3 and 8 milligrams per liter, 17 springs between 2 and 3 milligrams per liter, and over 66 springs that exceed 1 milligram per liter. It will be over a decade before the TMDL that's proposed begins to address those springs.

When I questioned the Department of Environmental Protection and the Department of Health about the dangerously polluted springs, I was told that since no one drinks out of them, the drinking water standard doesn't apply. Fanning Springs was the only dangerously polluted spring that was addressed by the TMDL plan.

The FDEP and Suwannee River Water Management District don't appear to be overly concerned about these springs as few of the dangerously polluted ones have been tested regularly since a single test that was done back in 1997. If they have, the data is not available to the public.

For streams, I believe the proposed criteria is scientifically sound because we need to do something. However, how you decide whether it

complies should be by multiple samples, not on a monthly average, because in springs it's seasonally dependent on rainfall and what crop is being grown.

Fish and other aquatic wildlife won't survive an average. Rather, they survive every moment. Springs have sustained serious damage in Florida as a result of nitrogen pollution. The proposed nitrogen criteria for springs and spring runs and clear streams should be revised based upon evidence I have seen at BMAP DEP meetings that's actually less than what you are proposing, and that is 23 micrograms per liter. And I will supply all my data to you in writing that supports what I say so you can have the geological information.

Thank you very much.

MR. KING: Thank you so much. Speaker number 27. And would speakers 28 and 29 come up.

MS. WATERS: Good afternoon. Mr. King and Mr. Keating, thank you for being here today to help average citizens learn about the EPA proposal and voice our concerns.

My name is Carol Waters, and I wish to speak on behalf of four different groups. I serve as

District 4 director of the Florida Federation of Garden Clubs and represent over 1700 women and men who are concerned about our environment and our water in north Florida.

This summer, as in the past, we will rent facilities at Wekiwa Springs State Park near Orlando for our camping program for kids, kindergarten through eight grade. What an unforgettable experience this is for children to experience the outdoors. Florida residents and tourists enjoy this gorgeous nature preserve and springs year round. This park makes money for

Florida. Clean water makes money.

For ninth through 12th graders, we have a program called SEEK, Save the Earth Environment Through Knowledge. In July 70 students will have a hands-on learning experience at Wakulla Springs State Park near Tallahassee.

Now more than ever garden club members are concerned about our water problems. We practice water conservation, study pollution and have participated in political rallies to support our Florida springs. We want to see this national resource protected now and in the future. And while your proposal may not solve all of our

problems, we believe this is at least a good start.

Now, on a personal level. My husband and I moved to Florida 35 years ago and became part owners in Stern Boats of Pompano Beach. We manufactured high performance custom built bass boats and sponsored numerous fishing tournaments in central and south Florida. We watched water quality decline over the years. The fertilizer runoff in central Florida continues to create problems with seasonal algae bloom and hydrilla growth that is choking out the fish, if the toxic water doesn't kill them first.

In 1989 we purchased a home because it was waterfront property here in Jacksonville on the Cedar River. My husband's switched from competitive bass fishing to fly fishing in the many areas available here in north Florida. But north Florida has problems as well. Oh, yes, you can still catch fish, but would you want to eat them? Just this week two dead fish washed up on my boat ramp.

Old and leaking septic tanks, unregulated dumping and overzealous landscapers are polluting our waters locally. I can't imagine water skiing

or fishing in the river behind my home.

If action isn't taken soon, Florida's reputation as a freshwater fishing mecca will be tarnished or worse, nonexistent. Other water sports and boat construction are in trouble and decline, too. Clean water means money for Florida.

I've spoken about concerns of our garden club members. Our camp and study opportunities for children, thanks to clean springs, apply fishermen and boaters, but there's one more group I heard from last night before I went to bed, the Canada geese that are breeding in my back yard. They were honking good night to each other. Oh, yes, they're very noisy and messy, but since my husband died on a fishing trip, these geese have been my feathered family. This is the third year they've built a nest on the boathouse and I've watched them every day trade off egg sitting duties and nibble on the fat moss and grass growing by the river. I would miss them greatly if the river failed to provide them with what they need to survive, or worse, it poisons them. When the fish

24 go and the birds go, we won't have much time left  
25 either.

0122  
1 No, time is not on our side. So why are we  
2 dragging our feet or, in this case, putting our  
3 oars in the water against the current? Everybody  
4 is in favor of clean water, and we need more  
5 economic opportunities in Florida. Promoting  
6 tourism, and especially the camping, fishing,  
7 boating and wildlife watching make good sense.  
8 Think about the future. Will children be able to  
9 camp and canoe by clean springs? I'm wondering if  
10 my nieces and nephews will be able to catch fish  
11 with their Uncle Ray's fishing rod and eat the  
12 fish they caught.

13 The time to act is now. No one likes  
14 regulations, but think of it, we have speed limits  
15 for motor vehicles, food inspection for  
16 restaurants, noise abatement control for airports  
17 and leash laws for dogs. These regulations are to  
18 protect people and our quality of life. Isn't it  
19 time to regulate the pollution and the water that  
20 we are eventually going to drink? Yes, now is the  
21 time to do the right thing.

22 The numerical values such as you have  
23 proposed seem to the most sensible and fair way to  
24 evaluate and solve this problem.

25 Thank you for being here today. Let's do the  
0123 right thing in October. Thanks again.

1 MR. KING: Thank you so much. Speaker  
2 number 28.

3 MS. OWEN GLEDHILL: Good afternoon. My name  
4 is Sarah Owen Gledhill. I'm with the Florida  
5 Wildlife Federation, and I represent the Northeast  
6 Florida office that's based in St. Augustine.

7 The federation's members have spoken at the  
8 public hearings held in Naples, Fort Myers, Tampa,  
9 West Palm Beach, Tallahassee, and Orlando, all to  
10 express their support to set scientifically based  
11 numerical nutrient standards for both fresh waters  
12 in 2010 and salt waters in 2011. I'm here today  
13 to echo their support.

14 Setting numerical nutrient standards will  
15 create processes that establish measurable goals  
16 and objectives. These goals and objectives will  
17 help us figure out how we can reduce applications  
18 and at the same time still be effective.

19 My -- I have a very wise father and he always  
20 told me to work smarter, not harder. This is  
21 about working smarter now so that down the road we  
22 don't have to work harder to clean up our mistakes  
23 through costly restoration projects.

24 How can we work smarter to reach these  
25

0124  
1 measurable goals or objectives? We've discussed  
2 some of those examples earlier, as well as some of  
3 the other presenters as they talked about native  
4 planting, fertilizer ordinances, scientific soil  
5 testing, application of fertilizer only to the  
6 root zone of the plants, as well as applying  
7 fertilizer only in the amount needed by the plant,  
8 as well as upgrading our sewage treatment systems.



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Our economy is built on our water quality in so many ways as we've heard here today. We're not trying to wipe out the agricultural industry or prohibit house owners from having lawns. In summary, and to put it real simple, we want fertilizer to stay where it's supposed to and used at the minimum effective rate.

The Florida Wildlife Federation supports numerical nutrient standards, and we look forward to submitting formal comments as well as staying engaged for the marine section in 2011.

Thank you.

MR. KING: Thank you very much. Speaker number 29 and speaker number 31 please come up.

MR. PULLEN: I'm Paul Pullen of Jacksonville, Florida. We do a lot of cleanups in the Jacksonville Riverside area. We do a lot of work

in the McCoy Creek area. A lot of locals there are really poor and all, and they always help us out cleaning up the area. We've taken out about 10 tons of garbage out of the creek itself. But the -- the people we meet there have to live off the river. They use it as their own source of meals. They actually -- if they don't get any fish that day, they don't have any meal that day. So that the algae growth, they don't know anything is going on, that don't know what's going on around them. And when we tell them what's going on around them, they just sort of breeze through it, so anything that happens around us, we just have to accept what's going on. So your coming in to evaluate what's going on around is duly appreciated.

Thank you very much.

MR. KING: Thank you. Speaker number 30. And will speaker 32 come up.

MS. NAN: Good afternoon. Thanks for being here. I appreciate it.

My name is Sarah Nan. I live in Jacksonville. I also do a lot of watershed cleanups, and I'm very concerned about the health of our waterways. I have watched them diminish

rapidly since we've been working, you know, for several years on -- on the water. And it just kind of makes me a little concerned that every day I see people fertilizing their yards weekly, and they also are blowing debris into the storm drains. And I'm not against -- I'm not against fertilizer. I just think that there needs to be higher standards. There's kind of a complacent attitude I've experienced personally with the local -- local city and the Department of Environmental Protection in Florida.

And I'm just a little -- you know, I'm just worried for our ecosystem when I'm standing next to a hospital, I'm watching people try to fish near the hospital, there are patients outside, there's an algae bloom, people can't breathe, there's, you know, eye irritation. It's just -- you know and they go, "Is your river normally like this?" No. Sometimes. So I'm just a little

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concerned that, you know, there just needs to be a little more, I would say regulation. I do support the nutrient standards.

So that's just what I wanted to say. So thanks for your time.

MR. KING: Thank you very much.

Speaker number 31. And would speaker 33 come up.

MS. HILLIARD: Good afternoon. I'm Marion Hilliard, Orange Park, Florida. I have no scientific credentials; however, I have a very lengthy commitment to protecting the nation's and Florida's waters. I serve the National Garden Club as their government agency education team chairman, I serve the deep south states as their legislative chairman, I serve the Florida Federation of Garden Clubs as the government agency liaison and a board member of the Clean Border Network in Washington.

In October of 2008, the National Garden Club representing every state in the nation adopted a water platform that was also adopted by the Florida Federation of Garden Clubs, a portion of which reads, "National Garden Clubs, Inc., believes it's imperative that we support and undertake proactive initiatives for the protection, conservation and restoration of the quality of our nation's waters."

When our family relocated to Florida in 1972, I could have been described as an all-around, in the water, by the water, boat the water, fish the

water, and swim the water person. Back then, we ate the crabs and the shrimp and the fish that we caught. Unfortunately, it's more than two decades that I haven't eaten fish or crabs caught in these waters due to the serious concerns with repetitive fish and bird killing red tides and harmful green algae outbreaks. Could the bird and fish deaths be similar to the mine canary warnings? I believe so.

It seems to me that we have enough facts before us to be properly warned and take action. Shame on us that today no part of Florida escapes from the unnatural and excessive algal growth caused by excessive nutrient pollution in our canals, spring fed lakes, streams, bays and rivers. It is an economic disaster when coastal beaches are closed due to pollution. It is a health hazard when exposure to toxic algae causes rashes, skin and eye irritation and allergenic problems. Even swimming along with other activities, when polluted water is ingested, can become a cause of serious illness.

It is time that these concerns are addressed and satisfactorily corrected by adoption of an establishment of state water quality standards for

nutrients before it is too late and it becomes more costly to correct.

People planned rallies, save the springs rally, save the river rally, both held in February

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of this year, should be a light bulb indicators to the EPA and the FDEP that across Florida people are deeply concerned about the degradation of our rivers and the springs that flow into them. These waters supply drinking water for the thousands of families. Let's face it, we can go days without food, but we can't go days without water. Recent horrible disasters in other countries certainly should be serious reminders of that fact.

I was a Yankee and spoke faster. Now I'm a Southerner and speak slower. It is a deep, dark secret that nutrient correction changes will be costly. I am quite positive that we recognize that; however, putting our heads in the sand, thinking polluted waters will disappear all by themselves in an absolutely -- is an absolutely ridiculous daydream solution. Without pollution free quality water and ultimate -- our ultimate survival on this planet is in serious jeopardy.

In closing, I strongly urge the EPA to adopt their proposed rulemaking for water quality

standards for the state of Florida's lakes and flowing waters before all of Florida's lake and flowing waters are more severely impaired and clean-up costs become even more costly.

And I thank you gentlemen for hearing us today.

MR. KING: Thank you so much. Number 32, followed by speaker number 34.

MR. MOORE: My name is Curtis Moore. I live here in Jacksonville, and I was a dairy farmer for most of my life. I'm a third generation dairy farmer. As a matter of fact, my dad was a dairy farmer, his dad was a dairy farmer, but my son will not be a dairy farmer because on April the 15th, today, six years ago, we sold our farm about 8 miles from here.

One of the main reasons that we sold our farm is because the Department of Environmental Regulation forced us into so many costly things that we had to do, we finally threw up our hands and we sold to a developer. Now, where there was cows grazing in our pasture, everybody used to enjoy watching them as they came by and stop by the farm with their kids, now there is asphalt, there's concrete buildings, and retention ponds.

So I suppose that's progress for our environmental future.

And just a point of interest, I've been drinking this water, Florida water for 58 years and I'm doing just fine.

Most people I come in contact with nowadays, they are so far removed from the farm, they don't know what it takes to produce the food that we get, and I fear that that kind of causes the numbers of people to be more against farming and down on farming. And I go with the Farm Bureau, the local Farm Bureau here and go and speak at schools and am very surprised by the students and the teachers that think that farmers are evil, that they are causing problems.

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16 I talked to one child and he says, "Why do  
17 you-all cut trees down?" Because I own some  
18 forestry, some trees now. And I said, "Do you  
19 realize that more trees are planted in Florida  
20 than are cut down? And that's a renewable  
21 resource." And I think that the forestry  
22 department, along with the University of Florida,  
23 with the Best Management Practices that they put  
24 into practice, which we also do, is a good thing  
25 for our environment and also it's also good for

0132  
1 the farmers.

2 One of the problems that I can see is that  
3 agriculture cannot pass on the added cost of more  
4 stringent regulations as can the utility  
5 companies, and that does put a strain on  
6 agriculture. We're in competition here in Florida  
7 with other states and their agriculture and even  
8 outside of our country. And the food that comes  
9 from outside of our country, we don't know how  
10 it's grown and how it's taken care of.

11 And, you know, just as I was sitting out  
12 there and thinking about what people were talking  
13 about up here, I see that it all kind of works  
14 together. We need trees. Trees are good for the  
15 environment. So we need the silviculture to take  
16 care of. We need the grass, that's good for the  
17 environment. So we can all work together and --  
18 and just try to do a better job.

19 That brings up another point that I want to  
20 be sure and get in. And that is that I believe  
21 that we're raising a generation that's so  
22 bombarded with Earth Day and recycling and what's  
23 good for the environment and everything that it  
24 kind of throws things out of balance. And  
25 personally, me personally, I think when we call

0133  
1 out and ask big government -- ask the federal  
2 government to come help us because we cannot help  
3 ourselves, we're in big trouble. That's how we  
4 ended up with the health care I guess we're going  
5 to have and everything. I guess I'm kind of a Tea  
6 Party type person where I think that the local  
7 people can take care of themselves a lot better  
8 than a more expensive, more intrusive federal  
9 government can.

10 And we've got some good people that work in  
11 that area. I know a dairy man from Okeechobee, he  
12 was -- I went down there and looked at the way he  
13 did his environmental program. And he told me  
14 that the Department of Environmental Regulation  
15 had him to drill a well that they would monitor to  
16 see what the phosphate and the nitrogen was. And  
17 the phosphate was just out of the limits. Well,  
18 it's because they dug the well into phosphate,  
19 because phosphate naturally occurs down there.

20 So when you put regulations that don't take  
21 that into concern in our specific area here in  
22 Florida, then just we're throwing away money  
23 trying to fix something that can't be fixed.

24 I wonder if the algae bloom, some of it  
25 occurs naturally. Even if people didn't exist in

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1 this state, would it occur naturally? Do you take  
2 that into consideration?

3 But I also, to make one more point is, I have  
4 a friend who he dives out in the ocean here, and  
5 the federal government put a regulation just  
6 recently that said that snapper fishing, you no  
7 longer could keep the red snapper from out of the  
8 ocean. And he told me that he has never in his  
9 life seen so many red snapper as what he's seeing  
10 out there now.

11 So I wonder where they get the logic from  
12 that tells you that our environment is in such  
13 trouble that it is when things are probably doing  
14 better than we think it is.

15 I enjoy clean water. I want us to have a  
16 clean environment, and I'm all for that. But just  
17 stop and think that what you do as you make the  
18 rules affects the lives and the livelihood of many  
19 farmers.

20 Thank you.

21 MR. KING: Thank you Mr. Moore. Speaker  
22 number 33. And would speaker number 35 come up  
23 and 34 come up.

24 MS. LITTLEJOHN: Thank you. My name is Cindy  
25 Grow Littlejohn, and I represent the Florida Land

0135  
1 Council, an organization of landowners who  
2 together make up about two and a half million  
3 acres of land throughout the state.

4 Florida has spent over 20 million trying to  
5 gather data, set benchmarks and find answers. But  
6 like everyone today, we all want instant answers,  
7 and DEP was forced to utilize a crude statistical  
8 averaging methodology that does not take into  
9 account the unique characteristics of our many  
10 thousands of rivers, streams, canals and lakes.

11 Right now, Florida's business community is  
12 employing scientists to study the data and  
13 methodology behind the standards that you have set  
14 for our state, and we're discovering that the  
15 science, the methodology, and the datasets itself  
16 are flawed.

17 I would like for your agency to take a  
18 special look at the work of three different bodies  
19 of scientists and experts who have been looking  
20 into this issue since last summer.

21 First, Florida's DEP's own technical advisory  
22 council met last week to review and provide  
23 comments regarding your technical support document  
24 and your proposed rule. Made up of scientists and  
25 technical experts, the council clearly found major

0136  
1 problems with the record stream approach, and they  
2 are very concerned that EPA and Florida's DEP  
3 would promulgate a standard that is so poorly  
4 backed by science. A transcript of their  
5 discussions was submitted into your docket, and I  
6 hope you will pay special attention to their  
7 findings.

8 Second, our own University of Florida  
9 scientists have been studying your proposal as  
10 well. Based on their studies, they concluded that  
11 under your proposed criteria, a large fraction of



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the states -- excuse me, of the lakes that are considered impaired are actually functioning quite normally. Their research found no correlation between the landscape, the development intensity index and the concentrations of total phosphorus, total nitrogen and chlorophyll in Florida lakes. This index was used by you and Florida DEP. This means that the intensity of human development around the Florida lakes is not by itself related to the lakes' troubled state. They found that a large diversity of Florida lakes is most strongly related to geology, to soils, and to hydrology.

Their work shows that for most lakes, the current nutrient levels are determined by natural

factors and, therefore, there is no feasible way to change them through regulation. And most importantly, they found that your criteria does not recognize the existence of naturally eutrophic lakes in Florida, and any good bass fisherman in this state can tell you that these types of lakes make for the best fishing. The fish thrive on these lakes' high nutrient levels, on their high planktonic growth and on their extensive aquatic plant beds. Because of these special lakes, Florida has a very productive bass fishery.

Our U.S. scientists also tell us that since your criteria does not -- your criteria do not recognize the existence of these lakes, that our state will waste valuable economic resources attempting to regulate what is a natural phenomenon.

And last, I hope you pay close attention to your own science advisory board subcommittee which met last September and also reviewed your technical support document for setting these standards. Your own advisory board found that your methods for setting stream criteria were indefensible. A source involved in the peer review said that your approach only gives you a

probability, and that it is consequently inappropriate for nationwide use when deriving protective nutrient standards for streams.

We sincerely appreciate your agency's willingness to provide more time for comments, more hearings and for withdrawing the portion on downstream waters. But make no mistake, we know that nothing has really changed, as the latter is simply a delay and we know that we still must face the downstream numbers next year.

Hundreds of people testified last February, and we kept track of how many people testified in opposition. It was a five to one ratio. They requested that you please reevaluate your numbers, but as far as we can tell, you haven't. And I believe that that's why you're hearing less and less from this side of the argument.

Right now we are a silent majority watching and waiting on the sidelines. We are literally the entire business community of Florida and almost every municipal and county government statewide. We are the Florida legislature and

almost every member the Florida's cabinet. We are all five of Florida's water management districts. And when the rest of Florida figures out what is

happening, it will be almost every single person who lives and pays taxes in this state.

We know that we will have to bear the cost of all this -- this work. We Floridians also know that these costs will place us at a competitive disadvantage with the rest of the country where such nonscience based federal standards will not exist. Florida's companies, its governments and its residents will be paying the tab no matter what. I believe we're probably headed to court. We lack the cash and the technology to meet these criteria. We --

MR. KING: Ms. Littlejohn, that's your time. Thank you so much.

The next speaker is speaker 34. Speaker 35.

MR. SPEED: The first item I gave you is a photograph of a retention pond outflow at a gated community in northeast Florida. This gated community has been under a strict fertilizer ordinance for over five years, yet the algae that you see there is being pumped into the Intracoastal Waterway on twice a week basis. Now, this community is surrounded -- the pines and creeks are surrounded by homes and by a golf course. So I guess the farmers can say it's not

my fault, it's their fault.

MR. KING: And just for the record, this is Mr. Speed?

MR. SPEED: I can show you similar pictures of golf courses which is surrounding nothing but by golf courses. I can show you similar pictures on farms, surrounding nothing but a farm, owned by a single person. So we're all part of the problem. And I have attended meetings at the state level, the county level, city level, numerous meetings on the fertilizer ordinance over the past five years. In all of these meetings, we hear from different people. The lawn service people say, "I cannot stay in business with your regulations." Well, Duval County passed a regulation limiting the amount of nitrogen fertilizer to 4 pounds per thousand square feet per year. Since then, numerous counties have passed similar but more strict regulation saying no fertilizer between the June and September period. And a hue and cry went up, "We can't stay in business like that."

Well, here's a newspaper article on Mr. George Richardson, Peninsular Pest Control, who is now using less than 2 pounds of nitrogen

per year and getting beautiful yards, and he's also cut his operating costs by 25 percent. So here's a regulation that has saved money and has saved the environment.

The point being that we have seen today a lot of statistical information. There has been no science presented by anyone here today, none.

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8 It's just -- and, Jim, all your information, your  
9 100,000 samples, that's not science, that's  
10 statistics. And we've got the science to do this.  
11 Let's just simply use it.

12 At a recent meeting somebody said, "Well, you  
13 just want us to use it because you make the  
14 product." Yes, we do, but you can't patent my  
15 product. It's a living organism, and you can't  
16 patent living organism. Plus half of my business  
17 is pond and retention cleanup. If the same people  
18 used my product, the ponds would not get bad and  
19 I'd lose that business. And I'd like to see that  
20 because I think it's more important that we clean  
21 up the environment.

22 And don't hide behind BMPs. BMPs were  
23 developed. They're not written in stone. They  
24 were developed for that moment in time, and if new  
25 science comes along, then that science should be

0142  
1 incorporated into BMPs. And I've seen a lot of  
2 speakers come up here today and talk about their  
3 BMP. Now, we're telling you, we've had golf  
4 course superintendents go to the state level and  
5 say we need to modify the BMP to incorporate this  
6 science, and they were rejected. So don't hide  
7 behind BMPs.

8 I've also presented this information to the  
9 agricultural secretary twice. Both times we got  
10 no reply. Mr. King, it's been presented to your  
11 department twice in the last two years, with no  
12 reply. So I can understand the frustration of the  
13 people in this audience who say, "Wait, this  
14 problem has been around. Why aren't we doing  
15 something about it?"

16 The problem is what you're proposing are  
17 regulations and restrictions. Well, (inaudible)  
18 didn't work and this is not going to work because  
19 the problem is here in communities that have very  
20 strict restrictions on application rates. That's  
21 it, gentlemen. The science is there to solve this  
22 problem, and it would save all of us a lot of  
23 money.

24 MR. KING: Thank you. Speaker 36. Speaker  
25 38, please come up.

0143  
1 MS. PRICE: Good afternoon and thank you for  
2 the opportunity to comment on these rules.

3 My name is Janet Price and I'm here  
4 representing Rayonier, a publicly traded  
5 international forest products company based in  
6 Jacksonville. Rayonier operates four businesses,  
7 timber, real estate, performance fibers and  
8 lumber. On an annual basis Rayonier contributes  
9 over \$100 million to the state's economy in the  
10 form of property taxes, payments to Florida  
11 vendors and payroll. We are the fourth largest  
12 landowner in Florida with over 435,000 acres of  
13 timberlands. It is management of those  
14 timberlands that I want to focus my comments on  
15 today.

16 In the proposed nutrient rule, EPA expressed  
17 concern that the practice of forest fertilization  
18 is a significant contributor to nutrients in

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flowing waters. Specifically the EPA is ready to reject some of the FDEP referenced sites based on allegations that fertilizer application to forest land has created a continuous source of nutrients that are impacting water quality.

Underlying those allegations were a couple of tree nursery research projects that demonstrate

what we all know to be true, under the right conditions pine trees will grow better if they are fertilized. However, to go from that simple fact to the EPA's current position is a leap to an unsupportable conclusion.

So let's back up a minute and review the science of silviculture and how those principles are used to grow and harvest trees in a manner that is both sustainable from a business standpoint and protective of the environment.

Over the past 30 years there has been a tremendous amount of research devoted to forest management practices, including fertilization. We now know that soil type and conditions, tree age and species, the presence of disease or pests and the number of trees per acre are critical factors in determining whether a fertilizer treatment will enhance tree growth sufficient to justify the cost.

Rayonier has translated this knowledge into a rigorous set of criteria to limit fertilization to only those tree stands that would measurably benefit from the application. Not all stands are fertilized and, in fact, we need (inaudible). When fertilization does occur, it is limited to

once a few years after planting or midway through a 20-year growth cycle.

Since we are constantly planting, growing and harvesting tree stands, our forests are composed of multiple age groups and species within a given watershed. For example, in a thousand acre tract, you might have a few scattered stands that were fertilized once, maybe twice over 20 plus years. The rest would have received no fertilizer at all. These practices automatically limit the potential for nutrient contributions to waterways.

To further protect water quality from pollution associated with forestry operations, the 1972 Clean Water Act required all states to develop and implement forestry Best Management Practices that, among other things, specifically address fertilization.

Florida BMPs limit the application rates of fertilizer during the tree growth cycle and mandate the establishment of protective buffer zones along waterways to prevent runoff in forestry operations. Fertilizer in any form is specifically banned within these zones. All forest operations on both public and private land, and that includes Rayonier, are subject to regular

BMP compliance audits by the Florida Division of Forestry. The most recent audit showed 100 percent compliance with nutrient control

practices.

Effective studies performed by the FDEP consistently demonstrate the presence of high quality aquatic systems and forest lands when Best Management Practices are in place. The Florida forest community has been a leader in protecting water quality and Florida BMPs are highly regarded across the region and even the nation.

And that brings us back to the subject of the FDEP reference streams which are all located within forestry watersheds across the state. Some of these watersheds include timber tracts that were fertilized within the past 20 years. EPA has expressed concerns that these sites have been affected by fertilization associated with forestry activities, yet there's no evidence indicating that nutrient concentrations in the reference streams reflect nutrient (inaudible). In fact, these sites are characterized by high quality aquatic environments.

If there really is a problem in these locations, we'd like to know about it. So far,

all the evidence only serves to demonstrate that targeted fertilizer use coupled with forestry Best Management Practices are highly effective in protecting water quality.

As this rulemaking process moves to completion, Rayonier would urge EPA to address forestry questions based on careful consideration of the evidence, including demonstrated cause and effect relationships.

Thank you very much.

MR. KING: Thank you. Speaker number 38.

And speaker number 40, please come up.

MR. COOKSEY: I'm 37. My name is John Cooksey and I appreciate the opportunity to speak with you today. I've worked as an analytical chemist for an environmental firm in south, Florida, and I've worked for Department of Oceanography at Florida State University on various environmental research projects. I have a bachelor's degree in chemical science and a master's degree in entomology.

I grew up on the St. Johns River, and since I was old enough to walk, I spent most of my free time fishing, canoeing, or just enjoying the river. I've seen the algae blooms that everyone

has talked about, and I, like everybody else, are repulsed by it. They're horrible. I'm a sixth generation Floridian, and for 160 years my family has been involved in agriculture in one form or another in this state.

I'm here today representing the Florida Pest Management Association. I along with many other members of my association are in the business of growing one of the largest crops in this state, 6 million acres of turf grass. Unfortunately, because of the use of the fertilizer, our crop gets a very bad reputation, even though research done by the University of Florida has proven that with its dense ground cover and root system, turf



grass remains one of the best nutrient filters available.

I represent an industry that has worked with the state to self-impose Best Management Practices and, as an association, we're in the business of being stewards of the environment. We promote the judicious use of fertilizers and promote integrated pest management using least toxic options of first choice.

I represent hundreds of companies and thousands of jobs in this state. As an industry,

we cut our nitrogen output by 33 percent through the Best Management Practices that we've imposed. I ask you to let us continue to work with the State of Florida to improve our water quality and I appreciate you giving me the opportunity to speak with you today.

Thank you.

MR. KING: Thank you. Speaker 38.

MS. AMBROSE: Good afternoon. My name is Louise Ambrose. I'm an attorney with Genesis Group, a land planning, engineering and landscape architecture design firm that has three branch locations in Florida, here in Jacksonville, Tallahassee and Tampa, and we work with both planned and develop large and small scale development ranging from residential, commercial, retail and mixed uses.

And in 2007, we opened up our applied sciences division which basically provides environmentally focused approaches, implementing low impact designs and Best Management Practices for developers and also the public sectors that want to do green development. And with that, we worked pretty closely with some members with the University of Florida's IFAS department, the

National Estuarine Research Reserve in Ponte Vedra here, and also DP.

And the point I want to get across tonight is the technology and the good science is there. The alternative approaches and methodology to nonpoint source pollution or, you know, which leads to the algal blooms is there. The sustainable practices that can be implemented on a lot, block, neighborhood, community and even regional scale is there. And I'm hoping that with the passage of this -- of this proposed rule, that this opens the door to be -- to more access to these sustainable practices and these alternative approaches.

So many people don't realize that simple practices that they can do within their neighborhood and right there in their homes make a huge difference in water quality and also the stormwater management. And these methodologies, good science, and practices are not only beneficial to the environment, proven and successful, they're also cost effective. They work to save the developer money, they save the lot owner home, and they save homeowner associations and special district boards lots and lots of money because they're sustainable

0151

1 practices. It's not chemical amendments where  
2 it's just only short-term relief and then you've  
3 got to reapply a short time later.

4 And it's complex science. There's some  
5 complex technologies. I heard somebody mention  
6 there's turf scrubbers, and that's kind of over a  
7 lot of people's head. But then there's also very  
8 good science that Mr. Speed was talking about,  
9 which is bioaugmentation programs that --  
10 basically it's as simple as building healthy soil.  
11 So few people do not realize that if you build and  
12 maintain healthy soil, you can cut and reduce the  
13 fertilizer. You don't have to add this chemical  
14 and fertilizer. You can add organic and  
15 biologically based soil or microorganisms that  
16 work to sustain the soil and keep it viable, do  
17 good source erosion control and also prevent  
18 stormwater runoff. And then there's also the  
19 simple common sense things like mulching, compost,  
20 biotar, which is the pyrolysis of biomass or what  
21 we know as yard waste. A holistic program that  
22 takes care of the terrestrial and also the lake  
23 management. And so when you're taking care of  
24 both, you don't need to bring in those lake  
25 doctors that dose it with copper sulfate, which is

0152

1 pretty much heavy metals that do not break down  
2 and pile up in the sediment.

3 So bottom line is that there is no shining  
4 bullet to solve water quality concerns, but I'm  
5 hoping that this is something that we can get  
6 excited about, where more people can learn how  
7 they can be -- implement sustainable practices in  
8 their home and at work and with better access to  
9 knowledge and education. And also with  
10 developers, it's not just an option to be green,  
11 it's more or less a requirement out of necessity  
12 to -- to improve our waterways.

13 And the second point I want to quick get  
14 across is the importance of being able to  
15 encourage sustainable stormwater retrofit for  
16 already existing communities. We've got great  
17 guidelines for new developments, but then what  
18 about the existing developments that continue to  
19 impair our waterways. There needs to be good  
20 sound regulations that encourage, you know, good  
21 science and good research and development  
22 practices that can retrofit already existing  
23 communities and not bring in a whole bunch of  
24 construction and structural BMPs, that we've  
25 sought simple BMPs like building healthy soil and

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1 taking care of the lake in a responsible way, not  
2 putting chemical amendments into it.

3 Thank you.

4 MR. KING: Thank you very much. Speaker  
5 number 39. And would speakers 40 and 41 please  
6 come up.

7 MR. JOHNS: Hello. My name is Danny Johns.  
8 I'm a fourth generation potato farmer in Hastings.  
9 I grow 600 acres of table stock potatoes, reds,  
10 whites, yellows, fingerlings. I employ

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12 employees and 65 seasonally, which, the good Lord willing, in about three weeks we'll start harvest, so 65 employees.

My concern with the proposed nutrient criteria is the added cost to my operation. Agriculture, I feel, has a black eye, is an easy target. We're already doing a lot of things precision agriculturewise, to labor leveling, land irrigation, improving irrigation efficiencies, water control structures, split applications of fertilizers. We're working with the university on different varieties of potatoes that require different nutrient requirements. We have a variety of trials. My nephew is putting a drip tape on his farm on 5 acres and just trying to

continually improve our operation to be more efficient.

And the most important thing I feel -- and we've had the DEP out and the Department of Agriculture who I felt have been our enemy. The most important thing is that when you-all consider these regulations, that you realize the impact it's going to have the family farms and individual growers that are out there. So I feel it's imperative, and I would invite you come out to the farm any time and see what -- what we are doing and the progress we're making on everything. My land is my most valuable asset I have. That's how I'm able to borrow the money to put the crop in. A little passion is going to come through in my voice. They say that's a good thing, I guess.

With an eye to the future on that, one person has approached me -- I live on the bottom end of a watershed and the water management district owns a thousand acres behind me -- is possibly take my 500 acres and use that as a mitigating source for the county so they can pay me to have retention areas out there.

I'm a producer. I love to produce. It's in my blood. The last thing I want to see is

something like that go on where I'm -- I can make more money by taking my land out of production.

The -- it's been mentioned a couple of times on the importance of agriculture for the security of the nation. And that sounds pretty grandiose and all that, but that's what made America great is self-sufficiency.

And my -- I cannot tell you how much it's going to cost my operation. I'm very concerned, though, that we're not able to pass our costs on. We're in direct competition with other areas of growing. And it's easy to say, "Well, it's not our fault, it's their fault." And that's one thing I don't want to do is get to the point of casting fingers and pointing fingers, or it's not our fault, it's the organization or whatever that's going on.

But we've already lost -- when I started in 1991, we had about 200 acres of farm -- 200 -- I'm sorry, 200 farmers out there. We're down to about 35 now. So our land is going out of production.

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Agriculture I'll say is not the problem, but we've been working hard to be a part of the solution all the way through.

So in your -- I encourage you to work within

the DEP and things that have been going on. At least use our expertise and come out to the farms and see exactly what -- what we are doing and the progress we have made. I'm very proud of our operation. Any farmer you talk to, you can see the pride in him. And we're very happy to see people. We're so far removed now, most of the people used to live on the farm, we no longer have that.

So I appreciate your consideration and we will submit written reports on it. I'm a much better writer than I am a talker, too. I apologize for that.

MR. KING: Thank you very much. Mr. Johns, we asked somebody else if when you submit your comments, if you can just help us with some examples of how, in what sense the standard would impose additional costs, that would help us a lot.

MR. JOHNS: Thank you.

MR. KING: Thank you. Speaker number 40.

MR. WELCH: Good afternoon. Excuse me. I'm Lane Welch. I'm a resident and a homeowner. I'm representing my family here.

I've lived in Florida for 42 years, half of it on the St. Johns River, and I'm here to

strongly support stringent quality standards for our waters. Underneath all of the technical data that we've all received and the other arguments that we've heard, remarks we've heard, fundamentally the reason we're here today is money. If there were no objections from industry to higher standards for our water body's quality, then we wouldn't be here. Those standards would be set at the highest level. Money is behind the complex debate over the chemistry of our water's content.

Under the surface of everything said at these hearings, we're debating whose lives matter most, the lives of the millions of people whose health is affected by the quality of our waters or the financially comfortable lives of those who make money from using those waters as a sewer. It's obscene, that a water body's quality standards be set according to who and how much money by being able to pollute those waters.

We don't make decisions about our loved one's health based on what's good for the pharmaceutical companies. My loved ones are Andy, Matt, and John, my sons and my husband. They live with me on the banks of the St. Johns River, and we've

been there for 22 years. We love it. We have wonderful times together. We've all learned important lessons, including spiritual and moral lessons by watching the creatures that depend on the water for life. But we didn't know what pollution and destruction was doing to the

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St. Johns, and our health has been directly affected by its quality.

The blue-green algae toxins that make us sick, we couldn't breathe in our own yard. When that first wave went through, my son thought that there was a gas leak, that there could be an explosion. Everyone's allergies and asthma acted up. We had to go inside for days. The dioxins from the paper mill unwittingly, unknowingly to me, soaked into my little boys' skin as they swam in the river water. We ate the fish that they proudly caught on the river. And they water-skied, and as they water-skied, they swallowed gallons of toxin tainted water. We don't see the manatee that used to visit us all year round to feed on the eelgrass that was thick and lush because the eelgrass is completely gone now.

There aren't as many fish as there used to

be. The young neighborhood boy that fishes from our dock comes up empty handed more times than most.

When I take my kayak out, I see construction site runoff that clouds the water, smothers crabs, and the water plants where fish breed and suffocate the fish.

Fertilizer laden waters breed blue-green algae. Toxins from the algae cause nerve, liver damage and liver tumors. I've spent the past 25 years of my life raising funds for Wolfson's Children Hospital, and I've spent many hours as a volunteer at the bedsides of children with cancer. I've researched and written articles about pediatric cancer, I'm a writer by profession, and its treatment.

A prominent pediatric oncologist in this town has become a friend of mine over those years. And when I asked him why cancer is rising, he replied, "It's all environmental."

Florida's waters must be drinkable, swimmable and fishable. We must set high standards for our waters. Otherwise, human lives will be traded for money.

Thank you very much.

MR. KING: Thank you. Speaker number 41.

MR. CARTER: Good afternoon. Kevin Carter representing the South Florida Water Management District. We are the water managers of Orange County, from Orlando down south to Key West and on the west coast from Fort Myers over to the lower east coast, including our headquarters in West Palm Beach, and I'm glad to be here today.

Day three of three for your second trip to the state of Florida and overall six of six. The district wants to thank the EPA very much for taking time to come down and get very important comments from the stakeholders across this great state. They've been very interesting days, and I hope you're able to get some useful information from it.

We also would like to thank you for extending



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the written comment period to April 28th. Still a lot of information to get through and analyze and to make comments on, but the additional time was definitely helpful and we will be submitting our written comments by the date of April 28.

The district supports numeric nutrient criteria as long as it is based on sound science with sufficient time to address Florida's

exceptional diverse water resources.

When we talk about science and numeric nutrient criteria, I've had the opportunity to participate in that process as a member of the Florida Department of Environmental Protection's technical advisory committee for numeric nutrient criteria development over the last six to seven years. Through that time, one thing that we've definitely seen on the TAC is we do not have the same level of information for all the ecosystems across this state. For example, the level of information on ecology of streams and rivers, natural streams and rivers in the peninsula and the panhandle of the state is much greater, far outweighs the amount of information we have on canal ecology in south Florida, for example.

The EPA has taken the time over the last 14 years to enhance and evolve their SCI approach to now where they have the benchmark approach for numeric nutrient criteria development. You evaluated it as an alternative in your rule. You, yourself, used the stream condition index in your show of choice in application for streams and rivers.

The district supports the DEP approach. DEP

has developed this process. They've taken information from the TAC, and if a reference approach must be used to develop the numeric nutrient criteria for the state of Florida, we support the benchmark approach, the 90th percentile -- and you've notice I said "if the reference approach is used." That is because there are limitations with using a reference approach, and the TAC has spent much time debating this issue. Our own scientists have been discussing it and it will come through in our comments. The challenge is, we've not been able as a scientific community to find a dose response for our streams and rivers as far as nutrients being chlorophyll or algal mass.

So the other reason that we think the FDEP approach is more appropriate is they have the biological confirmation in the application of the numeric nutrient criteria rule. We feel that's a very important part of applying the reference approach to rivers and streams.

The importance of sound science in the development of numeric nutrient criteria is particularly important as you are here to try to enhance the protection of our water resources.

There are many groups, organizations and agencies trying to restore the Florida's water resources.

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In particular, the DEP, through its TMDL program and Best Management Action Program, are currently working to address many of the areas that you have shown on your slides that have water quality challenges.

We would request that EPA go with the DEP approach with current TMDLs. This approach was shown in their draft rule put out in July of 2009 in which current TMDLs would be accepted immediately at site specific alternative criteria. This will allow stakeholders who are currently implementing practices and projects in their watersheds to improve water quality, to continue on without being slowed down by more administrative process.

In addition, other restoration initiatives, such as the Everglades restoration program project that we're involved with and the State of Florida has invested \$1.8 billion in, have focused a lot of their efforts on a specific nutrient. We have concerns that this rule will take time and resources away from those projects in order to focus on nutrients that may not be a part of the

problem that we need to manage in those watersheds.

I'm out of time. I appreciate the six days we've been able to spend together, and I thank you again and we look forward to submitting our comments.

MR. KING: Thank you very much. Let me check. Is there a speaker 42 in the room? Okay.

MS. KALUZNIAK: Good afternoon. My name is Donna Kaluzniak. I'm a certified environmental professional and I'm the utility director for the City of Atlantic Beach, Florida.

Atlantic Beach is a small coastal community with a population of approximately 14,000 in the Jacksonville area. And Atlantic Beach has been working diligently with the Department of Environmental Protection to meet a nutrient total maximum daily load, or TMDL, specifically for the lower St. Johns River. The lower St. Johns River is a unique combination of flowing river and saltwater tidal basin.

Florida has been one of the nation's leaders in environmental protection and has already established several dozen TMDLs throughout state. Each TMDL is water body specific and approved by

EPA as being protective of Florida's water.

The lower St. Johns River TMDL was developed after years of scientific study and highly sophisticated modeling on this water body, and the resulting TMDL was fully approved by EPA. A lengthy stakeholder process that included environmental interests, local governments, utilities, industry, agriculture, development, the military, and regulatory agencies, resulted in our current implementation of a Basin Management Action Plan, or BMAP. This plan included stakeholder projects of over \$1.2 billion, many of which are currently underway or completed already.

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As part of the BMAP, Atlantic Beach is designing improvements to our wastewater system to reduce our nutrient load. Costs for these improvements total over \$10 million, a huge financial burden for a small city like Atlantic Beach. That financial burden has resulted in approximately 40 percent utility rate increases over the last several years. Our citizens have willingly accepted the additional costs to protect the river because of the water body specific scientific and stakeholder driven process that DEP and the water management district use to determine

the river's needs.

In contrast, instead of finding the least -- the best and most cost effective way to protect each water body, EPA's proposed nutrient criteria ignores the completed and ongoing scientific study and the existing TMDLs on Florida's waterways.

If the FDEP's new criteria is implemented, it's likely that the city will have to postpone moving forward on our projects in order to determine how to best meet the new standards. This would delay the city's progress for improving the river's condition.

The city has also incurred considerable costs on design to meet the EPA approved TMDL, as have many other utilities in the area. It would seem appropriate that the federal government have liability to Atlantic Beach and other utilities for the costs that have been incurred to meet the EPA approved TMDL if EPA changes the rule without including the existing TMDL as a site specific standard in the new regulation.

In addition, Atlantic Beach's estimated cost for meeting EPA's criteria would be about \$21 million, an amount greater than the city's bonding capacity. The resulting utility rate

increases to our citizens would be a huge financial burden at a time that they are already struggling in the poor economy. Even in good economic times, it's bad to waste the public's money.

In summary, EPA's proposed numeric nutrient criteria represents not only bad environmental policy, but will further harm Florida's and Atlantic Beach's economy. By changing the rules in midstream, current basin management action plan projects may be delayed or abandoned. By ignoring variability of Florida's surface waters, limited resources will be wasted attempting to repair water bodies that are not impaired. And by failing to include existing EPA approved TMDLs of site specific standards, moneys will be spent to meet more stringent standards than needed to protect designated waterways.

Based on the above, it appears that EPA should seek judicial relief from its consent decree and allow Florida's Department of Environmental Protection to continue with their water body specific methods of protecting Florida's water from nutrients.

rulemaking proceed, EPA should adopt the existing EPA approved TMDLs and site specific alternative criteria directly into the rule.

Thank you very much for your time.

MR. KING: Thank you very much. 43?

MR. LARSON: Good evening. My name is Tom Larson, and I have lived in Florida for 12 years. I visited the state first in 1964 and have continued to return with increasing frequency and ended up moving here. I swim, canoe, boat, bird watch, hike, I live along a number of Florida waterways, including the Pablo River, the Guana River, the Tomoka River, the beautiful Silver River, Ichetucknee, Santa Fe, St. Marys, Nassau. I've spent time on these and various other rivers around the area with many friends.

I'm very concerned about the impacts that lack of attention to the impacts of nutrient pollution are having on our waterways. Florida is not what it should be. It is not what it once was. Many of these waterways have been destroyed or severely impaired by sewage and fertilizer, unmanaged growth, untoward business practices that are imposing costs on others in order for the private profit of the business.

I believe in healthy businesses. I believe in fair practices. I don't believe that someone else should impose on me and impair my experience costs that are a result of lack of attention to proper practices.

The State of Florida has been looking at nutrient issues for many years, a dozen years. The time has come to change the game. They have failed to solve the problem. There's been enough study. It's time for change. It's time for action.

I stand in front of you with one voice, but I represent also the Sierra Club Florida on its steering committee. We have 26,000 members around the state, and I'm sure you've heard from some of my friends elsewhere and you'll hear again from others. We support the need to change. We need nutrient standards to be set on science and numeric standards.

The TMDL process is broken. It's got too many opportunities for influence or -- or disregard of apparent facts. I want my children and their children to experience the full beauty of Florida. I want to be able to canoe from my back yard into the estuaries that make the

Intercoastal Waterway here in the region so fine. And I want to see the creatures that should be in those waters. I want to be able to eat that fish without concern. I want to be able to have life be full and rich in Florida. And we need these numeric nutrient standards in order to assure that future.

Thank you very much.

MR. KING: Thank you. Let me do a time check

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with folks. This afternoon's public hearing is scheduled to end at 5:00, but we can go a little bit beyond that. But I'd just like to find out how many folks are in the room who would like to speak who have not yet had a chance to speak.

Okay. I think we can probably -- I think we can do that. All right. So let's keep going. And number 44. Is there a number 44 or 45 or are we now up in the hundreds? 101. Okay. So number 101.

MS. BOUYOUNES: My name is Merril Bouyounes. I represent Bouyounes Turpentine and Kettle Company. I've lived in Duval County for almost 60 years. I grew up on the St. Johns River. We have a 17,000-acre family timber business, owning several miles of swamp frontage on the Georgia

side of the St. Marys River. We also own a lumber mill near the Satilla River. We have weathered 50 years of state and federal regulation both as timber farmers and as lumber mill operators. We appreciate the regulation. Each time it has been expensive, but each time it has made us more efficient.

So far we have been able to change and we've not gone out of business. We support the current proposal with some reservations. Florida's 2008 integrated water quality assessment reports that 28 percent of rivers and streams, 25 percent of lakes, and 59 percent of estuaries were impaired. The EPA determination letter has charged that despite huge expenditures of time and money, Florida has not been able to agree on numeric standards for the state surface waters.

The current reactive TMDL framework is set up to trigger restoration of impaired waters, not to produce warning signals prior to this level of degradation. The point of the EPA approach is to avoid ever getting to this point. Setting scientifically -- excuse me, scientifically sound numeric in addition to narrative nutrient criteria should improve Florida's ability to address

nutrient pollution.

Criteria would of necessity affect both states of boundary rivers, thus eliminating years of expensive and destructive interstate conflict. This is exactly where the federal government should be involved in our business, where individual states do not have clearly delineated control. A state cannot control only their half of a river.

We laud EPA for recognizing differences in water quality in Florida and for dividing the state into different water quality regions with potentially different criteria. However, please realize that surface waters still vary with (inaudible).

We at Bouyounes Turpentine and Kettle are specifically concerned about nutrient levels in blackwater streams like the St. Marys River and encourage you to use some sort of biological monitoring such as micro invertebrates to



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determine the impact that criteria are having on the biotic components of the water. As part of an adaptive management process, results from these biotic tests could be used to decide whether numeric nutrient criteria are helping or hurting

the water body.

Furthermore, we encourage EPA to design a federal -- excuse me, a feedback loop to modify criteria to allow maximum river health with minimum economic impact.

In closing, we agree with the development of proactive numeric nutrient criteria provided that it is well founded in scientific data, that it affects both sides of boundary rivers, and that it incorporates an adaptive process featuring feedback from biological monitoring. Thank you.

MR. KING: Thank you. Number 102, and will 103 please come up.

MR. JOHNS: Hey. My name is Chris Johns. I'm representing an old potato farm in Hastings, small farm, small potato farm and sod farm.

First, I'd like to thank you-all for taking time to do this. It really means a lot to us that you get to hear our comments. And one thing for certain, I do not envy you-all at all. It seems like a pretty complex and heated issue. Yeah. It's nice that you-all are willing to go through this.

Basically, I'd like to say that the emphasis that the science exists and my primary concern is

that if this gets done, that you-all pay attention to the work that's been done in the past 25 to 30 years in this area, in the area of nutrient runoff. And I know to a lot of people it may seem like it's been feet dragging or a good old boy network of, you know, people trying to get by, but really in that time a lot has been done. Science has been advanced immeasurably on identifying the problem, which sources and how to effectively deal with these problems. And that's -- that's essentially it.

Another -- one other note. Just with respect to the BMPs, I know that they're somewhat blind because it's obviously that we haven't been -- they haven't been effectively working, but to me it represents kind of a collaborative process between ag and the regulatory agencies and the universities to come -- to find effective solutions to these problems. And it's pretty much an adaptive management process that's been ongoing, and we're just now getting to the point where we're starting to see -- the science has finally kind of caught up with what we're trying to accomplish and we're able to accomplish a lot more effectively to protect our waters. And just

because it hasn't appeared to have been working as fast as many people would like, I don't see that as a reason to scrap the -- scrap the process. There's a lot of good information that's brought us, and it's actually solved problems in several

6 areas.

7 One small anecdote I have is, I happen to be  
8 the nephew that is currently working trying to  
9 implement drip irrigation on commercial potato  
10 production. And before -- before I started  
11 looking at this problem, I didn't even know that  
12 the University of Florida, I think back in the  
13 late '80s, had already addressed the issue or had  
14 looked into this as a possible solution, but at  
15 the time the technology wasn't to the point, it  
16 was still way too expensive to implement  
17 economically. But I just happened to start  
18 looking into it a little over a year ago and I got  
19 into it. And the technology for micro irrigation  
20 has advanced tremendously since then and becoming  
21 much more cost effective. And I'm -- I've gotten  
22 into -- I've got a trial going on right now to do  
23 it. And it represents, you know, if I can figure  
24 out a way to -- to manage it effectively and  
25 economically, it reduces nutrient runoff.

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1 But this is a natural part of the process,  
2 you know, these things take time. My trial is  
3 probably going to last four or five years. And I  
4 know to many people that that would seem not fast  
5 enough, but in order for these things to get done  
6 and get done right, it really -- we really have to  
7 make sure we're taking our time and using  
8 appropriate methods so that we actually solve and  
9 get appropriate fixes to these -- these problems,  
10 good solutions.

11 And, that's -- that's about it. And we're  
12 not necessarily against criteria, but -- but we --  
13 I just want to ensure that this criteria is  
14 actually going to solve the problem and it's based  
15 on something other than, you know, emotional, you  
16 know, irrational just emotion.

17 And, again, thank you-all.

18 MR. KING: Thank you very much. Speaker  
19 number 103.

20 MS. ST. JOHN: Good afternoon. I'm Trish  
21 St. John with the Nature Conservancy and I'm with  
22 the freshwater program for the Florida chapter.

23 The Nature Conservancy has worked for more  
24 than 40 years to ensure that rivers and waters in  
25 Florida are healthy for people, wildlife and

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1 natural habitats, and we've been working with --  
2 actively with the state's DEP TAC on the  
3 rulemaking.

4 Florida is a water rich state that has many  
5 regionally and globally important water bodies  
6 such as the Gulf of Mexico, the Apalachicola the  
7 St. Johns, St. Marys rivers, several natural  
8 estuaries and, of course, our freshwater spring  
9 systems, all of which support the state's annual  
10 \$65 billion tourism industry and directly affect  
11 the quality of life for all Floridians.

12 As clean healthy sources of water decrease  
13 and competition for water to meet public and  
14 industrial needs will continue to increase, it  
15 will be imperative for Florida to manage its water  
16 resources even more cautiously. This is

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compounded even further as our coasts and rivers are expected to experience increased flooding and sea level rise with climate change impacts. Water quality improvements are, therefore, even more pressing to preserve Florida's wide diversity.

The Nature Conservancy has worked -- successfully worked to fund and implement watershed scale projects that include acquiring critical conservation lands, water quality

improvement, runoff mitigation, habitat restoration projects, improving -- improvement areas such as Apalachicola, Indian River, Florida Keys, the St. Marys River and other conservancy freshwater marine sites across the state.

We support the efforts to set a series of numeric limits on the amount of nutrients that would be allowed in Florida's waters. We agree that setting scientifically sound numeric criteria will improve the ability to address nutrient pollution in a timely and effective manner.

Nutrient pollution can lead to many problems that you've heard about today, harmful algae blooms, low oxygen dead zones in water bodies such as the Gulf of Mexico and the St. Johns River, for example, and lead to declines in wildlife and wildlife habitat.

You've just heard about all the percentages about the impairments in the state of Florida, and we'd like to point out that while the TMDL framework is appropriate to restore a water body, that does not mean it's water quality criteria. We would support a proactive watershed program that aims to reduce impairments and deter further habitat degradation and also would hopefully avoid

more very costly restoration and clean-up projects.

Given the limited funds for costly restoration projects and increased urbanization, more collaboration with state (inaudible) should be developed to jointly work towards more sustainable projects that preserve riparian habitat, benefit water quality and benefit from emerging ecosystem services and also creates desirable communities for Floridians today and for future generations.

The Nature Conservancy supports efforts to not only improve water quality but also to establish, restore and enhance important criterion in aquatic habitats. We are pleased that efforts to date have recognized the differences in water quality throughout Florida by dividing the state into different its regions with different -- with generally different underlying natural water quality levels. However, these water quality -- however, the water quality of rivers and streams can still vary within each region.

And we support the use of biological monitoring associated with these criteria to ultimately answer whether or not they fulfill the

goal of environmental protection. This is

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especially important because of the inherent differences in each water body and how nutrients as well as other numerous factors ultimately influence bios in these systems.

Bios such nitrates and vertebrates can be further used to determine if these criteria are indeed effective in improving the biology and ecology of our rivers and streams. And this feedback will be -- will be important to ensure that the nutrient criteria are helping the water bodies that we care about.

We would also support the establishment of adaptive management process for setting standards in a manner that strives for water quality improvements by the use or the creation of these restoration standards. The framework for developing the restoration standards for impaired waters should work to set control measures that protect aquatic life in lakes and flowing water, including canals within the state of Florida. The provision would also Florida to retain full aquatic life protection for its water bodies while establishing a transparent phased process that would result in planned implementation of

enforceable measures and requirements to improve water quality over a specified time period to ultimately meet the long-term designated aquatic life use.

In closing, we agree with the development of criteria that would proactively address the discharge of excess nutrients and provide us with an early warning system for water threatened by (inaudible) before degradation and costly clean-up programs are necessary and which will ultimately help us in keeping Florida's waters healthy for people, wildlife and natural habitats.

Again, we'd like to stress that we support a proactive, not reactive program. We thank you for your time and effort. And we'll also be submitting these comments to you before the deadline.

MR. KING: Thank you so much. Speaker number 104. Speaker number 105.

MR. WILLIAMS: Good evening. I changed that from good afternoon. I'm Gary Williams. I'm with the Florida Rural Water Association. We're an association for over 1300 drinking water and wastewater utilities in Florida.

This proposed rule will have a major impact

on many of our members in many of these systems. For that reason, we are opposed to the rule, the proposed rule.

You've heard from many of our essential life sustaining industry members in these public hearings. I do want to point out that we will be submitting extensive, in-depth, technical with scientific reference written comments in addition to the limited comments I want to make today in the essence of time.

A couple of things I do want to point out, though. A lot of our members are small community

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water systems who lack the expertise and the economies of scale to operate the technology required to meet this proposed rule. The cost to comply for many of our systems will result in increases in water and wastewater rates of up to 300 percent, or amounts well over \$100 a month in utility bills. We've even analyzed a few of our members that will have to comply, and it's going to increase their wastewater rates by up to \$250 a month in order to implement technology to comply with this.

Even if the customers can afford those needed rates to comply with this, it's going to be a zero

sum game in public health and protecting our families. A 300 percent rate increase will cause family budget reallocations which will result in less money for food, clothing, shelter, medicines, et cetera.

Our members and folks that operate these water and wastewater systems live in these communities, their families live in these communities, their friends live in these communities, so they have a very vested interest in doing everything they can to provide the best drinking water and the best wastewater treatment for their community. But also understand that this must happen in an affordable way. It is our business to clean up pollution and to protect public health.

Another unintended consequence that I want to mention that should be considered is because of the cost and the inability to comply, likely wastewater utility systems may face and may have to employ abandonment of their systems which could cause customers back into less desirable treatment techniques, such as septic tanks, and at that point we lose a lot of the environmental protection that these centralized systems were

designed and built to achieve. We don't want to see this happen.

Even if water and wastewater systems can afford to implement the technologies needed to approach meeting the proposed criteria, I also want to point out that it's going to be impossible to design, permit, finance and construct these technologies by the proposed date of October 15th, 2010, when this proposed rule will go into effect. So there's going to need to be some relief there.

And I will stop there. Thank you.

MR. KING: Thank you so much. Speaker number 106.

MR. REYNOLDS: Good evening. My name is Greg Reynolds. As my day job, I'm employed as the vice president and general manager of Water Recovery. Water Recovery is a small business located in Jacksonville, Florida. Our business is a centralized wastewater treatment facility, and our business is cleaning dirty water from industrial sources, marine sources, other people's dirty water. Our company is part of a regulated community, and we are proud of our achievements in



regulatory performance.

This afternoon I'm also speaking to you on

behalf of First Coast Manufacturers Association where I volunteer as vice chairman of the environmental health and safety committee. The First Coast Manufacturers Association is the proud voice of nearly 1600 manufacturing members and represents over 35,000 employees in Florida's first coast. The association has over 20 years of history working on three primary objectives. Those objectives are improving our economy, educating our work force, and protecting the environment.

Since you've graciously extended into overtime, I think I'll get to some of the bottom lines up front and speed through this.

For the record, I'm not an attorney, I'm not a paid consultant. I'm actually a biochemist and an analytical chemist with 20 years of career dedicated to treatment of water across North America.

I am for clean water. I'm against the Green Monster. But the current NNC rule as proposed we do not support. And I want to offer up some specifics suggestions.

As you know, there are three nutrient TMDLs specifically applicable to the lower St. Johns

River. These TMDLs have specific numeric end points. So it's not specific numeric end points that we object to. It's a little bit of the science.

Under Florida's progressive TMDL legislation, these TMDLs are being implemented in a manner that goes far beyond what is required by the Clean Water Act. I'm pleased to report and have heard from other speakers that because of the TMDLs and over a decade's worth of work, that there are significant nutrient reductions happening because of the projects being implemented across this area. We are concerned, though, that if the rule goes forward as stated, that the projects that are in progress to clean up the nutrients' delivery to the watershed will be stifled and stopped.

If businesses need to come up with new end point targets arbitrarily assessed, not based on the TMDL science, then they're going to need to stop the capital expenditures, the planned projects and come up with new plans and processes. So I think that in that manner, it has a potential to slow down the end point which everyone wants, which is cleaner water in Florida.

The experience in the lower St. Johns River

demonstrates that the regulated community will make huge investments to accomplish pollutant reductions if doing so will benefit the environment. That's what has happened and continues to happen in the lower St. Johns River TMDLs. But now with these proposed regulations, EPA may ignore all that's been accomplished and require us to spend much more money possibly

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without any environmental benefit.

The bottom line, EPA's proposed rule, historic progress in reducing nutrient loading in the St. Johns River is substandard environmental policy and just not right. Waters that have an EPA approved nutrient TMDL do not need new nutrient numeric standards and, therefore, they should be excluded from the proposed rule. Failure to exclude these TMDL waters from the EPA's rule would represent a step backwards for the lower St. Johns River and for the economy of northeast Florida.

Thank you for the time. I thank you for the opportunity to provide input, and I thank you for going into overtime this afternoon session.

MR. KING: Thank you very much. Speaker number 107? Is there a 107 here? Speaker 108?

Speaker 109. Good afternoon, sir.

MR. KARNEY: Yes, you do have 109. I'm Patrick Karney, speaking to you this afternoon from two viewpoints, both as a resident and as a professional.

First of all, I've lived in northeast Florida for over 20 years. I own property on the St. Johns River just south of Green Cove Springs. I've seen no green blooms down there, but I've seen them other places, but I don't want to see them down there, either.

My second viewpoint is that as a professional engineer with an undergraduate degree and two graduate degrees in engineering, licensed professional engineer in Florida, Missouri and Ohio and a certified environmental professional by the American Academy of Environmental Engineers.

I've worked to remove pollution as a career and vocation in over 20 years of operating wastewater treatment plants across the country. I'm now a consultant. My firm designs and constructs the types of improvements that are proposed under your -- under your regulations, and it would be an economic boom for us. However, I cannot in good conscience support what you publish

because it would be unethical. This is not scientifically based. It would increase energy use, which EPA continually professes should be reduced. It would increase the generation of greenhouse gases and increase carbon footprints, two more points that EPA continually professes to want to see decreased. It would cost the residents of the state of Florida. Folks talk about companies not being willing to pay, cities not willing to pay. This comes down to the residents having to pay increased costs, and it would be money that is wasted.

And I would submit the EPA numbers are someplace between ten and 30 times below for what those investments would be. And that if the State of Florida were smart, it would take EPA up on its deal as low bidder and have EPA do the design, construction and operation of these facilities.

For the money you've put in there, I don't

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see where you get much more than design of facilities, let alone construction or the day-to-day operations. So both as a riverfront property owner and a consultant who could possibly benefit from what you're proposing, I object to these limitations as having no scientific basis

and being a criminal waste of the resources of the individuals in the state of Florida. Thank you.

MR. KING: Thank you. Speaker number 110? Speaker 111? Speaker 112? Is there anybody else who is here who would like to speak who hasn't yet had a chance to do that? Please come on up and please help us with your name. 113. Okay. Didn't go quite far enough.

MS. FERREIRA: My name is Julie Ferreira. I live Nassau County, Florida, Fernandina Beach. I want you to thank you for coming to Florida.

I'd like to agree with the woman who said -- I'm going veer off a little bit from what I was going to say. I'd like to agree with the woman who said that she was -- that she felt like what we were discussing here is money, the woman who got up and spoke for Rayonier. Rayonier does own 435 acres of -- thousand acres between Savannah and further a little bit south into Florida. And there's a river that divides Georgia and Florida, and it's called the St. Marys River. Rayonier owns property on both sides of that. And there have been several attempts to label that water as outstanding Florida water, and Rayonier always comes forward and thwarts that ability to label

that as an outstanding water body. And that makes me question whether their Best Management Practices are sustainable and -- or why is it that they're so concerned with their nutrient contributions so that they thwart that as a possibility.

We do have in Florida very lax water regulations. And we're surrounded by water, and in this day and age, one would think that, you know, we would have strong regulations, but that's just really not so. So I'm hoping that so that we can ensure the health of Florida rivers and canals and springs and lakes, and not to mention the ocean, that I feel that it's really important for EPA to create enforceable guidelines that include verifiable numbers to stop further water degradation in our state.

Living in Fernandina Beach, there's -- there's three rivers that come together. And several years ago we were starting to see patches of algae bloom in the Nassau River. And about three years ago, I went down to Marineland to attend an adult day camp program called Exploring Our Environment From the Ocean to the River. And it was sponsored by the Florida Sea Grant

Extension Agency. And during that time while we were there, there was a strong red tide and it limited our ability to go outside and do what we were there to do, which was to study the

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environment. Now, we did go out, but it was much more limited. We all had to wear masks. People's throats and eyes and everything was irritated, people were coughing. And I have respiratory problems, so I was having real problems. And it was -- it was amazing when we did go out to see the amounts of sea life that had washed up on shores and had died because of the red tide. It was frightening.

One the things that I wanted to talk about was locally in my local community, there was a fairly upscale housing development and it backs up to the YMCA, and there's a retention pond that lies behind the YMCA. And the local community was all up in arms because this retention pond suddenly turned green and was filled with slime. And the homeowner's association was accusing the YMCA of dumping swimming pool water in the retention pond and causing the problems. And through further water testing, it shows up that it's nonpoint solution and it's actually the

homeowner's runoff that's causing this.

I think one of the important things is that most homeowners and people aren't aware of the impact they're having on the environment. And it's really for regulatory agencies to step forward and create regulations that -- that encourage awareness or demand awareness and give the public the education that they're lacking. So I think most people are clueless and that there's really a need for an outside organization such as you to come in and create regulations that have teeth, you know, that have verifiable standards with numbers that will protect the fragility of our ecosystem.

And I'm terribly concerned about the generation of my granddaughter and what she's going to inherit and the generations to follow her. So I can only encourage you that, you know, we have to stop the -- we have to stop the impact that we're now having on habitats for fish, manatees, dolphin, aquatic wildlife and wood storks. And I encourage the EPA to stand tough and help the State of Florida. Thank you.

MR. KING: Thank you very much. Speaker 114.

MR. GRAMFORD: With luck, I may be your last

one. You never know.

I'm Norman Gramford and I live in Fernandina Beach. I am a newcomer to Florida and Georgia. I started out down in the Keys, went to school there.

When I first got to Fernandina Beach, I went kayaking on a group tour. And they said to watch out for the oyster beds because they were all dead. This used to be an area where people came to buy oysters because they were so tasty, and now because of the water runoff, it appears it is just this massive place where you have to watch out for the bottom of your boat. And I was thinking of that just as I was listening, too. And she is really impressive. Watching her take this down is

16 just phenomenal.

17 MR. KING: Thank you for that. You will be  
18 the last speaker, but thank you for saying that.

19 MR. GRAMFORD: Florida law is currently not  
20 specific enough and it only requires that nutrient  
21 levels not upset the natural balance of plants and  
22 animals in a waterway. The state has not moved  
23 with certainty or swiftness in setting these  
24 water -- water quality standards. I'm going to  
25 try to see if I can state this and just get out

0195  
1 quicker. Instead, our state wants to approve the  
2 new stream classification system. There are  
3 people who are in position of responsibility and  
4 they're not doing anything, at least it doesn't  
5 appear to be so. We really need your assistance  
6 to come and help.

7 We have five waterway classifications that  
8 are used to help determine the amount of pollution  
9 that can be discharged into our water bodies.  
10 Most of the waterways are considered to be Class  
11 III, meaning the water class will support  
12 recreation, healthy fish and wildlife. However,  
13 in 2009, the Florida Stormwater Association  
14 petitioned the DEP to create a new classification  
15 so that the local governments would not be  
16 required to improve their water systems. This is  
17 why we need you to come in and be the enforcer to  
18 develop these new standards that you're proposing  
19 for nitrogen and phosphorus for our waterways as  
20 they are needed. And I understand it varies over  
21 the state, but still these are needed. We really  
22 need to realize this classification system  
23 somehow.

24 Right now the fertilizer industry is working  
25 in Tallahassee right now trying to strip the local

0196  
1 governments of their ability to set new rules and  
2 regulations to do lawn fertilizer and saying how  
3 much you can use locally. In Pinellas and Orange  
4 County and others they have enacted restrictions  
5 on fertilizer and the use of formulations for  
6 certain times of the years to reduce the runoff or  
7 excess nitrogen and for phosphorus into the  
8 rivers, lakes and estuaries. But together with  
9 the Department of Agriculture and Consumer  
10 Services, the fertilizer industry and the lawn  
11 industry has launched an attempt in this year's  
12 session of the Florida legislature to reduce or  
13 remove these local attempts at controlling it.  
14 And since I'm one of the big users of fertilizer  
15 in trying to keep my lawn that doesn't ever turn  
16 green working, I'm one of the nuisances. Sorry.

17 We need to have standards that will stop the  
18 green slime and the water runoffs that are killing  
19 the fish and the wildlife that is actually  
20 occurring and that we can see. And I would really  
21 appreciate it if you were able to do that for us.  
22 Thank you.

23 MR. KING: Thank you so much.

24 That concludes the afternoon session of this  
25 public hearing. We will begin again at 7:00 p.m.



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2 this evening, and anybody who has not yet had a  
3 chance to speak and would like to, we welcome you  
4 to come on back at 7:00 o'clock. Thank you so  
5 much.

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4 THE STATE OF FLORIDA  
5 COUNTY OF DUVAL

6 I, Mary Hlavac, Registered Merit Reporter,  
7 Certified Realtime Reporter, State of Florida  
8 at large, certify that I was authorized to and  
9 did stenographically report the foregoing  
10 proceedings and that the transcript is a true  
11 and complete record of my stenographic notes.

12 Dated this 21st day of April, 2010.  
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16 MARY HLAVAC, RMR, CRR  
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