

EPA'S TAKEOVER OF FLORIDA'S NUTRIENT WATER QUALITY STANDARD SETTING: IMPACT ON COMMUNITIES AND JOB CREATION

HEARING BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION

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C O N T E N T S

	Page
Hon. Cliff Stearns, a Representative in Congress from the State of Florida, opening statement	1
Prepared statement	4
Hon. Corrine Brown, a Representative in Congress from the State of Florida, opening statement	7
Hon. Joe Barton, a Representative in Congress from the State of Texas, opening statement	8

WITNESSES

Gwendolyn Keyes Fleming, Region 4 Administrator, Environmental Protec- tion Agency	10
Prepared statement	13
Richard J. Budell, Director, Florida Department of Agriculture and Consumer Services	22
Prepared statement	25
Paul Steinbrecher, President, Florida Water Environment Association Utility Council	53
Prepared statement	56
William Dever, President, Florida Gulf Coast Building and Construction Trades Council	103
Prepared statement	105
Ron St. John, Managing Partner, Alliance Dairies	110
Prepared statement	112
Kelli Hammer Levy, Watershed Management Section Manager, Pinellas County Department of Environment and Infrastructure	115
Prepared statement	117
David G. Guest, Director, Florida Regional Office, Earthjustice	125
Prepared statement	127
David Richardson, Assistant General Manager, Water/Wastewater Systems, Gainesville Regional Utilities	136
Prepared statement	138

SUBMITTED MATERIAL

Memorandum, dated December 29, 2008, from Luis A. Luna, Assistant Ad- ministrator, Environmental Protection Agency, to Stephen L. Johnson, Ad- ministrator, Environmental Protection Agency	165
Memorandum, dated March 16, 2011, from Nancy K. Stoner, Acting Assistant Administrator, Environmental Protection Agency, to Regional Administra- tors, Regions 1–10, submitted by Mr. Stearns	175
Letter, dated April 22, 2011, from Herschel T. Vinyard, Jr., Secretary, Florida Department of Environmental Protection, to Lisa P. Jackson, Adminis- trator, Environmental Protection Agency, submitted by Mr. Stearns	181
Letter, dated June 13, 2011, from Nancy K. Stoner, Acting Assistant Adminis- trator, Environmental Protection Agency, to Herschel T. Vinyard, Jr., Sec- retary, Florida Department of Environmental Protection, submitted by Mr. Stearns	220

EPA'S TAKEOVER OF FLORIDA'S NUTRIENT WATER QUALITY STANDARD SETTING: IM- PACT ON COMMUNITIES AND JOB CRE- ATION

TUESDAY, AUGUST 9, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:10 a.m., at the Alumni Center, The University of Central Florida, 4000 Central Florida Boulevard, Building 126, Orlando, Florida, Hon. Cliff Stearns (chairman of the subcommittee) presiding.

Members present: Representatives Stearns and Barton.

Also present: Representatives Brown, Bilirakis, and Ross.

Majority staff present: Katie Novaria, Legislative Clerk; Peter Spencer, Professional Staff Member, Oversight; and James Thomas, Policy Coordinator.

Mr. STEARNS. Welcome, here at the Alumni Center, and we, as Members of Congress, appreciate that very much.

This hearing is part of the Energy and Commerce Committee in Congress, and I am authorized, as the chairman, to do this.

I am delighted to have my colleagues here. Corrine Brown, of course, this is part of her congressional district. Joe Barton is a former chairman of the Energy and Commerce Committee. He is from Texas. He is on vacation here with his family. Gus Bilirakis, I think all of you know, is over in the Tampa area. And Dennis Ross, of course, is contiguous here to Orlando. So I welcome my colleagues.

I will start with an opening statement.

OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

We convene this hearing of the Subcommittee on Oversight and Investigations to examine the impact of the Environmental Protection Agency's, EPA, recent rulemaking setting Federal numeric nutrient water quality criteria for Florida's lakes and flowing waters and overruling Florida's own process for setting the relevant standards.

This is the sixth hearing in the subcommittee's regulatory reform series, as well as the subcommittee's first field hearing. Regulatory reform has been a priority for this subcommittee in the 112th Congress, and this hearing continues its examination of potentially

burdensome and costly Federal regulation that will stifle job creation and economic growth.

As Floridians work to get back on their feet, the Federal Government's efforts must be focused on improving our economy and, of course, creating jobs. Unfortunately for the almost 1 million currently unemployed people from Florida, EPA's unprecedented and potentially costly water mandates threaten to harm Florida citizens, its local governments, and vital sectors of our economy, with no guarantee of benefit for improved water quality overall.

Nutrient pollution presents unique challenges that are difficult to remedy through the EPA's non-site-specific approach of setting numerical water quality standards. In other words, one size fits all. This approach is not universally appropriate for substances like nutrients that are both widely variable, naturally occurring, and a necessary component of healthy ecosystems.

Disturbingly, EPA's approach may result in numerous waters being labeled as impaired even though they are not and direct taxpayers' resources away from necessary environmental work while blocking business growth and job creation in the meantime here in Florida.

For example, the Cross Bayou within the Tampa Bay estuary system has an extensive oyster reef that the Florida Fish and Wildlife Conservation Commission has described as pristine. This pristine wildlife conservation center is clear to us it is OK. Yet the water quality of this area does not come close to meeting the EPA standard. So this is not sensible regulation, in our opinion.

Despite the well-known challenges with setting numeric nutrient standards, Florida had—for several years has been working to set such standards with EPA support until January 2009, when EPA abruptly called for Federal standards. Although Florida continues to collaborate with the Federal authorities for a workable solution, EPA instead chose in August 2009 to abandon Florida's process and to impose its own broad-brush standards by certain dates.

So, my colleagues, we will hear today how EPA's actions take over Florida's well-regarded process, places tens of millions of dollars of ongoing water quality projects into jeopardy, and threatens billions of dollars of economic, job-creating decision-making.

Witnesses today will provide perspective from the State, municipalities, water utilities, the labor community, and the agricultural community, all of which must confront the regulatory challenges and uncertainties presented by EPA's takeover of Florida's standard setting.

Ironically, the same EPA, bent on imposing its standards despite scientific and economic uncertainty about the impact, also asserts that according to a March 16, 2011, memorandum from Nancy Stoner, the Acting Assistant Administrator for Water, to EPA's regional administrators, quote, she says, "States need room to innovate and respond to local water quality needs. So a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary."

So, clearly, EPA is acting against its own advice in Florida. There are serious questions about the necessity of EPA actions, the quality of the analysis supporting its decisions, and the economic and jobs impact for complying with its Federal numeric standards.

[The prepared statement of Mr. Stearns follows:]

**Opening Statement of the Honorable Cliff Stearns
Chairman, Subcommittee on Oversight and Investigations
EPA's Takeover of Florida's Nutrient Water Quality Standard Setting:
Impact on Communities and Job Creation
August 9, 2011**

(As Prepared for Delivery)

We convene this hearing of the Subcommittee on Oversight and Investigations to examine the impact of the Environmental Protection Agency's (EPA) recent rulemaking setting federal numeric nutrient water quality criteria for Florida's lakes and flowing water and overruling Florida's own process for setting the relevant standards. This is the sixth hearing in the Subcommittee's regulatory reform series as well as the Subcommittee's first field hearing. Regulatory reform has been a priority of this Subcommittee in the 112th Congress and this hearing continues its examination of potentially burdensome and costly federal regulation that will stifle job creation and economic growth.

As Floridians work to get back on their feet, the federal government's efforts must be focused on improving our economy and creating jobs. Unfortunately for the 982,000 currently unemployed Floridians, EPA's unprecedented and potentially costly water mandates threaten to harm Florida's citizens, local governments, and vital sectors of our economy – with no certain benefit for improved water quality.

Nutrient pollution presents unique challenges that are difficult to remedy through the EPA's non-site specific approach of setting numerical water quality standards. This approach is not universally appropriate for substances like nutrients that are both widely variable, naturally occurring, and a necessary component of healthy ecosystems. Disturbingly, EPA's approach may result in numerous waters being labeled as "impaired," even though they are not, and direct taxpayer resources away from necessary environmental work, while blocking business growth and jobs creation in the meantime.

For example, Cross Bayou, within the Tampa Bay Estuary System, has an extensive oyster reef that the Florida Fish and Wildlife Conservation Commission has described as pristine. Yet the water quality of this area does not come close to meeting EPA's standard. This is not sensible regulation.

Despite the well-known challenges with setting numeric nutrient standards, Florida had for several years been working to set such standards, with EPA's support, until January 2009 when EPA abruptly called for federal standards. Although Florida continued to collaborate with the federal authorities for a workable solution, EPA chose in August 2009 to abandon Florida's process and to impose its own broad-brush standards by certain dates.

We will hear today how EPA's actions to take over Florida's well-regarded process places tens of millions of dollars of ongoing water quality projects into jeopardy and threatens billions of dollars of economic – job creating – decision-making. Witnesses today will provide perspective from the state, municipalities, water utilities, the labor community and the agriculture community, all of which must confront the regulatory challenges and uncertainties presented by EPA's take over of Florida's standard setting.

Ironically, the same EPA bent on imposing its standards despite scientific and economic uncertainty about the impacts, also asserts that – according to a March 16, 2011 memorandum from Nancy Stoner, the Acting Assistant Administrator for Water to EPA's Regional Administrators -- “states need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary.” Clearly, EPA is acting against its own advice in Florida.

There are serious questions about the necessity of EPA actions, the quality of the analysis supporting its decisions, and the economic and jobs impact for complying with its federal numeric standards.

The State of Florida's initial \$5.7 billion to \$8.4 billion annual cost estimate for implementing EPA's standards is 20 to 40 fold higher than EPA's estimates. Another study by the Florida Department of Agriculture and Consumer Services and the University of Florida concluded that EPA's mandated regulations could cost Florida's agricultural community \$1.1 billion annually and eliminate 14,545 full-time and part-time jobs.

My hometown of Ocala, Florida estimates their direct costs to range from \$90-\$150 million in associated upgrades and Clay County Utility Authority estimates their capital cost expenditures to comply with EPA's mandate to exceed \$120 million, resulting in a 35%-40% increase to their customers' utility bills. These multiple, independent estimates provide a much clearer picture of the actual impacts of this regulation on Florida's businesses and family budgets. It is simply unreasonable to place this exorbitant financial burden on communities already facing significant economic challenges.

As we will hear this morning, EPA simply assumes away these unnecessary burden's and economic realities, and appears to ignore the good efforts by state authorities to set scientifically defensible, EPA-approved, nutrient standards.

We all support clean water but at a time when our State and its communities are suffering from high unemployment, budget deficits, and depressed real estate values, we must be cautious about forcing unaffordable and scientifically questionable federal mandates on our communities, hardworking families and employers.

While I don't want to see the EPA dictate these potentially burdensome and expensive regulations, I do want the EPA and the State of Florida to work together in developing an economical solution to safeguard our water quality. Preserving our State's natural

resources is a sound environmental policy. If EPA will work with the State of Florida and our municipalities and businesses to develop sensible regulations, it can be economical as well.

Mr. STEARNS. With that, that is my opening statement. And I ask unanimous consent that Members who are not a member of the committee may ask questions and also that my good colleague Corrine Brown can also have an opening statement.

Without objection, so ordered.

With that, I recognize Corrine Brown for her opening statement.

OPENING STATEMENT OF HON. CORRINE BROWN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Ms. BROWN. Thank you, Mr. Chairman.

First of all, I want to acknowledge that I am happy to be here at the University of Central Florida with Dr. Hitt and all of the Central Florida family. I claim them as a part of representing them in the United States Congress.

And I want to thank the committee for being fair in their also giving me the opportunity to have an opening statement since I am not on this committee. I am on the Transportation and Infrastructure Committee that have had hearings, both in full and sub on this issue.

I am also supposed to say something nice about Texas, since they agreed for me to make the opening statement. My best friend is from Texas, Eddie Bernice Johnson. So thank you very much.

[Laughter.]

Ms. BROWN. But I did tell him who is going to beat them in football. So—

Mr. BARTON. There you go. We will see about that.

Ms. BROWN. But back to the subject area. You know, I, first of all, have got a problem with the title of the hearing, "EPA Takeover of Florida Nutrient Water Quality Standard Setting: Impact on Communities and Jobs." Now we do know that it is not really an EPA takeover, and I am a little disappointed that the State is not here today because the State has the leading role.

And my friend Herschel Vinyard, since he left Jacksonville and in Tallahassee, is the new EPA director, and I think they should be here at this hearing today because I would like to know—have their input because the more input we have, the better we can make our decisions in Washington.

As I said before, we have had two hearings, both the full and subcommittee, on this issue. And I really think that we need to work together in a balanced approach, but we also need to make sure that we are fair in how we handle this issue. That is why I supported Congressman Rooney's amendment that would have limited funds for this new criteria of Florida.

But I also know that water is very important, and we do not need to weaken the clean water standards. We need to work together to protect the people of Florida, but also how can we implement it and make sure it is safe and that Florida is not held to a different standard than the rest of the country as we move forward?

We are going to have a lot of water battles. We are doing it with Georgia, and we are doing it with other communities. So how do we do this in a way that is going to be fair to the people of Florida and fair to the businesses as we move forward?

So I am very interested and thank the chairman for having me here today. And I am very interested in hearing what the panelists have to say and seeing how we can work together to move forward. So thank you very much.

Mr. STEARNS. I thank the gentlelady.

And with that, I recognize the gentleman from Texas, Mr. Barton.

Mr. BARTON. Well, thank you, Chairman Stearns.

I am a past chairman of the Oversight and Investigations Subcommittee of the Energy and Commerce Committee. So it is a delight to be here for this field hearing.

My family is on vacation in Florida. Yesterday was the Magic Kingdom, and today I am missing Epcot Center. But I will be home in time to help pay for supper this evening. So——

[Laughter.]

Mr. BARTON [continuing]. We are contributing to your Florida economy substantially.

Ms. BROWN. Thank you.

Mr. BARTON. Eddie Bernice Johnson is my good friend, and I am glad that Congresswoman Brown is going to be in my new congressional district I think this Friday?

Ms. BROWN. This Friday.

Mr. BARTON. At a transportation summit. So I, too, want to thank the University of Central Florida for their hospitality and being here.

I do have an official opening statement. I am going to run through it real quickly, Mr. Chairman.

**OPENING STATEMENT OF HON. JOE BARTON, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

I was very pleased when I found out that you were going to hold this field hearing on the EPA and Florida and its efforts with regards to water regulations. I have said this before, and I will say it here at this hearing, that it does appear to me that the Obama EPA administration is trying to reset the balance between State regulation and Federal regulation, with an emphasis that Washington knows best, and it is in almost every case very easy to override the State and implement their own Federal standards.

What the EPA is attempting to do here in Florida with regards to water quality is very similar to what the EPA is trying to do in Texas with regards to air quality. In Texas, we have a flexible air quality permitting program that was approved back in the Clinton administration and has been in existence for over a decade. And the Region 6 administrator for the EPA and the Washington EPA has revoked those permits that affect over 130 facilities in Texas without any real justification that I can find.

Here in Florida, back in 2007, the EPA and the Florida Environmental Protection Department agreed on a consent decree, I am told, with regards to nutrients and phosphorus that was in effect and that the Floridians were beginning to implement, setting the standards, compliance dates. And then, last year, the Obama EPA in Region 4 came in and revoked that and put in place their own standards with a compliance date, I believe, of early next year, which is probably going to be impossible to meet.

I think it is fair to say, Mr. Chairman, that regardless of whether you are a Federal official or a State official, we want the strongest air quality and water quality standards. I think it is fair to say also that we should recognize that those standards should be based on real scientific data. They should be promulgated in a cooperative atmosphere, if at all possible, with those that are being regulated.

And since it is the State that has to implement in almost every occasion, Mr. Chairman, that you should give deference to the State in terms of how to implement and the timelines for implementation. You should be very pleased and happy, Mr. Chairman, that in Florida you have water resources to regulate.

My son yesterday, my 5-year-old son, when it started raining wanted to know what that was. Yes, we haven't had rain in 4 months. We have had 30 days of 100 degree temperature or better, and we have had 7 or 8 days in a row of over 105. So having water resources to develop is definitely a positive.

Let me conclude simply by saying that when I get to the question and answer period here today, I do plan—first of all, I want to thank the Region 4 administrator for being here. We haven't been able to get the Region 6 administrator for Texas to come to a field hearing in Texas. So give her credit for showing up and being willing to answer questions.

But I am going to ask her some questions, such as why they refuse to grant the flexibility needed for your State to implement the agreed-upon plan that you had in place before it got revoked? What does the EPA do to really take into account the compliance costs? Why does the EPA continue to ignore the concerns of your State officials and industry representatives regarding the data, the assumptions, and the models that are used?

I want to emphasize the word "models." When you have real data, Mr. Chairman, it would seem to me that you would take the real world data over an EPA-generated model, which may or may not reflect the real world. And again, in Texas, EPA is using modeling data that has no relationship to the real world data that is collected on a continuous basis with regards to air quality.

We all want safe water. We all want clean air. It is the appropriate oversight role of this particular subcommittee to oversee the Environmental Protection Agency. And this field hearing in Florida in front of your constituents and Ms. Brown's constituents and Mr. Bilirakis's and Mr. Ross's constituents is an open, transparent way to conduct that oversight, and I commend you for doing that.

I look forward to the hearing.

Mr. STEARNS. Thank the gentleman.

And we will welcome our first panel. If they would please come forward? Gwendolyn Keyes Fleming is EPA's regional administrator for Region 4 and was appointed by President Barack Obama in September 2010. Prior to her position with the EPA, Ms. Keyes Fleming served as a DeKalb County district attorney and prosecuted approximately 11,000 felony cases annually.

Ms. Keyes Fleming is a New Jersey native and earned her bachelor's degree in finance from Douglass College and her law degree from the Emory University School of Law. Welcome.

Richard Budell is the director of the Office of Agricultural Water Policy with the Florida Department of Agriculture and Consumer

Services. He has been involved in the development and implementation of agricultural water resource protection and restoration programs in Florida for 26 years. Mr. Budell, welcome.

Both of you are aware that the committee is holding an investigative hearing and, when doing so, has had the practice of taking testimony under oath. Do you have any objection to taking testimony under oath?

Ms. KEYES FLEMING. No objection.

Mr. BUDELL. No.

Mr. STEARNS. The chair then advises you that under the rules of the House and the rules of the committee, you are entitled to be advised by counsel. Do you desire to be advised by counsel during your testimony today?

Ms. KEYES FLEMING. No.

Mr. BUDELL. No.

Mr. STEARNS. In that case, if you would please rise and raise your right hand, I will swear you in.

[Witnesses sworn.]

Mr. STEARNS. You are now under oath and subject to the penalties set forth in Title 18, Section 1001 of the United States Code. You now may each give a 5-minute summary of your written statement, and we welcome you.

Ms. Keyes Fleming?

STATEMENTS OF GWENDOLYN KEYES FLEMING, REGIONAL ADMINISTRATOR, SOUTHEAST REGION, ENVIRONMENTAL PROTECTION AGENCY, AND RICHARD J. BUDELL, DIRECTOR, FLORIDA OFFICE OF AGRICULTURE AND CONSUMER SERVICES

STATEMENT OF GWENDOLYN KEYES FLEMING

Ms. KEYES FLEMING. Good morning. I'm pleased to appear before you today to discuss the water quality challenges here in Florida resulting from nutrient pollution.

The urgent problem before us is how we can most effectively collaborate at the Federal, State, and local government levels to address the growing public health risks and adverse economic impacts of this widespread pollution on the prosperity and quality of life of the communities here in Florida.

Clean water is vital to Florida's economy. We know that 82 million tourists come to Florida for the beaches, rivers, and State park system that is the envy of the Nation. Tourism, the State's number-one industry, employs about 1 million Floridians and generates \$57 billion for the State's economy each year. Clearly, the businesses these tourists and all of us depend on need a reliable and plentiful supply of clean water.

Clean water is also essential to our public health, our drinking water supplies, and to the welfare of our families and communities. But here in Florida, over 1,900 miles of rivers and streams are currently impaired for nutrients, and the numbers are increasing, despite the best efforts of the State.

Nutrients cause algal blooms, that thick green muck that fouls clear water and can produce toxins harmful to humans, animals, and the environment. Exposure can cause skin irritations, stomach

and intestinal problems, fever, sore throat, headache, and liver damage.

In early June of this year, for example, a toxic blue-green algae bloom was reported on the Caloosahatchee River in Fort Myers. Lee County officials warned people to avoid fishing, swimming, or boating due to the potential health risks associated with the algae.

The St. Johns River continues to routinely suffer from harmful algae blooms and fish kills that hurt local businesses and damage property values. If businesses that rely on clean water don't have it, their bottom line suffers, and so does the economy.

In January 2009, recognizing the State's significant pollution—nutrient pollution challenges, EPA concluded that numeric criteria were necessary to restore and protect the State waters in a timely manner. In November 2010, EPA promulgated standards for the State's lakes and flowing waters but delayed the effective date by 15 months to allow stakeholders the opportunity to review the standards and ensure a smooth transition toward implementation by the State.

In addition, EPA recognized the need for flexibility within the rule. So the rule allows any entity to propose site-specific alternative criteria based on local environmental factors, and EPA will approve such alternative criteria where it will protect water quality.

EPA recognizes the need for a sensible approach in the implementation of this rule. Over the course of the past 8 months, EPA has been working with a wide range of stakeholders, communities, and organizations to address their concerns and issues. Throughout the process, EPA has also been coordinating closely with the State on issues related to implementation of the rule and supporting State efforts to develop their own rule.

EPA clearly understands there are economic consequences associated with the implementation of the rule and that these are difficult economic times. We believe the State can implement the rule in an economically sensible way, using currently available technology.

But given the concerns expressed about the economic analysis conducted by EPA, we've asked the National Research Council to conduct an independent review of the costs of implementing the inland rule. This process is under way, and we expect the results of this review will be available in February of 2012 before the rule becomes effective.

As you know, in April of this year, Florida petitioned the EPA to withdraw its determination, repeal Federal rulemaking to establish criteria, and refrain from proposing or promulgating further numeric nutrient criteria. The petition further outlined plans in a rulemaking schedule by which the State would adopt its own criteria.

EPA supports Florida's continued focus on reducing nitrogen and phosphorus pollution and commends the State's commitment to recommence its rulemaking efforts. EPA believes that the State has the primary role in establishing and implementing water quality standards. We are working with the State during this process, and we will continue to make available our policy and technical staff to provide assistance on a priority basis.

If Florida adopts an EPA-approved, legally enforceable nutrient criteria that are sufficient to address the concerns underlying our determination in the Clean Water Act, EPA will promptly initiate rulemaking to repeal our criteria.

In conclusion, the threat posed by nutrients in Florida's waters is perhaps the most serious water pollution problem faced by EPA, the State, and local communities. EPA is committed to continuing to work with Florida and the many stakeholders here in the State to implement nutrient controls in a manner that protects the State's water, sustains its economy, and safeguards the well-being of all of its citizens who depend on clean and safe water.

Thank you for the opportunity to testify, and I look forward to answering your questions.

[The prepared statement of Ms. Keyes Fleming follows:]

TESTIMONY OF

GWENDOLYN KEYES FLEMING
REGIONAL ADMINISTRATOR, REGION 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
ENERGY AND COMMERCE COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

August 9, 2011

Introduction

Good morning Chairman Stearns. I am Gwen Keyes Fleming, Regional Administrator of the U.S. Environmental Protection Agency (EPA) Region 4 and I am pleased to appear before you today to discuss EPA's mission to protect public health and the environment with a particular emphasis on the water quality challenges here in Florida resulting from what is known as "nutrient pollution." The urgent problem before us is how we can most effectively collaborate at federal, state, and local government levels to address the growing public health risks and economic impacts of widespread nitrogen and phosphorus pollution on the prosperity and quality of life of communities here in Florida. It is within this context that I will briefly describe the economic and environmental impacts of nutrient pollution in Florida, the critical factors that led to EPA's determination that numeric nutrient criteria are needed in the State of Florida, our efforts to ensure an effective transition to State implementation of those criteria in a cost-effective manner, and our current efforts to support the State's promulgation of its own numeric nutrient water quality standards.

Economic and Environmental Impacts of Nutrient Pollution in Florida

We all recognize the value of clean water. Clean water is not simply a resource and asset to be passed on to our children, but is an essential part of life. Clean water is essential to public health, drinking water supplies, and to the welfare of families and communities, whether in large cities, small towns, or rural areas here in Florida. The health and growth of Florida's small and large businesses and the jobs they create rely upon a high-quality and sustainable source of water. The range of businesses that depend on a reliable and plentiful supply of clean water includes tourism, farming, fishing, beverage production, manufacturing, transportation, and energy generation, just to mention a few. We know that 82 million tourists come to Florida for the beaches and rivers, and the state park system that is the envy of the nation.¹ Tourism – the state's No. 1 industry — employs about 900,000 Floridians and generates \$57 billion for the state's economy each year.² Fishing in Florida's waters attracts 2.8 million anglers each year.³ This includes more than 880,000 out-of-state anglers who spend over \$1 billion on fishing-related products and services. Combined with residents, Florida's fishers spent more than any other state — \$4.3 billion.⁴

Nitrogen and phosphorus pollution is a major threat to Florida's economy and its ecology. This has been extensively documented in the scientific literature and confirmed by monitoring data collected by Florida agencies and institutions. According to the Florida Department of Environmental Protection (FDEP)'s list of impaired waters, about 1,918 miles of rivers and

¹ "Deepwater Horizon FAQ's" Florida Restaurant and Lodging Association. <http://www.frla.org/government-relations/deepwater-horizon-faqs>

² State of Florida. "Florida Economy, State Spending & Taxes." *StateofFlorida.com*. N.p., 2010. Web. 28 Apr. 2011. <<http://www.stateoflora.com/Portal/DesktopDefault.aspx?tabid=95>>.

³ "2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation- Florida." *U.S. Fish and Wildlife Service*. Pg 14. January 2008. Web. 28 Apr. 2011. <<http://www.census.gov/prod/2008pubs/fhw06-fl.pdf>>.

⁴ Ibid.

streams are currently impaired for nutrients. The number of miles increased from approximately 1000 miles in 2008 to approximately 1900 miles in 2010. Impaired acres of lakes increased from 350,000 acres in 2008 to 378,000 in 2010. Some of this increase may be due to increased monitoring, but the data strongly suggest the problem is worsening. FDEP reports that nutrients are the fourth major source of impairment for rivers and the number one source of impairment for lakes in Florida.

A particularly persistent result of excessive nutrient pollution is the proliferation of harmful algal blooms – a situation in which once-clear waters are choked with algae and green with slime. Because of the increased incidence of these and other risks, many states actively monitor their waters for harmful algal blooms to protect swimmers, assure safe recreational uses, and protect consumers of shellfish. This is certainly true here in Florida.

In early June of this year, a toxic algae bloom was reported on the Caloosahatchee River in Fort Myers. Lee County Department of Health officials provided a precautionary warning, urging people to avoid fishing, swimming or boating on the popular waterway for at least a week. Blue-green algae, or cyanobacteria, were detected. Exposure to blue-green algae can cause symptoms in humans, including skin irritation, stomach cramps, vomiting, nausea, diarrhea, fever, sore throat, headache, muscle and joint pain, blisters of the mouth and liver damage. The health department noted that swimmers in water containing cyanobacterial toxins may suffer allergic reactions, such as asthma, eye irritation, rashes, and blisters around the mouth and nose.

The St. Johns River continues to routinely suffer from harmful algae blooms and fish kills that hurt local business – from restaurants to outfitters – and damage property values. When green

slime covered the St. Lucie River in 2005, the drop in nearby property values was estimated to be up to half a billion dollars. In each of these instances, nutrient pollution was a critical element contributing to these environmental impacts.

Nutrient pollution also affects the water that we drink. As noted above, increased nutrients in surface waters can spur harmful algal blooms that release toxins that pose a risk to drinking water. Detecting these toxins can be challenging and costly, and uncertainty exists about the effectiveness of existing treatment in removing these toxins. If not properly treated, the ingestion of water contaminated with toxins produced by harmful algal blooms can have health impacts on the liver, kidney, or nervous system. Additionally, higher levels of algae in drinking water sources can increase the formation of disinfection byproducts during drinking water treatment. This requires water utilities to take further action to prevent exposure that could impact the health of their customers, when the best way to address these byproducts is to prevent their formation in the first place.

Excess nutrients have also migrated into ground water causing contamination of drinking water wells. According to data in our national public water supply database, there were 52 violations of the drinking water nitrate standard in Florida public water supplies from 2005 to 2010. In predominantly agricultural regions of Florida, 63% of the approximately 4000 private drinking water wells analyzed by the State contained detectable levels of nitrate, and 15% of these (around 584 wells) exceeded the nitrate drinking water standard. Most of these were located in the Central Florida citrus growing region.

Development of Numeric Nutrient Standards in Florida

EPA and the State of Florida have worked together to address the significant water pollution problems associated with nutrient pollution in Florida waters. During 2009, the State had made substantial progress in its effort to develop numeric nutrient standards that would replace the general, and less effective, narrative criteria for nitrogen and phosphorus. These State numeric nutrient criteria, however, were not finally adopted.

In January 2009, EPA concluded that the State was relying on narrative nutrient criterion, the application of which is resource intensive, time consuming and less than effective in implementing programs to protect water quality and prevent impairments of designated uses due to nutrient overenrichment. EPA concluded that numeric criteria for nitrogen/phosphorus pollution would enable the State to take necessary action to restore and protect the designated uses of its waters in a timely manner.

In August 2009, EPA settled a lawsuit by agreeing in a consent decree to a schedule to adopt numeric nutrient pollution standards for lakes and flowing waters by November 2010 and for estuarine, coastal and South Florida waters by August of 2012. In developing the numeric nutrient criteria for Florida's lakes and flowing waters, EPA used extensive data provided by the FDEP and utilized sound scientific approaches that were independently peer-reviewed. EPA conducted 13 well-attended public hearing sessions in six cities in Florida and held a 90-day public comment period inviting broad public participation. The Agency received over 22,000 written public comments throughout this process. The final numeric nutrient criteria published by EPA in November 2010 are similar to the numeric criteria developed earlier by the FDEP.

In addition, given the need to ensure a smooth transition to implementation of the new, numeric criteria by the State, EPA established the effective date for the new criteria of March 6, 2012, a full 15 months from the publication of the criteria, thereby allowing cities, towns, businesses and other stakeholders, as well as the State of Florida, a full opportunity to review the criteria and develop strategies for implementation.

EPA also included with the new numeric criteria, a flexible approach that allows for case-by-case adjustments depending on local environmental factors while protecting water quality. The “site-specific alternative criteria” (SSAC), are based upon stakeholder submission of scientifically defensible recalculations of protective levels that meet the requirements of CWA section 303(c). For example, my office is currently considering a formal request for site-specific alternative criteria for the Econfinia and Fenholloway Rivers submitted by the Buckeye Corporation.

Over the course of the past eight months, EPA has been working with a range of communities and organizations to address their concerns. For example, immediately following the publication of the new, numeric criteria in November 2010, I, along with other EPA representatives, met with a wide range of stakeholders, including state officials, environmental organizations, municipal organizations, and representatives from industry and agriculture. Between November 2010 and March 2011, EPA conducted five webinars discussing various aspects of the promulgated rule for lakes, streams and springs and its implementation, with participation by over 750 people. EPA met with and/or held conference calls with local officials from Palm

Beach County, Jacksonville, Gainesville, Polk County and several Water Management Districts. EPA hosted officials from the Florida League of Cities and the Association of Counties for a day-long meeting. EPA also participated in conferences sponsored by organizations such as the League of Cities, Association of Counties, Florida Stormwater Association, Air and Water Managers Association, and the Florida Engineering Society. Throughout this process, EPA has been coordinating closely with FDEP to assure a smooth transition to implementation of the new, numeric nutrient criteria.

Florida's Petition

On April 22, 2011, FDEP Secretary Herschel Vinyard petitioned Administrator Lisa P. Jackson, requesting that EPA: (1) withdraw its January 2009 determination that numeric nutrient criteria are necessary in Florida; (2) repeal Federal rulemaking completed in November 2010 to establish such criteria for inland lakes and streams; and (3) refrain from proposing or promulgating any further numeric nutrient criteria. The petition further outlined plans and a rulemaking schedule by which the Florida Department of Environmental Protection would adopt nutrient criteria. The projected rulemaking schedule called for a rule development and public outreach process through the summer and early fall of 2011, and adoption of a final rule in January 2012, to be followed by a legislative ratification process under Florida law.

EPA supports FDEP's continued focus on reducing nitrogen and phosphorus pollution and commends the State's commitment to recommence its development of nutrient criteria that are sufficient to address the concerns underlying the EPA determination and to protect water quality and prevent impairment of designated uses of Florida's inland and estuarine waters. EPA agrees

with FDEP that the Clean Water Act (CWA) provides that states have the primary role in establishing and implementing water quality standards for their waters. The State was authorized by the CWA to adopt numeric nutrient water quality criteria before EPA's January 2009 determination, and has remained so authorized. FDEP affirmed its support for the promulgation of numeric nutrient criteria for the State in its initial commitment to develop numeric nutrient criteria in 2002, and reaffirmed this position in a subsequent commitment to develop numeric nutrient criteria in 2007. In the determination, EPA affirmed its preference for State-adopted numeric nutrient criteria. FDEP also continues to have authority to implement the range of activities and tools highlighted in the petition to assure more effective nutrient pollution reductions.

In its June 13, 2011 initial response to the petition, in order to support the State in development of nutrient criteria, EPA agreed to consider extending the March 2012 effective date for the EPA-established nutrient criteria for lake, streams and springs. More specifically, if the March effective date is approaching and Florida has adopted a protective and approvable final rule, but further steps are needed for the State's final rule to take effect, such as ratification by the Legislature, EPA will propose, through rulemaking, an additional extension of the effective date to enable Florida to complete such steps.

In addition, assuming that Florida starts the rulemaking process and is moving ahead on schedule toward adoption of protective and approvable nutrient criteria for coastal and estuarine waters, EPA will ask the litigants and the Court to agree to a modification to the consent decree that would allow an appropriate extension of the schedule for EPA proposal of draft numeric nutrient criteria for coastal and estuarine waters, now scheduled for November of this year, so that Florida can continue to focus on completing its own process. EPA is working with FDEP during

this process and will continue to make available policy and technical staff to provide assistance on a priority basis.

EPA clearly understands there are economic consequences associated with the restoration of waters polluted by nutrients and that these are difficult economic times. EPA believes there are reasonable ways to implement the numeric criteria rule that will protect Florida waters, and the many economic benefits that come from clean waters, without causing economic hardship. However, given the wide range of cost estimates developed by various organizations, EPA has requested that the National Research Council conduct an independent review of the costs of implementing the inland waters numeric nutrient criteria. This process is underway and the results of this independent review will be available by the end of February 2012.

Conclusion

In conclusion, the threat posed by nutrient pollution is perhaps the most serious water quality problem faced by EPA, the State, and local communities in Florida. EPA is committed to continue working with Florida and the many stakeholders here in the State to implement nutrient controls in a manner that protects the State's waters, sustains its economy, and safeguards the well-being of all its citizens who depend upon clean and safe water.

Thank you for the opportunity to testify before the subcommittee today. I look forward to answering any questions you may have.

Mr. STEARNS. Thank the gentlelady.
Mr. Budell?

STATEMENT OF RICHARD J. BUDELL

Mr. BUDELL. Thank you, Chairman Stearns.

Good morning, committee members. I'm pleased to have the opportunity to share with you my department's perspective on key aspects of the U.S. Environmental Protection Agency's final numeric nutrient criteria for Florida's springs and inland waters that were adopted this past December.

In EPA's own words, and I quote, "Florida has developed and implemented some of the most progressive nutrient management strategies in the Nation," end quote.

EPA has also acknowledged that Florida has placed substantial emphasis on the monitoring and assessment of its waters and as a result of this commitment has collected significantly more water quality data than any other State in the Nation. More than 30 percent of all the water quality data that exists in EPA's National Water Quality Database comes from Florida.

Florida was the first State in the Nation to implement comprehensive urban stormwater management regulations. Florida's treated wastewater reuse program is a model for the rest of the country.

Our agricultural best management practices program is firmly rooted in State law and is a critical component of Florida's overall water resource protection and restoration program. These practices have been implemented on over 8 million acres of agricultural and commercial forest lands here in Florida.

By targeting its efforts and resources, Florida has made significant progress in nutrient reduction and restoration activities. Examples range from Tampa Bay, where seagrasses have returned to levels not seen since the 1950s and now cover over 30,000 acres, to Lake Apopka, where phosphorus levels have been reduced by 56 percent and water clarity increased by 54 percent.

Despite these glowing reviews and Florida's demonstrated commitment to water resource protection and restoration, EPA, we believe in direct response to litigation, determined in January of 2009 that Florida had not done enough and mandated the development of numeric nutrient water quality criteria within 1 year. Before that year was up, however, EPA entered into a settlement agreement with the plaintiffs and agreed to deadlines for Federal rule adoption that, for all practical purposes, usurped Florida's ongoing efforts to develop its own standards.

EPA subsequently developed and released their draft criteria for Florida in January of 2010 and finalized them last December. We believe the methods used by EPA to develop its rules are inconsistent with its own guidance documents and the advice of its science advisory board.

EPA compounded the situation, we believe, again by improperly applying the methods it did use. As a result, in many cases, the rule would deem healthy waters as impaired.

In response to these issues, our attorney general and the commissioner of agriculture filed a complaint in Federal court challenging the rule. Subsequently, over 30 additional entities, both

public and private, have filed complaints in Federal court citing the same shortcomings.

Florida believes strongly that any nutrient reduction strategy should focus on measurable environmental and biological improvements while optimizing cost and efficiency. In the preamble to the rule, their rule, EPA admits that they were unable to find a cause-and-effect relationship between nutrient concentration and biological response for flowing waters, like streams and rivers.

In the absence of that cause-and-effect relationship, there can be no certainty that the money and human resources devoted to reduce nutrient content in a stream or river will have any measurable improvement in the biological condition of that stream or river.

Florida believes as there are so many natural factors—like stream size, flow velocity, and light penetration—that affect how nutrients impact ecosystems, that nutrient standards are best determined on a site-specific basis. It is important to recognize that nitrogen and phosphorus are naturally occurring and necessary for the normal biological productivity of all waters. Determining when too much human-induced nitrogen or phosphorus is present is difficult.

In other words, Florida believes it is very important to link nutrient concentration with an assessment of the biological health of a water body before requiring the implementation of costly nutrient reduction strategies. Without this linkage, implementation of the EPA criteria would have Florida businesses, wastewater and stormwater utilities, and agricultural producers spending time and money attempting to reduce nutrient concentrations in some cases to levels below natural background.

So I'll focus a little bit on cost. There is a lot of controversy about the issue of cost. Implementation costs for these numeric criteria vary dramatically. EPA's are much lower than those generated by Florida agencies and other public and private stakeholders.

My department, working in cooperation with the University of Florida, estimates the implementation costs for agriculture alone to be between \$900 million and \$1.6 billion annually and could result in the loss of up to 14,000 jobs. Our cost estimates are much higher than EPA's because of the uncertainty, because we don't know what the rules of the game are going to be for implementing these Federal criteria.

EPA's cost estimates assume future agency action and Florida rules that allow for the provision of variances or site-specific alternative criteria. None of these things are fleshed out in the rule as it is written now. So there is a lot of uncertainty about how those kinds of relief mechanisms will be implemented.

In closing, Florida believes that Florida is best positioned to assess the health of its waters and establish associated water quality criteria for their protection and restoration. We believe that our track record for the implementation of progressive and successful water resource management programs is one of the best in the country.

Florida has earned the right to exercise the authority envisioned by the Clean Water Act to develop its own water quality standards

and implement them through an EPA-approved and predictable process governed by existing State law.

Thank you.

[The prepared statement of Mr. Budell follows:]

Written Testimony of
Richard J. Budell
Director, Office of Agricultural Water Policy
Florida Department of Agriculture and Consumer Services
As submitted to the
U. S. House Committee on Energy and Commerce
Subcommittee on Oversight and Investigations
August 9, 2011

Chairman Stearns, Ranking Member DeGette, and Committee members: Good morning: my name is Richard Budell. I am the Director of the Office of Agricultural Water Policy with the Florida Department of Agriculture and Consumer Services. I have been involved in the development and implementation of agricultural water resource protection and restoration programs in Florida for 26 years. I have chaired the Scientific Advisory Group for the Everglades and Florida's Pesticide Review Council. I have advised Florida's Governor and Department of Environmental Protection on issues ranging from the protection of Florida's coastal waters and estuaries to the designated use classification of Florida's surface waters. I recently concluded service on a National Research Council Committee evaluating the nutrient reduction strategies being employed to improve water quality in the Chesapeake Bay. I am pleased to have the opportunity to share with you my Department's perspective on key aspects of the U.S. Environmental Protection Agency's (EPA) final Numeric Nutrient Water Quality Criteria for Florida Springs and Inland Waters that were adopted this past December.

In the EPA's own words, "Florida has developed and implemented some of the most progressive nutrient management strategies in the Nation." Florida is one of the few states that has implemented a comprehensive framework of accountability that applies to both point and non-point sources and provides authority to enforce nutrient reductions. The EPA has also acknowledged that Florida has placed substantial emphasis on the monitoring and assessment of its waters and, as a result of this commitment, has collected significantly more water quality data than any other state. Greater than 30% of all water quality data in the EPA's national water quality database comes from Florida. Florida was the first state in the nation to implement comprehensive urban storm water management regulations. Florida's treated waste water reuse program is a model for the rest of the country. Our agricultural Best Management Practices program is firmly rooted in state law, is backed by sound science and is a critical component of Florida's overall water resource management programs. These practices have been implemented on over eight million acres of agricultural and commercial forest lands in Florida.

By targeting its efforts and resources, Florida has made significant progress in nutrient reduction water resource restoration. Examples range from Tampa Bay, where sea grasses have returned to levels not seen since the 1950s and now cover 30,000 acres, to Lake Apopka, where phosphorous levels have been reduced by 56% and water clarity increased by 54%.

Despite these glowing reviews and Florida's demonstrated commitment to water resource protection and restoration, EPA, in response to litigation, determined in January of 2009 that Florida had not done enough and mandated the prompt promulgation of numeric nutrient water quality criteria within one year. Before that year was up, EPA entered into a settlement agreement with the plaintiffs and agreed to deadlines for federal rule adoption that, for all practical purposes, usurped Florida's ongoing efforts to develop its own standards. EPA subsequently developed and released their own draft numeric criteria for Florida in January of 2010 and finalized criteria in December of 2010.

This takeover of Florida's efforts was further aggravated by EPA's rulemaking process. Florida stakeholders were not accustomed to the manner in which EPA develops rules. Under State law, rulemaking provides much more opportunity for input, discussion and dialogue. While the State convenes Technical Advisory Committee meetings and public workshops open to public dialogue and interaction, EPA holds public hearings where the public can make comments to silent, nodding representatives while a giant five minute timer counts down. While Florida's sunshine laws make all data and information available to the public throughout the rulemaking process, EPA restricts the amount of information available to the public and doesn't make all relevant analyses available for comment. Finally, many stakeholders invested significant time and money providing detailed comments regarding the technical basis for the EPA draft rule only to receive an unsatisfactory and vague response akin to, "EPA's criteria are based on sound science."

Outside of the process concerns, the methods used by EPA to construct its rules are inconsistent with EPA's own guidance documents and the advice of EPA's Science Advisory Board. EPA compounded this situation by improperly applying the methods it did use. As a result, in many cases the rule would deem healthy waters as impaired. In response to these issues, Florida Attorney General Pam Bondi and Commissioner of Agriculture Adam Putnam filed a complaint in Federal Court challenging the rule. Over 30 other entities, both public and private, have subsequently filed similar Federal complaints against the EPA and their Florida numeric nutrient criteria, citing the same shortcomings.

Florida believes strongly that any nutrient reduction strategy should focus on measurable environmental and biological improvement, while optimizing cost and efficiency. In the preamble to their rule, EPA admits that they were unable to find a cause-and-effect relationship

between nutrient concentration and biological response for flowing waters like streams and rivers. In the absence of that cause-and-effect relationship, there can be no certainty that the money and human resources devoted to reduce nutrient content in a stream or river will result in any measurable improvement in the biological condition of that stream or river. Florida believes that, because so many other natural factors (e.g., stream size and velocity, light penetration) affect how nutrients impact ecosystems, nutrient management decisions are best determined on a site-specific basis. It is important to recognize that nitrogen and phosphorous are naturally occurring and necessary for the normal biological productivity of water bodies. Determining when too much human-induced nitrogen or phosphorous is present is difficult. In other words, Florida believes that it is very important to link numeric criteria with an assessment of the biological health of a water body before requiring the implementation of costly nutrient-reduction strategies. Without this linkage, implementation of the EPA criteria would have Florida citizens, businesses, waste water and storm water utilities and agricultural producers spending time and money attempting to reduce nutrient concentrations, in some cases, to levels below natural background. In all estimations, implementation of numeric criteria is an expensive proposition; care must be taken to avoid unnecessary efforts that do not add measurable value to water resource protection and restoration.

I just mentioned cost of implementation – this is an issue around which there is considerable debate. EPA estimated the range of total costs to implement the Florida nutrient criteria at between \$135 million and \$236 million annually. The Florida Department of Agriculture and Consumer Services, working in cooperation with The University of Florida Agricultural Resource Economics Department, estimated the implementation costs just for agricultural land uses at between \$900 million and \$1.6 billion annually and could result in the loss of over 14,000 jobs. Preliminary estimates from the Florida Department of Environmental Protection peg the implementation costs for urban storm water upgrades alone at nearly \$2 billion annually. A study commissioned by a large coalition of Florida-based public and private entities estimated the total implementation costs at between \$1 billion and \$8.4 billion annually. The wide variability in this latter estimate is, in part, due to the uncertainty associated with not yet knowing the rule requirements. During EPA's rulemaking effort, the Agency did not address implementation expectations. However, in their cost estimates, they assumed future Agency and Florida rules would be issued that provide relief. While the final rule did not grant the relief itself, their reliance on future rulemaking allowed the publication of a low cost estimate.

From an agricultural perspective, I can tell you without question that virtually no sector of Florida agriculture can comply with the final EPA nutrient criteria without the implementation of costly edge-of-farm water detention and treatment. Construction of these facilities takes land out of production and requires ongoing operation and maintenance. None of these costs

can be passed on by the producer. Few growers can afford to implement this kind of practice without the support of Farm Bill or state-derived cost-share program payments.

Florida waste water utilities believe that expensive reverse osmosis technologies will have to be employed in order for them to comply with the requirements of their point-source discharge permits. These technologies are not only costly to implement and maintain, but they require an enormous amount of energy to operate.

Florida is pleased that the EPA has agreed to request that the National Research Council convene a panel to review all of the economic studies and render an opinion on the likely costs of implementation.

In closing, Florida believes that Florida is best positioned to assess the health of its waters and establish associated water quality criteria for their protection and restoration. We believe that our track record for the implementation of progressive and successful water resource management programs is one of the best in the country, and demonstrates the commitment and determination to further its comprehensive program through the development and implementation of state-derived numeric nutrient criteria. Florida has earned the right to exercise the authority envisioned by the Clean Water Act to develop its own water quality standards and implement them through an EPA approved and predictable process governed by existing state law. Thank you.

Mr. STEARNS. I thank the gentleman.

And I will start off with my questionings. Ms. Keyes Fleming, I think all of us in this room and all in the State of Florida obviously are very concerned about the water quality in our State. We find areas that are satisfactory and others that we would like to see improved, and I think the State has been active in trying to address these areas.

In my opening statement, I mentioned Nancy Stoner, the Acting Assistant Administrator for Water, to EPA's regional administrators. She said, "States need room to innovate, respond to local water quality needs. So a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary."

Do you agree with that?

Ms. KEYES FLEMING. In terms of it making sure that it is not a one-size-fits-all approach, absolutely.

Mr. STEARNS. OK.

Ms. KEYES FLEMING. And in doing the rule, we made sure that we diversified based on the variable regional specifications within the State. We divided it into five regions. We looked at the different types of lakes, divided that into three subsections. And then, of course, we provided for the opportunity for even more flexibility in looking at places on a site-by-site specific approach.

Mr. STEARNS. Now I gave also in my opening statement the Cross Bayou within the Tampa Bay, where the Florida Fish and Wildlife Conservation said it is pristine. Yet, at the same time, the EPA standard shows that they want to regulate it.

Does that seem like a conflict to you? That perhaps the State indicated it is pristine, yet EPA wants to come down and regulate it?

Ms. KEYES FLEMING. Well, I think that goes to the question of whether lakes or other water bodies that are deemed to be healthy are going to somehow be labeled as impaired under this rule. And in terms of our looking at the science, we do not believe that that is going to be the case.

I've not looked at the Tampa Bay, Tampa situation specifically, but I can do so and make sure we get back to you.

Mr. STEARNS. And I could give you some other examples just like that, where they are considered pristine, natural. Yet EPA's regulations indicate that we are going to have to go in and do a lot of work to clean it up when there is no cleanups necessary.

Would you agree that it is a good idea for the EPA to work with stakeholders in the State when its economic impact is large, or not?

Ms. KEYES FLEMING. Well, I think it's always best to work with the State. And actually, my office has been working consistently with the new DEP secretary and members of his staff on this particular issue and many others.

Mr. STEARNS. Do you think economic impact should have an impact on your decision, or should it be just based upon the regulations?

Ms. KEYES FLEMING. Well, the Clean Water Act, as it was written by Congress, does not allow EPA to take into consideration the economic impact when setting the standard. Those discussions occur when we do talk about implementation, and that's one of the reasons why we've spent so much time looking at the cost estimates of our rule and offered to have a rule or, at the suggestion

of Senator Nelson, offered to have our rule evaluated by the National Resource Council to make sure that as we look at our cost estimates, the underlying assumptions of those estimates are reviewed and evaluated to see if they're accurate.

Mr. STEARNS. Would you agree that local and State environmental authorities are perhaps better positioned to make a decision than perhaps coming from Washington, based upon the Clean Water Act? I mean, I know you have this mandate on the Federal level. But obviously, the regulation was passed without perhaps insight that some of the local stakeholders or the State environmental agencies know.

So, wouldn't you agree that some kind of latitude and forbearance should be in place so that they could help you make your decisions?

Ms. KEYES FLEMING. Well, again, we've had ongoing discussions with Florida, and we do—we at EPA do believe that the State is to be the lead in these types of things. And actually, back in 2009, under the Bush administration, when the determination was first made about the necessity for numeric nutrients, the officials, Florida officials at that point in time agreed that more needed to be done and actually said so in several press statements.

They were on the track to implement their own rules and, for whatever reason, decided to get off of that track. Their doing so made it necessary for we at EPA to continue to make sure that the rule was put in place to be as protective as possible, as required under the Clean Water Act.

Mr. STEARNS. You heard Mr. Budell indicate that it could be an economic impact of \$1 billion to \$8 billion? I think those were your words? Is that right?

Mr. BUDELL. I said \$900 million to \$1.6 billion just for agriculture.

Mr. STEARNS. Just for agriculture, you said. And I have seen surveys that it could impact the loss of jobs up to 15,000 in the State. Do any of those figures have an impact on your decision process?

Ms. KEYES FLEMING. Well, I think we need to understand where the figures are coming from. The assumptions that EPA put forth, there are differing assumptions.

First of all, in the types of treatment that is required, EPA has consistently said that we would not require reverse osmosis or microfiltration. Looking at the scope of facilities that would be affected by this rule, there are over 2,200, but only one-tenth of that actually have permits. And then a fewer percentage would actually be required to make any possible changes under this rule.

So, yes, we do look at or did our due diligence to make sure we recognize the good work that is already going on in the State by a lot of folks, whether it's at DEP or the other local governments, and looked at incremental cost as we went forward.

Mr. STEARNS. Mr. Budell, I will just close with a last question. From your perspective, and perhaps what you have heard Ms. Keyes Fleming talk about, have the EPA's actions to impose Federal standards helped or harmed the State's effort to improve water quality, and have EPA's efforts helped or harmed the State's economic priorities?

Mr. BUDELL. I think that the efforts that EPA undertook were litigation driven.

Mr. STEARNS. The consent agreement?

Mr. BUDELL. And that—correct.

Mr. STEARNS. Yes.

Mr. BUDELL. And I think it was litigation that got us to the point where they determined that we needed to develop numeric criteria within a year in January of 2009. It was litigation again, the same litigation that drove them while we were in the process, working cooperatively with EPA on their time schedule to develop the criteria—Florida to take the lead to develop the criteria—they entered into a settlement agreement in August of 2009 without consulting the State, without discussing any of the elements of that settlement agreement with the State.

They entered into that settlement agreement and in that agreement were agreeing to timelines to develop their own criteria and proposed them in January of 2010. That is why Florida stopped development, because of the settlement agreement where EPA said, “We are taking over. We are going to propose criteria in January of 2010.”

That is, I don’t think, the kind of cooperation that Florida DEP or other stakeholders expected.

Mr. STEARNS. OK. My time has expired.

And I recognize the gentlelady from Florida, Corrine Brown.

Ms. BROWN. What about the other—

Mr. STEARNS. Oh, I think you are right. I go to Mr. Barton next. That is right. He is on the committee. So I recognize you for 5 minutes.

Mr. BARTON. Well, thank you, Mr. Chairman.

Let me compliment Congressman Bilirakis and Mr. Ross. I didn’t really say much about them in my brief opening statement. But Congressman Bilirakis’s father was a member of this committee, a member of this subcommittee, and his mother is the best cook not only in the Florida delegation, but as far as I know, the entire congressional delegation.

And Mr. Ross is not only a rising star in the Congress, but he is my starting designated hitter on the Republican congressional baseball team.

[Laughter.]

Mr. BARTON. And we expect great things from him in the years ahead.

Mr. ROSS. Yes, sir. No pressure.

Mr. BARTON. Again, Mrs. Fleming—or Ms. Fleming, I want to thank you for showing up. The Region 6 administrator has not yet given us the courtesy of showing up at one of these hearings in Texas for air quality.

And I want to apologize in advance, Mr. Chairman. What little expertise I have is on air issues, not so much on water issues. So I am going to ask some kind of basic questions that will help educate me and, hopefully, educate the committee as well.

I know there was a lawsuit that required—that led to the reversal of the decision to accept the standards that had been agreed upon with the State. But what was the fact-based issue there that

caused the EPA to reverse its approval and go to disapproval and make the decision to set its own standards?

Ms. KEYES FLEMING. Well, Congressman, I think, first of all, one of the things with respect to the lawsuit, I think we can all agree the great treasure that we have here in Florida with respect to many of the parks that you talked about your family enjoying, certainly the water that so many come to enjoy, whether it's for fishing or boating or those types of things. EPA's obligation is under the Clean Water Act to make sure that that water is healthy, safe, whether it's for drinking water or to be able to enjoy it.

And so, in looking at whether the work that had currently been—was going on in Florida at the time, with respect to the requirements under the Clean Water Act, were they meeting the needs of the act? And—

Mr. BARTON. Well, I only have 5 minutes. Something made EPA change its mind. What was that? You had approved the plan—not you personally, but the EPA and the State—and then it got disapproved.

It was disapproved as a consequence of a lawsuit that was brought. The people that brought the lawsuit are going to be able to testify on it on another panel later. But what was the fact-based issue that moved your agency from approval to disapproval?

Ms. KEYES FLEMING. As we looked at how far the narrative approach was getting, it was not cleaning the water fast enough.

Mr. BARTON. Fast enough. And Mr. Budell, I know you don't represent the entire State. You represent this Florida Department of Agriculture. But is what Ms. Fleming just said, is that your assessment? It was a question not necessarily of the standard, but of the timing, of implementation?

Mr. BUDELL. I think we were working under the understanding that we were on a timeline that EPA had approved. We had committed to submit numeric criteria to them by January of 2010, and we were on a line to do that. We were preparing to submit criteria to our Environmental Regulation Commission in September of 2009 to try to finalize those criteria so they could be submitted to EPA in January of 2010, when they entered the settlement agreement and agreed to take over the process.

Mr. BARTON. But we can agree, for purposes of this hearing, that the disapproval was a result in both—not that you are on different sides, but representing EPA and representing the State, that it was a timing issue, not a need to set the standard. Is that a fair assessment?

Ms. KEYES FLEMING. Well, I think timing was one of the main issues. The timing that was laid out in the consent decree mirrored what had been discussed between the State and the EPA previously. And it was the State that decided not to continue and present to their commission in accordance with that timeline. When the State failed to act, EPA then had to go forward and initiate its own rule.

Mr. BARTON. Again, I am not a water expert. But we keep talking about these numeric standards. In your testimony, Mr. Budell, you talked about water flow and the clarity of the water and the temperature in the water and at least gave me the impression that

one numeric standard is not appropriate for different types of water.

Has the EPA taken the position that there should be a one-size-fits-all standard, numeric standard?

Mr. BUDELL. No. No, they have regions. As the regional administrator pointed out, they have broken the State up into regions. But for all flowing waters within a region, they have established one nitrogen number and one phosphorus number.

Mr. BARTON. And you think that is inappropriate?

Mr. BUDELL. We believe that that is even too gross of a wand to use. There is a lot of variability between streams, even within these ecoregions that they set up.

Mr. BARTON. Do you agree with that, Ms. Fleming, what he just said?

Ms. KEYES FLEMING. I think that's one of the reasons why the rule also allows for the site-specific alternative criteria, where, if there is an environmental reason for a difference from the numbers that EPA has set, that particular—anybody can bring forth the scientific basis for deviating from the numbers that we set.

Mr. BARTON. OK. My time has expired. But I want to give him a chance to—are we going to get a second round before we go?

Mr. BUDELL. If I could?

Mr. BARTON. Yes, sir.

Mr. BUDELL. I'd just like to respond to that. The only provision for site-specific numeric criteria for nutrients is now in the Florida law, is in the rule that they promulgated for Florida. There is no specifics in there as to what you have to do to get it. There is no timeline. There is no—you have no idea how much money and how much data has to be collected to jump over the hurdle to get EPA to approve a site-specific alternative criteria. It's not been tested before for nutrients ever.

There's a lot of uncertainty that you'd ever be successful in getting such a site-specific alternative criteria. We've developed dozens of TMDLs in Florida that have been approved by EPA.

Mr. BARTON. What is a TMDL?

Mr. BUDELL. Total maximum daily load. It's another provision of the Clean Water Act that requires States to identify protection and restoration strategies for water bodies that have already reached impairment.

We've had dozens of these TMDLs developed and approved by EPA. We requested or had many discussions with EPA about approving those TMDLs as site-specific alternative criteria, but there has not been any resolution to that yet. We've done the data on a site-specific basis to identify a water body's specific nitrogen or phosphorus standard, and we've not yet been able to get those approved as site-specific alternative criteria.

Mr. BARTON. I will ask my other questions second round.

Mr. STEARNS. Sure. By unanimous consent, we are allowing people who are not on the committee to ask questions. And with that, I recognize the gentlelady from Florida, Ms. Brown.

Ms. BROWN. Thank you.

Ms. Keyes Fleming, thank you for coming.

Let me just take a minute to frame this because I think a perfect example of the problem is the Florida Everglades. I mean, it is a

perfect example of what could happen when natural resources aren't protected from encroachment and pollution.

Each year, the Federal, State, and local government pays millions of dollars to restore the Everglades, money that could be used for dredging our ports, enhancing recreational waterways, or improving sewer and water infrastructure. So that is the problem.

However, let me just also mention that the Riverkeeper Program was my bill. So I am very interested in how we can work through this issue.

Would you elaborate for us what are some of the things that you recommend that we could do, Ms. Fleming, to move the process forward, being fair to the local communities that have spent—let's say, in Duval County, I know I met with all of the stakeholders in all of the regions, Gainesville—and I want to know what we can do because they are spending millions and millions of dollars. And some communities have already implemented programs and have programs in place, but I don't know whether it has been approved by EPA.

Ms. KEYES FLEMING. Well, at EPA, we've been having numerous meetings with stakeholders. We've had webinars. We've met with various local city agencies, trying to understand what their concerns are and then also address them.

And what we found is in situations where there is a TMDL, we've had discussions about whether that would apply for a SSAC. And one of the things that EPA has agreed to do, recognizing the good work and resources that have gone into creating these TMDLs, is say that if that TMDL is scientifically protective of the water body, then it can be used to set the permit limits for the NPDES permit.

And so, it's those types of things, of recognizing good work that has already been done and making sure that we're not having people go back to the drawing board in every circumstance because we do recognize the increased cost that that could involve. We do have guidelines with respect to site-specific alternative criteria that has gone out for review and comment.

So we are working. We want to be able to hear from folks about what their concerns are so we can address them. Rather than continuing to discuss this in an abstract, let's look at the individual water bodies and come to some solutions.

Ms. BROWN. What about the study that you implemented or Senator Nelson has recommended that you all implement this study? So it is going to be due in February. What are you looking for, and how can that help us as far as we implement the rule?

Ms. KEYES FLEMING. Well, I think one of the things that the study will do will look at the basis upon which EPA used to set its numbers. Again, we talked about us not requiring reverse osmosis or some of the other more costly things. We talked about how we set aside certain waters where we did not have good information. And so, we narrowed the scope as much as we could in terms of the applicability of this rule going forward in order to have accurate cost figures going forward.

And so, the study will look to see whether those assumptions were the correct ones to make. The study, however, will not change the fact that the determination was made that numeric standards

provide more of a target, a clear idea of where businesses and communities need to meet with respect to their water quality standards and give them that 15-month delayed effective date in order to plan appropriately.

I think the other thing that's important to point out is that even after the effective date, implementation will occur on the regular permitting schedule or TMDL review schedule. So it's not as though everybody will be in violation on March 7th, let's say. It'll come up through the normal course of review by the State.

And so, that will give us more time to talk with stakeholders and answer their questions as well.

Ms. BROWN. So the actual date may not be the 15 months?

Ms. KEYES FLEMING. Well, it depends on whatever the particular entity's review cycle is. So the State will be reviewing things, pursuant to the pre-set review cycle for either that permit or that TMDL.

Ms. BROWN. How long have you been in this position? I know you weren't in when we made this element.

Ms. KEYES FLEMING. Since September 3rd of 2010 at noon.

Ms. BROWN. OK.

[Laughter.]

Ms. BROWN. So you were not involved in—well, it was the Bush administration that—

Ms. KEYES FLEMING. Correct. It was the Bush administration that made the initial determination of need for numeric criteria.

Ms. BROWN. Do you know why or what we can do as we move forward, why that the talks were stopped and we entered into agreement and the State was not a part of it?

Ms. KEYES FLEMING. Actually, I do not know. I know, in reviewing the documentation, that the then-DEP secretary had agreed that more needed to be done in Florida, even though they had been doing great stuff. They certainly are working as a leader. But even leaders, as they're reaching a particular target, you don't slow down the momentum and delay reaching the target.

The target here is to make sure that we have clean water that can support the great tourism industry and other economies here in the State. And so, we need to keep moving forward to make sure we provide the greatest protections possible.

Ms. BROWN. OK. I know my time is up. But did you want to respond in any way, sir?

Mr. BUDELL. Well, I would only repeat myself. I believe we were aggressively moving forward according to an agreed schedule, that had been agreed to with EPA, when they made the determination in January of 2009. We were working on that schedule, on their timeline, when they entered into a settlement agreement two-thirds of the way through that process.

Ms. BROWN. OK. And the State was not involved in that?

Mr. BUDELL. Correct. We were not party to the settlement agreement at all.

Ms. BROWN. Thank you. Yield back.

Mr. STEARNS. Thank the gentlelady.

And Mr. Bilirakis is recognized for 5 minutes.

Mr. BILIRAKIS. Thank you. Thank you very much, Mr. Chairman. And I appreciate the witnesses coming to testify.

It is worth repeating. I know that this statement was already—Mr. Budell made this statement, and also you, Mr. Chairman. Thanks for holding the hearing, by the way, and including me and Mr. Ross.

A study by the Florida Department of Agriculture and Consumer Services concludes that Florida's agriculture community alone, alone, will lose 14,545 full-time and part-time jobs and lose at least \$1.1 billion annually. I want you to name specifically, if you can, Ms. Fleming, the stakeholders that you have met with and about how to keep Florida's waters clean in a cost-effective manner, if you have had that input? Specifically, please name these stakeholders.

Ms. KEYES FLEMING. Some of the stakeholders include folks from Palm Beach County, include folks on the Fenholloway and Econfina Rivers. They include folks from the City of Jacksonville, folks with respect to the St. Johns River. I have a list that we can actually provide for you, and that's in addition to the five webinars that we've done.

With respect to ag interests, we met with them, additionally, last November when we first rolled out the rule, to hear their concerns. I've had personal conversations with Ag Commissioner Putnam about wanting to come down and talk with him about this issue in more depth.

And I think it's important to point out, though, that although the numbers that you're citing, one of the things is EPA does not regulate the ag community. That is left purely to the States, and they have been doing so based on a BMP schedule and things that allow for improvement over time.

To the extent that EPA does regulate CAFOs and those types of things, it's a very small circle of facilities that would be affected by this particular rule. But again, I need to stress that we are not looking for edge of farm changes to the ag community or ag businesses in response to this rule. That would be something that would be left completely up to the State because EPA does not have the authority to go in and regulate those entities, except for the CAFOs that are covered by the Clean Water Act.

Mr. BILIRAKIS. Mr. Budell, you would like to respond?

Mr. BUDELL. Only that I believe that the expectation will be that once these criteria are finalized, that there will be an expectation that agriculture will have to comply. I think EPA has demonstrated in the Chesapeake Bay, and even more recently with a memo that went out from Nancy Stoner talking about the certainty document, that talked about the development of programs that would be led by the State but would certainly be coordinated by EPA to develop programs to require programs to control agricultural nonpoint source stormwater.

They've done it in the Chesapeake Bay already by mandating that the States include bona fide programs to control agricultural stormwater as part of their watershed improvement plans. So while the Clean Water Act exempts agricultural stormwater and return flow from permitting, it doesn't specifically say agriculture is not regulated or can't be regulated.

And I think we're seeing examples of how EPA is exerting influence and beginning to get its arms around how to regulate agricul-

tural stormwater indirectly, if not directly, from the Clean Water Act.

Mr. BILIRAKIS. Thank you very much.

I yield back the rest of my time. I have a couple of questions in the second round.

Thank you, Mr. Chairman.

Mr. STEARNS. Sure. Mr. Ross, you are recognized for 5 minutes.

Mr. ROSS. Thank you, Mr. Chairman. And again, Mr. Chairman, I wish to thank you and my colleagues for being here and allowing for this hearing to take place.

As a native of Florida, a boat owner and an avid outdoorsman, I have a great concern about the conservation of Florida's natural resources and, of course, including their water. Also representing a district that is predominantly agriculture, I wish to also note that not only is tourism important to this State, but the one area, the one part of our economy that has continued to remain stable throughout all these recessionary times is the agricultural industry.

And the economic impact that the agricultural industry will face because of this proposed rule is absolutely devastating. Mr. Budell, you indicated in your opening statement, you have been doing this for 26 years on behalf of the State of Florida.

Mr. BUDELL. That's correct.

Mr. ROSS. And you have seen the history in the last 26 years, as I have, in water quality improvement in the State of Florida by the State of Florida exercising their best science practices in order to make that happen, haven't you?

Mr. BUDELL. Yes, I have.

Mr. ROSS. And interestingly, there has been, under the Clean Water Act, what is known as "narrative nutrient water criteria," I guess. And that has been a standard or an accepted practice that has been used not only in Florida, but all other States. Is that correct?

Mr. BUDELL. That's correct.

Mr. ROSS. And it is this first time that we now see this numeric nutrient water criteria come about? In other words, there is no other State that this applies to, is there?

Mr. BUDELL. There is no other State that I'm aware of where EPA has come in and proposed numeric criteria for another State. There are States that have developed some numeric criteria on their own.

Mr. ROSS. And in fact, wasn't it the EPA that then, because of their involvement, require that the State of Florida develop their own numeric nutrient water criteria, which you all were working on?

Mr. BUDELL. Correct.

Mr. ROSS. And Ms. Keyes Fleming, as I understand it, in 2007, the EPA had no problem with the plan initially proposed by the DEP in the State of Florida. Is that correct?

Ms. KEYES FLEMING. That's correct. That's why we had a similar timeline included into the consent decree.

Mr. ROSS. And that consent decree was a result of litigation of which the State of Florida was not a party. Is that correct?

Ms. KEYES FLEMING. That is correct.

Mr. ROSS. And in fact, the consent decree, they were not a party to that either, were they?

Ms. KEYES FLEMING. Well, obviously, they were affected by it. It's something—

Mr. ROSS. They were a victim of it, I guess, would be a better way to put it.

Ms. KEYES FLEMING. Well, that's not a term that we would use. But—

Mr. ROSS. Well, as a native of the State of Florida, I would use that. Now one of the things that we talk about, economic impact, and you mentioned the cost of the inland rule. What exactly do you mean by that? What is the cost of the inland rule that you talked about?

Ms. KEYES FLEMING. We looked at what the incremental cost would be, having to add new water bodies to the impaired list as a result of new designations under the total phosphorus and total nitrogen requirements.

Mr. ROSS. And have you come up with at least empirically what that cost in the aggregate it may be?

Ms. KEYES FLEMING. Yes. We estimated anywhere around I think it's \$135 million to \$200 million per year.

Mr. ROSS. And that is the cost that would have to be paid by those that need to comply with the numeric nutrient criteria?

Ms. KEYES FLEMING. Well, and that works out to be about 11 cents or so per household per day for clean water. We look at this as an investment. It's much cheaper to be able to invest and prevent some of the adverse health impacts that we discussed about in my opening statement, as opposed to having these communities or the stakeholders pay for costly cleanups on the back end.

Mr. ROSS. Now your administration, of course, has made as a priority I think of every elected official in Washington right now "jobs, jobs, jobs." And it appears as though the implementation of this numeric nutrient water criteria may cost, according to the Department of Agriculture, over 14,000 jobs. Are you all prepared to have that impact if this is implemented?

Ms. KEYES FLEMING. We don't believe that that impact will occur. But at the other end, you also need to think about the impact of not having the rule and the adverse impact that would have on the tourism jobs that are here in the State.

Mr. ROSS. Exactly. But did not the State of Florida adopt a plan that was accepted by the EPA that would have prevented that because they were in the process of doing that when they were essentially stopped because of a consent decree?

Ms. KEYES FLEMING. Florida actually made the decision not to present their rule to their own regulatory commission.

Mr. ROSS. They made their decision based on the actions of the EPA in entering a consent decree.

Ms. KEYES FLEMING. Whatever the reason, they did not move the ball forward in order to protect water quality.

Mr. ROSS. And as you stated in your testimony, you said that if Florida adopts a numeric nutrient water criteria that is acceptable to you, then you will back off on the implementation of this rule. Is that correct?

Ms. KEYES FLEMING. Yes. As long as it—

Mr. ROSS. Then what is wrong with the one adopted in 2007?

Ms. KEYES FLEMING. It's not in place currently.

Mr. ROSS. That is the only thing? That is the only thing.

Ms. KEYES FLEMING. Well, and actually, as you look at——

Mr. ROSS. In other words, they have been going on for 2 1/2 years, working on doing their science, getting ready to implement this. They stop because of a consent decree, and now you say, "Ah, you stopped. We are going to have to do our own thing." Come on.

Ms. KEYES FLEMING. No. Actually, as you look at where we are today, we're glad that the State of Florida has decided to recommence its rulemaking. We have said consistently——

Mr. ROSS. Had they not filed a petition asking you all to hold off, what would have happened then? You would have implemented it?

Ms. KEYES FLEMING. Well, I don't know that speculating about what would have been is the best way to use our time. The fact is under the current situation Florida is working to implement a rule, and we are working with them diligently on a weekly basis, answering questions and things, as needed.

And so, as they continue to move forward, we have agreed to rescind whatever corresponding Federal promulgation there is. And as they continue to move, look at adjusting the schedules within the consent decree.

Mr. ROSS. I see my time is up. I yield back, Mr. Chairman.

Mr. STEARNS. I thank the gentleman.

We are going to do a second round. So if you would be so kind and be patient with us.

Mr. BUDELL. Mr. Ross's line of questioning, would you care to comment on what he was saying, and particularly on the fact that Florida has to make certain decisions?

Mr. BUDELL. Well, Florida made a conscious decision to not move forward with the development of their criteria upon learning that EPA was going to be promulgating their own. That was a policy decision made from a standpoint of why would we continue to pursue the development of numeric criteria in Florida knowing that EPA was going to develop their own?

And we would have come out potentially—in all likelihood, we would have come out with different numbers, and there was no real—we didn't think any benefit of moving forward with our effort, knowing that EPA was going to develop their own and were obligated by a settlement agreement to do so. So we backed off and said, OK, you entered into the settlement agreement. You develop a criteria, and you propose them.

So, I mean, that was the rationale for why we didn't move the ball forward supposedly is because they entered a settlement agreement. We were prepared to move the ball forward and would have done so on the timeline agreed to in the original determination.

Mr. STEARNS. Ms. Keyes Fleming, would you agree that perhaps the EPA standards are not well suited to the conditions and circumstances that are unique to Florida waterways? Do you think that is true?

Ms. KEYES FLEMING. No, I would not agree with that.

Mr. STEARNS. OK. All right.

Ms. KEYES FLEMING. I think what we've done is try to——

Mr. STEARNS. OK. Yet, at the same time, you have indicated that EPA would give variances, forbearance because of cost, because of implementation. Isn't that true?

Ms. KEYES FLEMING. With respect—if presented with site-specific reasons.

Mr. STEARNS. Right. So these site-specific cases would allow you to go back and give, shall we say, flexibility or forbearance, particularly if it was dealing with cost. Is that true?

Ms. KEYES FLEMING. The rule has always allowed for that flexibility.

Mr. STEARNS. OK. So if the rule allows for that, wouldn't that also imply that the decisions you are making perhaps are faulty?

Ms. KEYES FLEMING. No, not at all.

Mr. STEARNS. OK. Would the decisions that you are imposing on Florida be of such a stringent nature that they don't take into account the, shall we say, peculiarities of Florida and its waterways? I guess I am trying to get you to admit that Florida has particular needs, particularly with numeric nutrient water quality that perhaps are singular to Florida. Would you say yes on that?

Ms. KEYES FLEMING. Well, as a former prosecutor, getting me to admit things, Mr. Chairman, might go against—

[Laughter.]

Mr. STEARNS. How about if I said you have got to answer—what if I said you have to answer yes or no?

[Laughter.]

Ms. KEYES FLEMING. I'd be looking for a judge then, Your Honor, to allow me to finish the question. I think we all agree that Florida has a unique topography, unique jewel in its water sources. And what we did was to help protect that so, again, we can protect the economies that rely on that water source, whether it's fishing and boating, as Congressman Ross had mentioned, or swimming or enjoying some of the parks that rely on that water.

Mr. STEARNS. OK. Now let's say that Florida comes up and they specifically said we need a variance, we need flexibility, and you grant it. Don't you think the environmental groups are going to sue because of that? What is going to happen there, in your opinion?

Ms. KEYES FLEMING. Well, I don't have a crystal ball. I think the bottom line is let's make sure we look at ways to have the most protective water quality standards possible, given the variability throughout the State.

Mr. STEARNS. Do you think there is enough guidelines that you can provide so that Florida feels comfortable following your guidelines?

Ms. KEYES FLEMING. I think we've worked hard to institute guidelines and seek public opinion, including the 22,000 comments that we received prior to the rule, to come up with something that would best—try best to address a lot of the communities' concerns.

Mr. STEARNS. I think a real question we all have, who are these people that are going to give the variance? Do you know their names? Who is actually going to be making the decision on these variances?

Ms. KEYES FLEMING. Well, I think it would go through the normal variance process, whether that is applying through the State

originally. EPA, using its authority under the Clean Water Act, to either approve or make suggestions.

Mr. STEARNS. OK. So under that process, I come forward to this particular agency. Is there an agency that you can tell me specifically that I would go to for these variances? I mean, you sort of alluded to it. But is there a specific name?

Ms. KEYES FLEMING. Well, the variances, it's my understanding, are governed by DEP, the Department of Environmental Protection.

Mr. STEARNS. OK. And is there appeal process on this?

Ms. KEYES FLEMING. I believe that—

Mr. STEARNS. For the stakeholders?

Ms. KEYES FLEMING. For the stakeholders?

Mr. STEARNS. Yes, or for the State of Florida, is there appeal process?

Ms. KEYES FLEMING. Well, I think—

Mr. STEARNS. I guess you don't know. That is OK.

Mr. Budell, are there any comments you would like to make off of my questioning?

Mr. BUDELL. If the State were to propose a variance, EPA would ultimately have to approve that variance.

Mr. STEARNS. Right.

Mr. BUDELL. If there is an appeal process if we were to deny a variance. But even if we were to develop one and submit it for approval, there would also be a point of entry for any party affected by that variance to challenge it.

Mr. STEARNS. And so, would that allow the environmental groups to come back into the fray and sue again?

Mr. BUDELL. Absolutely.

Mr. STEARNS. So, in your opinion, do you think that is going to happen?

Mr. BUDELL. I stated it publicly at the National Academy of Science meeting last week. I don't think you'll ever get a SSAC or a variance in Florida.

Mr. STEARNS. OK.

Mr. BUDELL. I think it's nice to say that it's there and available, but there are too many points of entry. You'd never achieve getting a site-specific alternative criteria.

Mr. STEARNS. And that is because of the consent decree, because of the Clean Air Act, because of the threat of environmental suits, or why is that? Because that is pretty categorical what you are saying.

Mr. BUDELL. Well, that's just my belief that it's so litigious that I don't think you'd ever get one approved.

Mr. STEARNS. So the EPA would just not do it because it is litigious?

Mr. BUDELL. They may try. But the thing is, is that if Florida—as soon as Florida were to propose a SSAC to EPA for approval, there is a point of entry.

Mr. STEARNS. There is a point of entry?

Mr. BUDELL. Under our Administrative Procedures Act, there is a point of entry for affected parties to challenge that decision.

Mr. STEARNS. Uh-huh. OK. Do you agree with that, Ms. Keyes Fleming?

Ms. KEYES FLEMING. Well, I don't know that challenging something is necessarily a bad thing. I think what we're trying to do is make sure we arrive at the best protective result possible.

Mr. STEARNS. But he is saying basically there is going to be no variances because of it.

Ms. KEYES FLEMING. Well, certainly variances exist today, and all of the procedures that you just talked about have been in existence prior to this. So the fact that current variances exist for different things suggest—

Mr. STEARNS. You are saying variances already exist. So how can you say that categorically?

Ms. KEYES FLEMING. In different arenas, not just in numeric nutrients.

Mr. BUDELL. Not for nutrients.

Mr. STEARNS. Not for phosphorus and nitrogen. OK.

Mr. BUDELL. I'm not aware of any variances or SSACs for nutrients.

Mr. STEARNS. OK. My time is up.

Ms. Brown?

Ms. BROWN. Thank you.

Sir, let me ask you a question. I understand this process started in 2002, but it was 6 years or 2009, and the State had not done anything as far as the rule process is concerned. Why did it take 6 years?

Mr. BUDELL. The State had worked, we had a technical advisory committee that had been convened early in the 2000s, that had met multiple times, trying to develop the necessary science methodology and proposals to deal with these notoriously difficult issues to deal with.

As we mentioned, nitrogen and phosphorus are naturally occurring in the environment. Trying to determine when too much human-induced nitrogen is present is hard. And there are no easy answers.

Florida, I believe, was working as aggressively as any other State in the country has ever worked, putting more time and effort into trying to deal with the issue of nutrient management than probably any other State. We have a lot of variety of water bodies, more varied perhaps than any other State. Our climate is different than most other States.

Our coastal resources are so varied and multiple that trying to arrive at a conclusion to deal with—to more effectively deal with nitrogen is very, very difficult. And as I said, it took 7 or 8 years of that technical advisory committee to meet to get us to the point where we were. You know, not—

Ms. BROWN. You do understand that that is a problem? I mean, that is why we are here.

Mr. BUDELL. I completely agree that nitrogen management and phosphorus management is a problem. Yes, there's no question about that.

Ms. BROWN. Well, the other part of it is that the State hadn't acted. And so, therefore—

Mr. BUDELL. But the State was constantly working under agreements that had been negotiated with EPA. We had had plans and

strategies that we had submitted, development plans, timelines for the development of these plans that had all been approved by EPA.

Ms. BROWN. You mentioned in your comments about the Apopka River that at one time it was dead, and it is coming back because of the work that has been done.

Mr. BUDELL. Correct. Lake Apopka.

Ms. BROWN. So you do acknowledge that it is a problem in Florida?

Mr. BUDELL. Absolutely. I acknowledge that nitrogen and phosphorus management nationwide, worldwide is a problem and that we're past arguing about whether or not it's a problem.

Ms. BROWN. But the answer, I guess, is what are we going to do about it?

Mr. BUDELL. That's correct.

Ms. BROWN. And how we can do it in such a manner that the science there.

Mr. BUDELL. That's correct.

Ms. BROWN. And that we take in jobs and how we move forward. Do we all agree with that?

Mr. BUDELL. Yes.

Ms. BROWN. Ms. Fleming, I understand that you all have gotten over 22,000 comments. Can you give us an update on the nature of it and whether it is supportive as to what EPA is trying to do?

Ms. KEYES FLEMING. Absolutely. Overwhelmingly the comments supported what we were trying to do. And as Mr. Budell had just indicated, we all recognize that there is a problem and something needs to be done to fix it.

I think the other thing that is—we're very close on is, in fact, the numbers. This is not a situation in which EPA's science is so drastically different from the State's. We may be slightly off, but we use the State's database in arriving at our scientific numbers.

And so, the question does become how do we move things forward? And we at EPA looked at the most cost-effective way to do that. We've built in flexibility. This is not a one-size-fits-all rule.

We've narrowed the scope as best we can in terms of who the rule applies to. And so, we believe, again, that the study will show that our assumptions are correct ones in going forward.

Ms. BROWN. Well, I mean, the question, the discussion was how can we move forward, indicating that we talked about suits, that the environmental groups may sue. Well, the community or I guess the business community or certain stakeholders are suing.

So we are suing. I mean, that is just a part of what we do every day. The question is how we move forward.

Ms. KEYES FLEMING. What it's going to take is all of us getting in a room and talking about it, and that's what we've—

Ms. BROWN. I love that approach.

Ms. KEYES FLEMING [continuing]. What we've been doing with DEP. The secretary and I speak regularly on these issues.

Ms. BROWN. He is a good fellow, too. I know him. He is from Jacksonville.

[Laughter.]

Ms. KEYES FLEMING. Trying to get—and I don't disagree at all. Trying to get a good understanding of what the real issues are on the ground, speaking with folks from the League of Cities, speaking

with folks from the agricultural community. All sectors need to be able to come together to really address this.

Because this is an opportunity not only to address and solve the challenges here in Florida, but the issue of nutrients is something that's affected all over the world. And so, if we can solve it here, then perhaps it could create the opportunity where we could export that expertise to other places as well.

Ms. BROWN. You know, I guess you are saying Florida is kind of the guinea pig, and we don't like that. But we have the best resources. I mean, we have the beautiful beaches, and we are the tourist destination in the world. I mean, right here we sit, number-one destination of the world for people to come.

And so, we want to make sure we have clean water and do what we need to do. But it has still got to be that balanced approach so that we can afford to move forward. As I mentioned before, the community that went out of business, declared bankruptcy, was based on they couldn't—you know, they had to implement certain things, and they couldn't afford it. So it has to be balanced, working with all of the stakeholders.

Ms. KEYES FLEMING. That is correct. It's about making a cost-effective investment today to avoid having to pay higher costs for cleanup years from now.

Ms. BROWN. But do you agree that the science—well, I guess I just want to address if it is not a procedure in place, then maybe this is something that we can take back to Washington so that the communities can have a way to ensure that their input is taken into consideration?

Ms. KEYES FLEMING. Well, I would respectfully—

Ms. BROWN. He asked whether or not it was appeal process, and I don't know that you were clear. And as an attorney and as a prosecutor, it has got to always be an appeals process.

Ms. KEYES FLEMING. Well, and obviously, the way the process is set up—and perhaps I wasn't clear, Mr. Chairman, earlier—variances may not exist with respect to nitrogen and phosphorus. But obviously, as we look at other chemical factors and things within our waters, there have been variances set in other areas here in Florida.

And whatever process was set to get those variances put through still exist. And so, to simply say that no variance would come out of a nitrogen or phosphorus analysis I think doesn't do service to the fact that the process has worked previously.

Ms. BROWN. I thank you, Mr. Chairman. I yield back my time.

Mr. STEARNS. I thank the gentlelady.

Mr. Bilirakis is recognized for 5 minutes. Oh, excuse me. Mr. Barton, excuse me. Mr. Barton? I am sorry, Mr. Barton.

Mr. BARTON. I am a member of the committee, Mr. Chairman.
[Laughter.]

Mr. BARTON. And the past chairman. I appointed you sub-committee chairman.

[Laughter.]

Mr. STEARNS. Deference, deference, deference.

Mr. BARTON. But I am not from Florida. So that downgrades me, obviously.

In my first round of questions, I asked just some basic information that was specific to this issue locally. This round, I want to ask some more generic questions.

We have air quality and water quality laws because the last 100 years, the people and their representatives to Congress have decided that the market wasn't working, that the market function in terms of air quality and water quality was dysfunctional. So we had to have Federal and State regulation to be sure that the public health was protected.

We created the Food and Drug Administration. We created the Environmental Protection Agency, the Safe Drinking Water Act, the Clean Air Act, any number of acts. But in every case, we have made the Federal Government preeminent because of interstate commerce. And obviously, air is transportable across State lines, and in many cases, water is also, but not in every case.

These laws were created before the litigious society has been developed. So when we created the Safe Drinking Water Act and the Clean Water Act and those, I think there was an understanding that various stakeholders would work cooperatively, which is not always the case.

So we are now in a situation where the EPA in Florida, in all—in fact, has preempted the State, for whatever reason. I am not sure the EPA is in a better position to protect the water quality of Florida than the State is, but the current law gives the Federal Government preemptive ability.

So my first question to each of you would be might it be time to review the relationship between State and Federal and perhaps use the 10th Amendment to give preference to States, unless there is a finding that the States are failing? And I will let our Region 4 administrator answer first.

Ms. KEYES FLEMING. Congressman Barton, I think one of the reasons why, you had said earlier, that we have these Federal laws is because of that interconnectivity. And so, whether you look at the water wars that are existing between Georgia, Alabama, and Florida or other things, regulations that occur in Georgia and Alabama do affect what happens in Florida. And I think for that reason, we need to be able to step back and have that bigger picture view about how to make sure that comprehensively the laws are still protective of the water that knows no State boundaries.

Mr. BARTON. Mr. Budell?

Mr. BUDELL. Well, I don't think clarification of the issue of cooperative federalism is inappropriate. I think in this situation there could be clarity added to the Clean Water Act that clearly states that States are responsible for developing standards, and EPA has oversight. And it would take tremendous inaction by a State to justify EPA stepping in.

Mr. BARTON. Well, if there is clearly an interstate issue, the Federal Government has to mitigate or mediate between Alabama and Florida. You can't just say go at it, boys, and whoever has got the biggest State army or whatever is going to win. If we did that, Texas would rule the country.

[Laughter.]

Mr. STEARNS. California?

Mr. BARTON. But that wouldn't—ah, we can handle California with one hand tied behind our back. That is not a problem.

[Laughter.]

Mr. BARTON. But if it is clearly within the boundary of Florida, you know, water issues, in many cases, it would be. Not in every case. I don't see why you couldn't reopen the Clean Water Act and the Safe Drinking Water Act and say unless the Federal Government can show failure, then the State should be preeminent.

My assumption is the State cares just as much about water quality as the Federal Government, if not more so, because the State actually is impacted by it.

Second question would be we have talked about these lawsuits, and Congresswoman Brown said that is just what we do. We sue. Now she didn't mean herself. She just meant society.

Ms. BROWN. She sues, too.

[Laughter.]

Mr. BARTON. She sues, too? Why could we not modify standing to bring these lawsuits that there is a higher level of proof required to sue. It is my understanding right now there is no skin in the game. If an environmental group or anybody, for that matter, brings a lawsuit, it is allowed. And it is almost, in many cases, encouraged. The EPA will go out and solicit, if not officially, at least unofficially, a friendly lawsuit. "Oh, well, we have to settle because of this lawsuit."

Is that something that we might want to look at is standing to bring a lawsuit?

Mr. BUDELL. I think it would be a great idea. I think that the environmental community—and there may be others, but certainly in the Clean Water Act, I think that there the history shows that lawsuits are successful, and that if you sue the EPA, they're very likely to settle.

Mr. BARTON. Would you like to comment on that?

Ms. KEYES FLEMING. Yes. Respectfully, Congressman, I think we would disagree with the analysis that we don't have skin in the game. I think all of us have skin in the game with respect to having clean water, clean air. And whether we come to this State as a tourist or whether we live here, we're all committed to making sure that we have a quality of life that is enjoyable without harm of illnesses or diarrhea or things that some of your congressional folks have unfortunately had to experience as a result of algae blooms.

And so, we all have this collective responsibility to make sure that we protect—

Mr. BARTON. But under current Federal law, to have standing in court—and correct me if I am wrong—but the only thing you have to prove is that you are a citizen of the United States and maybe, in some cases, a citizen of the State. That is it. There is no burden of proof on the allegation.

There is no—there is just you can bring a lawsuit. And if you have an environmental group, they are going to pick up the expenses. And there is no downside to bringing the lawsuit. Wouldn't you agree with that?

Ms. KEYES FLEMING. No, actually. I think—and obviously, it's Congress that wrote this law some 40-plus or 40 or so years ago.

I think that it's beneficial to write it in that way because having these things—clean air, clean water is an inherent right of everybody in this country.

Mr. BARTON. I understand that. But the compliance cost of some of these regulations are in the billions of dollars annually, and the job losses in the tens of thousands on a one-time basis and perhaps several thousand on an annual basis. And again, when these laws were put on the books, society was different. There was an understanding, at least implicitly, if not explicitly, that some of these costs would be considered. It is different today.

I mean, it is a different issue. But on ozone, the EPA is about to put out an ozone standard that may be 6 parts per billion. God can't meet that standard in about 70 percent of the country. There is no demonstrable health benefit to it. It is just a lower standard.

You know, in my time in Congress, we have seen—and again, it is an air issue, Mr. Chairman. Have gone from 12.5 parts per billion on an 1-hour spike standard. I think the current standard is 8 parts per billion on an 8-hour average standard, and now it is going to go down to 7 or 6 or 5.

We have taken the lead standard down to almost zero, and I mean, it is just this “if one standard is good, a tighter standard is better” mentality, with no cost-benefit requirement, with no real justification except that the Federal laws written, as she pointed out, 40 or 50 years allow it.

And it is something I think that we, hopefully, on a bipartisan basis need to revisit and see if it might not be a time to revisit the 10th Amendment of the Constitution, to take cognizance of the fact that the congressional approval rating is at an all-time low, that President Obama's approval rating is less than his disapproval rating. I mean, there is a reason for it, Mr. Chairman.

Many people look at what we are doing or not doing in Washington and say, those guys don't get it. You know, Federal Government especially is out of control.

And with that, Mr. Chairman, I yield back.

Mr. STEARNS. Thank the gentleman. And I thank and apologize for not getting right to him and his very good comments.

Mr. Bilirakis?

Mr. BILIRAKIS. To follow up—thank you, Mr. Chairman—on what Chairman Barton said, I haven't had—I represent the coastal areas of Florida. And during the oil spill, we have had commercial fishermen, recreational fishermen, shrimpers, people that are in the tourist industry. I haven't had one single person come to my office and complain about the pollution, the nutrient pollution.

And we have had several people, both Democrats and Republicans, this is a bipartisan issue against this rule. If you could comment on that? And then I have another question maybe both of you can comment on.

Ms. KEYES FLEMING. Well, I would agree in that clean water is not a partisan issue. We all want it. We all recognize the need for it. I think where we approach things differently is how best to achieve it.

And with respect to the coastal part of the rule, we are currently in the process of working that segment, that schedule.

Mr. BILIRAKIS. I understand. I understand that.

Ms. KEYES FLEMING. But again, if you're looking for the breakdown of the 22,000 comments, we can certainly provide that for you. But those are voices that I don't think we can deny. That this is a problem—Mr. Budell has said it. Several other witnesses have said. We agree that there is a problem.

And it's our view that if we do not address and prevent this problem now, it will get much worse and cost more later. And might even cost more jobs later, as folks choose not to come to Florida because they no longer see it as a rich treasure.

Mr. BILIRAKIS. Thank you.

Mr. Budell, do you agree or disagree with this statement? Florida has done more to promote clean water than, obviously, the EPA suggests.

Mr. BUDELL. I agree with that statement.

Mr. BILIRAKIS. You agree with that. Would you like to elaborate?

Mr. BUDELL. Well, I think our record stands on its own. I think that there are more aggressive and protective programs in Florida than almost any other State. Our 1999 Watershed Restoration Act was really kind of a model legislation. It was enacted far before any other State in the Nation had a comprehensive bill in place that was the blueprint for how Florida would implement total maximum daily load provisions of the Clean Water Act.

It was really ground-breaking legislation. We've had tremendous success. We've developed hundreds of TMDLs. We've got basin management action plans underway. There are glowing examples—Sarasota Bay, Tampa Bay, Lake Apopka—that are wonderful examples of the restoration activity that we've taken over time, the protection activity that we've taken over time.

I don't—I don't take a backseat to any other State in the Nation on our water restoration and protection program.

Mr. BILIRAKIS. Thank you.

Next question for Ms. Fleming. It appears some of the discrepancy in cost estimates, back to the cost, is based on an expectation for relief or waivers. Does EPA have an estimate of the time required to obtain regulatory relief? And then I would like to have Mr. Budell comment on that as well.

Ms. KEYES FLEMING. I don't know that we'd have a set estimate. I think that's one of the reasons why the rule allowed for the SSAC process to start earlier this year, as opposed to waiting for the completion of the 15-month cycle. We wanted to be able to have productive discussions, and I do have the list. It includes, as I said, Palm Beach, Jacksonville, Gainesville, Pope County, various water management districts, and others that we have already spoken with and will continue to speak with to figure out how best to continue to protect and improve water quality.

I think we do want to make sure our decisions are scientifically sound, and sometimes that takes time. But it does result in coming or reaching the end game of making sure we have something that is protective.

Mr. BILIRAKIS. Mr. Budell, again?

Mr. BUDELL. I believe that the site-specific alternative criteria process would require an entity, whether that's a regulated permanent entity or a county or a city, to collect at least 3 years' worth of data, water quality data that would be seasonally variable across

and have to be collected throughout the calendar year for a 3-year period, submit those data to EPA justifying that a site-specific number is more appropriate.

We believe the costs to do that certainly enter into the millions of dollars with no guarantee of actually achieving the SSAC at the end of the process. So it's a tremendous gamble, a monetary risk for any entity, whether that's Orange County or the City of Orlando or the City of Punta Gorda. To come forward with a site-specific alternative criteria, you're talking about outlaying millions of dollars, time and effort and money to develop a dataset, but there's no guarantee it would be approved once it's submitted.

Mr. BILIRAKIS. I would like to suggest that maybe that timeframe to be part of the rule so that there would be some certainty there. Would you like to comment on that?

Ms. KEYES FLEMING. Well, I think what I would like to be able to do is go back and look at the SSAC guidelines that we have put out for public comment. I know in some instances with—in our conversations with the department with respect to the St. Johns River, for example, we had indicated that we thought we could come to a conclusion in a relatively short timeframe, largely because the science that Mr. Budell had talked about has already been collected. And I think that's an important thing to remember.

That Florida has a unique database of information already, and we are building upon that database when we instituted the rule, and we'd be considering that database, whether it's the State or us, as we come to conclusions about SSACs in the future.

Mr. BILIRAKIS. Any comment from you?

Mr. BUDELL. No. It would just be duplicative. Thank you.

Mr. BILIRAKIS. Well, thank you very much. I yield back, Mr. Chairman.

Thank you. Appreciate it.

Mr. STEARNS. Mr. Ross is recognized for 5 minutes.

Mr. ROSS. Thank you, Mr. Chairman.

Ms. Fleming, I want to make sure I understand this because Mr. Budell brought it up in his opening that the EPA acknowledges that its nutrient standards were established without demonstrating a strong cause-and-effect relationship to impaired water quality. Is that correct?

Ms. KEYES FLEMING. No. I don't think that's correct. I think it does go to the challenge of looking at those factors that vary. But that's one of the reasons why the rule is a rolling 3-year average.

Mr. ROSS. So you would say there is a strong relationship, cause-and-effect relationship between the standards and water quality?

Ms. KEYES FLEMING. I think there is a strong cause-and-effect relationship between excess nutrients and the algae blooms and other things that are adversely affecting public health.

Mr. ROSS. Mr. Budell, do you want to comment on that?

Mr. BUDELL. There is no demonstrated cause-and-effect relationship between nutrient concentration and biological response in flowing water. In any kind of flowing water.

Mr. ROSS. OK.

Mr. BUDELL. There is stronger data for lakes and springs.

Mr. ROSS. Ms. Keyes Fleming, I believe the EPA has indicated that water utilities will not have to use reverse osmosis in order to comply. Is that your understanding?

Ms. KEYES FLEMING. That was stated in the preamble of our rule, yes.

Mr. ROSS. And you would be willing to stand by that? So that will not be a cost that would have to be considered in order to comply with any numeric nutrient water criteria?

Ms. KEYES FLEMING. That is something we would stand by.

Mr. ROSS. In regard to what utility companies have indicated that it may be as much as \$750 a household for—an increase in your utility bills, to those in my district that are senior citizens, unemployed, and on fixed incomes, could you help me craft a message to them as to why we are now having that, require that they pay that?

Ms. KEYES FLEMING. The message would start with we believe that those figures inaccurately look at the current landscape, that they overreach, that they do not narrowly look at those entities that would really truly have to make the change. And if you looked at those entities, then the costs would be more like 11 cents per day per household.

Mr. ROSS. Which would translate to how much per year?

Ms. KEYES FLEMING. Anywhere from, I believe, \$135 million to maybe \$206 million.

Mr. ROSS. And that is a justifiable cost-effective increase for my constituents?

Ms. KEYES FLEMING. Compared to the cost of having to clean this up later, we believe that it would be a worthwhile investment to prevent these things from happening to avoid the increased cost later.

Mr. ROSS. Let's talk about the site-specific alternative criteria, the SSACs that you speak of. Have there ever been any issued in the State of Florida?

Ms. KEYES FLEMING. The rule was just implemented last November, and so we are currently talking with numerous entities about SSACs. Again, the rule does not take effect until March. That schedule may change, depending on what the State of Florida does with respect to implementing its own rule.

Mr. ROSS. Mr. Budell, are you aware of any SSACs that have been approved?

Mr. BUDELL. None for nutrients.

Mr. ROSS. OK. And would you disagree that there are over 30,000 bodies of water in the State of Florida?

Ms. KEYES FLEMING. I wouldn't disagree with that number. The question becomes how many of them would be subject to this rule? It's a much smaller universe.

Mr. ROSS. Well, I think if you are going to have a rule, anything would be subject to that rule. So all 30,000 would be subject to that rule.

Ms. KEYES FLEMING. Only if they're inland waters or are encompassed in the definition.

Mr. ROSS. All right. Mr. Budell indicates that it is nearly \$1 million in order to go through the process. Are we not doing anything but furthering litigation and putting a greater burden on our econ-

omy and our State in order to have to apply for these to seek some type of variance?

Ms. KEYES FLEMING. I think one of the things that perhaps hasn't been taken into account is that when you talk about the cost or millions, what you're looking at is about \$4,000 to \$5,000 cost per acre to be able to fix one of these challenges if we do nothing.

Mr. ROSS. But you, yourself, said that really standing doesn't matter. Anybody has standing. And so, all they have to do is file a petition objecting to any SSACs being issued, and therein lies the problem and the constant litigation that is going to follow.

Ms. KEYES FLEMING. Well, I think let's step back—

Mr. ROSS. I guess what I am saying is the unintended consequences of this rule does nothing to ultimately affect the water quality in the State of Florida. What it does is to further the administrative burden on businesses and residences in the State of Florida and to further create greater tax burden for the State of Florida to even try to defend this.

Ms. KEYES FLEMING. I think what this rule does is allow families to be able to enjoy water without having to worry about suffering from diarrhea, from sore throats, from any of the other adverse impacts. And when you talk about litigation, there have been plenty of times that EPA has been sued and not done whatever it is the petitioners want, including the Mississippi River basin, which we just denied.

Mr. ROSS. Now you talk about a 15-month compliance. Is that correct? I mean, once—

Ms. KEYES FLEMING. Delayed effective of 15 months.

Mr. ROSS. Delayed effective. And in that 15 months, a business would have to do what? Whatever is necessary to comply. Correct?

Ms. KEYES FLEMING. I think it gives them the opportunity to come in, talk with us, ask us questions. Our best to be able to answer their questions, to look at the schedule because, obviously, that business might not have a TMDL or permit that is expired in March.

Mr. ROSS. And do whatever is necessary to comply means either complying with the regulation, laying off people, or going out of business?

Ms. KEYES FLEMING. No. I think what it means is making sure that we protect the water that is so vital to Florida's economy and the well-being of its citizens.

Mr. ROSS. Mr. Chairman, if I could just have 30 seconds to ask one follow-up to Mr. Budell?

Mr. STEARNS. Sure.

Mr. ROSS. Mr. Budell, what did Florida do wrong? Why are we where we are today? We have got probably the most clean water of any State out there, the most aggressive water control program out there. What have we done wrong to receive the wrath of the EPA?

Mr. BUDELL. I don't believe we've done anything wrong. I believe we were the unfortunate victims of litigation and the settlement agreement.

Mr. ROSS. Thank you. I yield back.

Mr. STEARNS. I thank the gentleman, and I thank the first panel for your patience.

Ms. BROWN. I have one——

Mr. STEARNS. Do you want a third round?

Ms. BROWN. Well, we can have a third round, but I need a third question.

Mr. STEARNS. I think we have got a second panel who has been waiting patiently, and there are six of them. So I would like to get them up. Do you have something in 30 seconds?

Ms. BROWN. One minute?

Mr. STEARNS. How about 45?

[Laughter.]

Ms. BROWN. OK. Let me just say that for the Texas, you need to know that the Democrats won, what was it, 8 to 2 on the baseball game. But let's go on.

Mr. BARTON. That is a fact.

Ms. BROWN. That is a fact.

[Laughter.]

Mr. BARTON. I will stipulate that you all lucked out this year.

Ms. BROWN. Lucked out, 8–2.

Ms. Fleming, thank you very much. Let me just be clear, I would not be in favor of doing away with the clean water. Now I do think it should be balanced, that we need opportunities. I mean, Florida, 6 years we didn't weigh in. We didn't come up with our rules, and so, basically, now we are trying to work through it.

But my understanding what Florida had implemented or proposed is pretty much the same as what EPA has done. So can you—just in closing, I want to give you the 45 seconds to close.

Ms. KEYES FLEMING. Hopefully, it won't take that long. Yes, the science is very similar between the State and what EPA is proposing.

Mr. STEARNS. Thank you.

Ms. BROWN. Thank you very much.

Mr. STEARNS. And now we will ask the second panel to come forward. Paul Steinbrecher is president of the Florida Water Environmental Association Utility Council and Director, Environmental Services for JEA, Jacksonville.

Mr. Steinbrecher has been with the JEA since 2001. Prior to that, he was a process engineer and a project manager for CH2M HILL. He has a bachelor's degree in science and civil engineering and earned his master's in civil engineering at the University of Arkansas in Fayetteville.

William Dever is president of the Florida Gulf Coast Building and Construction Trades Council, whose affiliated unions represent thousands of working men and women in Florida's Gulf Coast region.

Ron St. John is a dairyman and the managing partner of Alliance Dairy in Trenton, Florida. He is testifying on behalf of the dairy industry of North Central Florida, Suwannee basin, and the Florida Farm Bureau Federation.

Kelli Hammer Levy is the watershed management section manager for the Department of Environment and Infrastructure for Pinellas County in Florida. The county's watershed management protection improves the environmental aesthetics, quality of county surface water, such as creeks, streams, lakes, bays, and coastal waters.

David Guest is a managing attorney and director of the Florida regional office of Earthjustice. Mr. Guest has tried environmental cases in Florida for the past 20 years. He had the least notification. So I thank him for his patience in coming to testify this morning.

And David Richardson, lastly, is the assistant general manager for water and wastewater systems. He administers all aspects of the water and wastewater utilities for Gainesville Regional Utilities, including water and wastewater planning and engineering, water treatment, water distribution, wastewater treatment, wastewater collection, operation of lift stations, distribution of reclaimed water, and administration of the environmental laboratory industrial pretreatment and cross-connection program.

Welcome, all of you, this morning.

You are aware that the committee is holding an investigative hearing and, when doing so, has had the practice of taking testimony under oath. Do any of you object to testifying under oath?

[All witnesses answered in the negative.]

Mr. STEARNS. The chair then advises you that under the rules of the House and the rules of the committee, you are entitled to be advised by counsel. Do you desire to be advised by counsel during your testimony today?

[All witnesses answered in the negative.]

Mr. STEARNS. In that case, if you would please rise and raise your right hand, I will swear you in.

[Witnesses sworn.]

Mr. STEARNS. You are now under oath and subject to the penalties set forth in Title 18, Section 1001 of the United States Code.

I now welcome you and ask you each to give a 5-minute summary of your written statement. And Mr. Steinbrecher, we will start with you.

STATEMENTS OF PAUL STEINBRECHER, PRESIDENT, FLORIDA WATER ENVIRONMENT ASSOCIATION UTILITY COUNCIL; WILLIAM DEVER, PRESIDENT, FLORIDA GULF COAST BUILDING AND CONSTRUCTION TRADES COUNCIL; RON ST. JOHN, MANAGING PARTNER, ALLIANCE DAIRIES; KELLI HAMMER LEVY, WATERSHED MANAGEMENT SECTION MANAGER, PINELLAS COUNTY DEPARTMENT OF ENVIRONMENT AND INFRASTRUCTURE; DAVID G. GUEST, DIRECTOR, FLORIDA REGIONAL OFFICE, EARTHJUSTICE; AND DAVID RICHARDSON, ASSISTANT GENERAL MANAGER, WATER/WASTEWATER SYSTEMS, GAINESVILLE REGIONAL UTILITIES

STATEMENT OF PAUL STEINBRECHER

Mr. STEINBRECHER. Thank you, Mr. Chairman and committee.

I'm pleased to be here this morning still. My name is Paul Steinbrecher. I'm the director of environmental permitting for JEA, the second-largest utility in Florida, water, wastewater utility, one of the largest in the Nation. We serve the Jacksonville area.

I am speaking to you today, however, in my capacity as the president of the Florida Water Environment Association Utility Council. The utility council is a State-wide organization of your community wastewater treatment utilities.

Our members collect and treat the wastewater produced by Floridians, and then we safely return that treated reclaimed water to the environment or we provide it to our citizens to beneficially reuse for irrigation or other purposes. Because the raw wastewater that comes to us and that we treat is rich in nutrients, we have extensive experience with implementing nutrient control programs.

Everyone, of course, wants clean water. As an environmental services director for a regional wastewater utility and a former consulting engineer, I have dedicated my own career to cleaning water. When utilities undertake a new project, the decisions have to be based on sound science. EPA should be held to the same standard.

Unfortunately, EPA's nutrient rule is rooted in poor science and in litigation. In order to settle a lawsuit, EPA committed to developing numeric nutrient standards for Florida's diverse rivers, lakes, and springs on a wholly unrealistic timeframe. To then try to meet their self-imposed deadline, EPA had to resort to taking shortcuts in their science, ultimately using crude averaging techniques, rather than the dose-response techniques you've heard people speak of.

As a result, their standards absolutely fail to acknowledge that the level of nutrients that water bodies need for biological health, as well as the level of nutrient loads that create problems, vary quite significantly from one water body to another water body.

The utility council provided extensive and detailed technical commentary questioning the scientific basis of EPA's draft rules. Unfortunately, EPA ignored our input in their draft—in their rule.

The utility council also urged EPA not to supersede existing EPA-approved, site-specific nutrient standards. We have those in Florida already with this rule. They're called nutrient total maximum daily loads, nutrient TMDLs. We wanted to ensure that the existing public projects that were designed to achieve scientifically vetted and already federally approved nutrient goals in Florida were not rendered obsolete by the new litigation-driven rule-making.

Again, however, EPA declined. Instead, EPA is now requiring Floridians to resubmit these already EPA-approved TMDLs for re-evaluation and potential re-adoption. Especially in these economic times, we need more surety in the investments we make with the public's dollars. It absolutely makes no sense for EPA to discard or ignore existing EPA-approved, site-specific standards and the millions of dollars of associated public investments in favor of generalized and poorly derived criteria.

Lastly, the costs of EPA's rule have been grotesquely understated by them. The utility council commissioned a reputable environmental consulting firm, Carollo Engineers, to perform a cost analysis of just EPA's freshwater rule. There's a marine rule coming as well.

That professional analysis estimated that the effect on customers whose utility is impacted by this rule—we hope everybody gets exemptions, too, but we doubt it—will be an average utility bill for those that are affected of over \$700 per household per year. EPA's cost estimate, in stark contrast, assumes ridiculously that nearly all utilities will get variances or exemption from their rule.

If all these exemptions were even possible, at a minimum, it would call into question the underlying need for the rule in the first place. How can EPA possibly assert that these standards are necessary for Florida, yet then claim that virtually no one is going to actually have to meet those numeric criteria?

In closing, EPA's intrusion into the State's water quality program sets unscientific standards, derails many existing effective programs, and absolutely has tremendous cost implications that will needlessly burden our already economically stressed communities. Rather than discount these concerns, we would urge EPA to rethink its intervention into Florida's water policy.

Protecting the water environment is absolutely our core business. We are your community utilities. Florida deserves a nutrient water quality program that is focused on cost-effective, measurable environmental programs that will continue to protect our pristine waterways that so many people come here and enjoy every year, as well as our residents, and improve our impaired waters as we grow.

Thank you.

[The prepared statement of Mr. Steinbrecher follows:]



FWEA Utility Council

Protecting Florida's Clean Water Environment
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Subcommittee on Oversight and Investigations

**Field Hearing: "EPA's Takeover of Florida's Nutrient Water Quality Standard Setting:
Impact on Communities and Job Creation."**

**Summarized Testimony of Paul Steinbrecher
President, FWEA Utility Council**

My name is Paul Steinbrecher. I am the Director of Environmental Permitting for JEA, the second largest municipal water and wastewater utility in Florida and one of the largest in the nation. JEA serves the Jacksonville metropolitan and surrounding areas. I am speaking to you today in my capacity as the President of the Florida Water Environment Association Utility Council.

The Utility Council is the statewide umbrella organization for community wastewater treatment utilities in Florida. Our utility members collect and treat the sewage waste produced by millions of Floridians and then safely return the treated reclaimed water to the environment or provide it to our citizens to beneficially reuse for irrigation or other purposes. Because the raw sewage we intake to our treatment systems is rich in nutrients, we have significant experience implementing nutrient water quality control programs.

Everyone wants clean water. As an Environmental Services Department Director for a large regional wastewater utility and a former consulting engineer, I have dedicated my career to

cleaning water. When utilities undertake a new project, our decisions have to be based on sound science. EPA should be held to the same standard.

Unfortunately, EPA's nutrient rule is rooted in poor science -- and litigation. In order to settle a lawsuit, EPA committed to developing numeric nutrient standards for Florida's thousands of miles of diverse rivers, streams, lakes, and springs on an unreasonably rapid timeframe. To meet their self imposed settlement agreement timeframes, EPA took shortcuts in their science, and set stringent standards based on crude statistical assumptions that disregard the diversity of Florida's flowing waters and fail to acknowledge that the level of nutrients that water bodies need for biological health -- as well as the level of nutrient loads that create problems -- varies from water body to water body. The Utility Council, like many other Florida stakeholders, invested significant resources developing extensive and detailed technical comments questioning the scientific basis of EPA's draft rules. EPA ignored our input.

The Utility Council also urged EPA to not overlay its generalized nutrient criteria on waters that already have site-specific EPA-approved numeric nutrient rules, called Nutrient Total Maximum Daily Loads (Nutrient TMDLs). We wanted to ensure that ongoing public projects designed to achieve scientifically vetted and federally approved nutrient targets are not rendered obsolete by this new litigation-driven rulemaking. Again, EPA declined. Instead, EPA is requiring Floridians to resubmit these already EPA-approved TMDLs for reevaluation and potential re-adoption by them as site specific alternative criteria. It makes no sense for EPA to put regulated interests in a position where an EPA approved site specific standard and associated investments are displaced in favor of a generalized, poorly derived criteria. We must have more surety in the investments we make on the publics' behalf.

Lastly, the costs of EPA's rule have been grotesquely understated by them. The Utility Council commissioned a reputable environmental consulting firm, Carollo Engineers, to perform an analysis of the costs to achieve EPA's freshwater rule. Carollo's analysis estimates that domestic wastewater treatment utilities will spend \$4.2 to \$6.7 billion to achieve the freshwater criteria alone, causing affected utilities to increase their annual sewer bills by over \$700 per year (note, the majority of Floridians live near the coast, hence the total costs to Florida is expected to be many times this amount when the pending marine portion of the rule is promulgated by EPA in 2012). Our analysis assumes that EPA's promulgated criteria will be implemented and will have to be achieved, just as the law requires. EPA's cost estimate assumed nearly all utilities would get variances or exemptions from the rule. If this were even possible, at a minimum it would call into question the underlying need for the rule in the first place. How can EPA assert that these standards are necessary yet also claim that no one is going to have to achieve them?

Closing

EPA's intrusion into the States's water quality program sets unscientific standards, derails existing effective programs, and has tremendous cost implications that will needlessly impact our ratepayers and burden our already stressed economies. Rather than discount these concerns, EPA should rethink its intervention into Florida water policy. Protecting the environment is the core business of our community domestic wastewater treatment utilities. Florida deserves a nutrient water quality program focused on cost-effective, measurable environmental programs that will continue to protect our pristine waters and improve our impaired waters as we grow.



FWEA Utility Council

Protecting Florida's Clean Water Environment
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Subcommittee on Oversight and Investigations
Field Hearing: "EPA's Takeover of Florida's Nutrient Water Quality Standard Setting:
Impact on Communities and Job Creation."

Testimony of Paul Steinbrecher
President, FWEA Utility Council

Thank you Chairman Stearns and members of the Subcommittee on Oversight and Investigations for holding this field hearing. My name is Paul Steinbrecher. In my day job, I am the Director of Environmental Permitting for JEA, the second largest municipal water and wastewater utility in Florida and one of the largest in the nation. JEA serves the Jacksonville metropolitan and surrounding areas. Today, however, I am speaking to you in my capacity as the President of the Florida Water Environment Association Utility Council.

The Utility Council is the statewide umbrella organization for community wastewater treatment utilities in Florida. Our utility members collect and treat the sewage waste produced by millions of Floridians and then safely return the treated reclaimed water to the environment or provide it to our citizens to beneficially reuse for irrigation or other purposes.

Because the raw sewage we intake to our treatment systems is rich in nutrients, we have significant experience implementing nutrient water quality control programs. It is with that experience that I offer this testimony regarding EPA's nutrient criteria rulemaking in Florida.

Everyone wants clean water. As an Environmental Services Department Director for a large regional wastewater utility and a former consulting engineer, I have dedicated my career to cleaning water. When my utility and other utilities across the state consider undertaking a new environmental project, we evaluate the degree to which the project will improve the environment. Our decisions have to be based on sound science.

I am providing testimony on three areas of concern to the Utility Council: the lack of a sound scientific basis; the rule's displacement of existing, approved nutrient control programs; and the lack of an adequate cost estimate by EPA for this rule.

1 - EPA's Rivers and Streams Criteria Lack a Sound Scientific Basis

EPA should only derive nutrient criteria rules based on sound science. Unfortunately, EPA's nutrient rule is rooted in poor science -- and litigation. In order to prompt settlement of a lawsuit, EPA committed to developing and finalizing numeric nutrient standards for Florida's thousands of miles of diverse rivers, streams, lakes, and springs on an unreasonably rapid timeframe. In so doing, EPA made promises they couldn't keep.

To meet the settlement agreement timeframes, EPA took shortcuts in their science. Their methods do not ensure a cause and effect relationship between their criteria and an environmental outcome, particularly for Florida's rivers and streams. Instead, EPA set stringent and generalized standards based on crude statistical assumptions that disregard the diversity of Florida's flowing waters.

A simple review of EPA's public representations -- from the time of the January 2009 determination through the finalization of the rule in November 2010 -- demonstrates the agency's steady retreat from sound science and a move to reliance on statistical assumptions.

In January 2009, Assistant Administrator Benjamin Grumbles anticipated that it would only take six months to set scientifically valid nutrient criteria at the levels at which Florida's flowing waters exhibit signs of nutrient impairment:

EPA anticipates that six months will then be required to complete detailed analyses of the data to identify the relationships between nutrient causal variables, e.g. nitrogen and phosphorus, and key response variables, e.g., chlorophyll a, Secchi depth, periphyton, and dissolved oxygen (DO).¹

EPA thus initially represented that within half a year, by July 2009, it could use a cause and effect analysis to establish true numerical interpretations of Florida's existing narrative nutrient standard (i.e. affix numeric nutrient standards at the nutrient levels at which Florida water bodies will exhibit imbalances of naturally occurring populations of flora and fauna).

Ten months later, however, EPA used less definitive terms when assuring Northern District Court of Florida Judge Hinkle that the agency could propose "protective criteria" within the strict timeframes of the Consent Decree. A sworn declaration of Denise Keehner of EPA's Office of Science and Technology stated:

EPA is able and capable of proposing protective criteria for lakes, rivers, streams, and estuaries/coastal waters based on scientifically defensible methodologies, and appropriately taking into account current data and other information, as well as the state of the science.²

By the time EPA issued its proposed rule in January 2010, the agency signaled a full retreat with respect to stream standards from Mr. Grumbles' prognostication a year earlier:

...EPA analyzed stressor-response relationships in Florida streams based on available data, but...did not find sufficient scientific support for their use in the derivation of numeric nutrient criteria for Florida streams. More specifically,

¹ EPA, Letter from EPA Assistant Administrator Benjamin Grumbles to FDEP Secretary Michael Sole, 9 (Jan. 14, 2009) (emphasis added), *hereinafter*, Necessity Determination.

² *Florida Wildlife Federation v. EPA*, Case No: 08-00324, Declaration of Denise Keehner, ¶ 5 (November 3, 2009).

EPA was not able to demonstrate a sufficiently strong correlation between the biological response indicators...and TN or TP concentrations. ...³

In other words, EPA could not demonstrate what levels of nitrogen and phosphorus caused algal blooms in different types of flowing waters: the information needed to set a numeric criteria. Thus, due to the self-imposed timeframes of the Consent Decree, EPA abandoned its attempts to derive cause and effect relationships for Florida's rivers and streams, and instead EPA moved to a crude averaging methodology that by its very nature will deem some healthy waters as impaired and create an obligation on the part of public agencies to "clean up" these water bodies. This error was carried through to EPA's final numeric nutrient criteria rules for Florida's rivers and streams.⁴

The obvious flaw in EPA's approach is that it fails to recognize that:

[n]utrients are unlike any other "pollutant" regulated by the federal Clean Water Act (CWA). Most water quality criteria are based on a toxicity threshold, evidenced by a dose-response relationship, where higher concentrations can be demonstrated to be harmful, and acceptable concentrations can be established at a level below which adverse responses are elicited (usually in laboratory toxicity tests). In contrast, nutrients are not only present naturally in aquatic systems, they are absolutely necessary for the proper functioning of biological communities, and are sometimes moderated in their expression by many natural factors. Therefore, the development of protective nutrient criteria is immensely more complicated than that for toxic substances.⁵

EPA's broad-brushed regional criteria fail to acknowledge that the level of nutrients that water bodies need for biological health -- as well as the level of nutrient loads that create problems -- varies from water body to water body. The proposed rule confirms what the scientific community has known and reminded EPA for quite sometime: the relationship between nutrients and natural factors such as stream biology, color, shading, flow rate, pH, etc.

³ 75 Fed. Reg. 4174, 4194

⁴ 75 Fed. Reg. 75762, at 75763 (stating that "EPA concluded that reliance on a reference-based methodology was a strong and scientifically sound approach for deriving numeric criteria, in the form of total nitrogen (TN) and total phosphorus (TP) concentration values for flowing waters including streams and rivers.")

⁵ FDEP, State of Florida Numeric Nutrient Criteria Development Plan, 1 (March 2009) (emphasis added).

requires site specific nutrient criteria.⁶ In the words of EPA's Science Advisory Board, "statistical associations may not be biologically relevant and do not prove cause and effect," and "in order to be scientifically defensible, empirical methods must take into consideration the influence of other variables."⁷ As the Florida Department of Environmental Protection (FDEP) noted, EPA's rule fails to "fully acknowledge the basic limitation of the 'reference approach', that there is no link between criteria and impairment (no 'dose-response' relationship)."⁸

Crudely derived, generally applicable nutrient standards, such as those imposed by EPA, will cause numerous unintended consequences, including the designation of healthy water bodies as impaired and overly stringent standards for certain impaired water bodies.

The Utility Council, like many other Florida stakeholders, invested significant resources developing extensive and detailed technical comments questioning the scientific basis of EPA's draft rules. EPA ignored our input and has simply asserted that its rules are based on sound science.

2 - EPA's NNC Rule Needlessly Interferes with Existing Nutrient Control Programs

The Utility Council also urged EPA to not overlay its generalized nutrient criteria on waters that already have site-specific EPA-approved numeric nutrient rules, called Nutrient Total Maximum Daily Loads (Nutrient TMDLs). This action would have been a simple way to ensure

⁶ EPA, Science Advisory Board, Processes and Effects Committee Advisory Report, Draft, 1 (Jan. 8, 2010) ("The empirical stressor-response framework described in the Guidance [developed by EPA for promulgating nutrient standards] is one possible approach for deriving numeric nutrient criteria, *but the uncertainty associated with estimated stressor-response relationships would be problematic if this approach were used as a 'stand alone' method because statistical associations do not prove cause and effect.*") (emphasis added); FDEP, *Main Concerns with the Environmental Protection Agency's Proposed Numeric Nutrient Criteria for Florida's Lakes and Flowing Waters* published January 26, 2010 (Feb. 17, 2010), available at http://www.dep.state.fl.us/water/wqssp/nutrients/docs/federal/dep_concerns_epa_nutrients_0210.pdf.

⁷ EPA, Science Advisory Board, Processes and Effects Committee Advisory Report, Draft, at 22 (emphasis added).

⁸ FDEP, *Main Concerns with the Environmental Protection Agency's Proposed Numeric Nutrient Criteria for Florida's Lakes and Flowing Waters* published January 26, 2010 (Feb. 17, 2010).

that ongoing public projects designed to achieve scientifically vetted and federally approved nutrient targets are not rendered obsolete by this new litigation-driven rulemaking. Again, EPA declined. Instead, EPA is requiring Floridians to resubmit these already EPA-approved TMDLs, to EPA, for reevaluation and potential re-adoption by them as site specific alternative criteria. This resubmittal and reevaluation requirement is nonsensical, potentially rendering millions of dollars of existing investments either obsolete or insufficient, and making it difficult to plan utility expansions and upgrades.

Depending on the community size, a member utility's investments may be measured in the tens to hundreds of millions of dollars for existing comprehensive nutrient management programs. My own utility, JEA for example, has invested \$185 million over the past decade on technologies designed to meet the specific numeric nutrient endpoints contained in the Lower St. Johns River Nutrient TMDL and on building and expanding a reclaimed water system to encourage the use of reclaimed water in place of potable water for uses such as irrigation. The Lower St. Johns River TMDL has both a freshwater and a marine component, and was approved by EPA. Now EPA asserts in their freshwater rule that this body of science needs to be re-submitted for re-evaluation and approval, and utilities such as mine are left in a position of uncertainty regarding the regulatory efficacy of their investments. It makes no sense for EPA to put regulated interests in a position where an EPA approved site specific standard is displaced in favor of a generalized, poorly derived criteria. We must have more surety in the investments we make on the public's behalf.

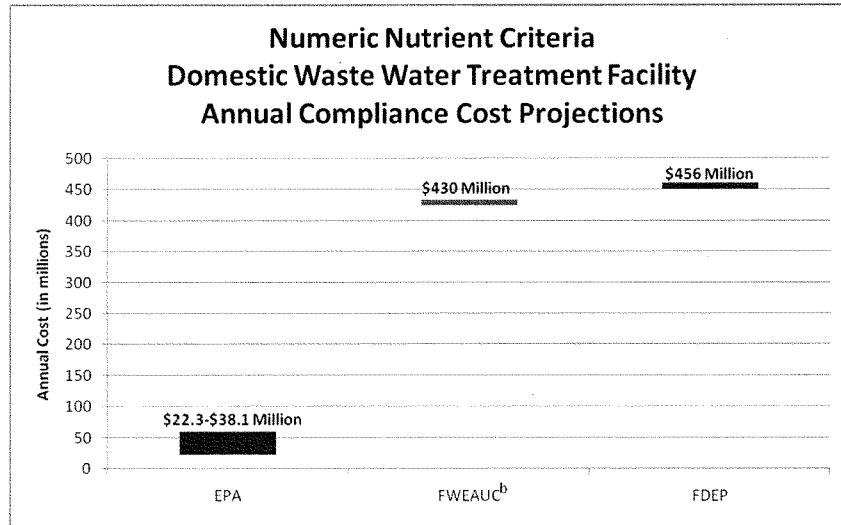
Several of our members recently wrote about the difficulty they are having planning as a result of EPA's shifting standards in the June issue of the Florida Water Resources Journal. A copy of that article is attached. These vignettes provide examples of environmental projects at

risk of being derailed due to EPA's actions. One of our members, David Richardson of Gainesville Regional Utilities, is providing separate testimony to the committee on his individual utility's planning dilemma, and the potential derailment of an outstanding environmental restoration project, as a result of EPA's NNC rule.

3 - EPA Grossly Understates the Costs of its Nutrient Criteria Rules

As shown in the following chart, EPA estimates an annual compliance cost for domestic wastewater treatment utilities that is an order of magnitude lower than that projected by the FWEA Utility Council and FDEP.⁹

⁹ EPA, *Economic Analysis of Final Water Quality Standards for Nutrients for Lakes and Flowing Waters in Florida* (November 2010); FWEA Utility Council, *Costs for Utilities and their Ratepayers to Comply with EPA Numeric Nutrient Criteria for Freshwater Discharges* (November 1, 2010); Florida Department of Environmental Protection, *FDEP Review of EPA's "Preliminary Estimate of Potential Compliance Costs and Benefits Associated with EPA's Proposed Numeric Nutrient Criteria for Florida"* (April 2010) (FDEP cost projections included South Florida canals, which were delayed for promulgation).



The reason for EPA's extremely low compliance cost estimate is due to an extraordinary assumption by EPA: EPA assumes that nearly all utilities will not have to achieve the EPA's final nutrient standards; instead, EPA assumes the utilities will successfully apply for and receive variances, site specific alternative criteria, designated use modifications, or some other form of relief from compliance with the rule.¹⁰ If this were even possible, at a minimum it would call into question the underlying need for the rule in the first place. How can EPA base its entire rulemaking on a determination that these standards are necessary for Florida to comply with the Clean Water Act, yet for the purposes of calculating the economic impact of its final rule, assume that virtually no permitted utility is actually going to have to achieve the standards?

This economic analysis by EPA is in stark contrast to one commissioned by the Utility Council. The Utility Council commissioned an economic analysis based on the simple

¹⁰ 75 Fed. Reg. at 75794 (explaining EPA's assumptions in its cost estimate).

assumptions that EPA's promulgated criteria will be implemented and will have to be achieved, as required by the law.

The law is clear. Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."¹¹ The Clean Water Act requires each state to adopt water quality criteria and, where necessary, Total Maximum Daily Loads (TMDLs) to ensure that surface waters achieve and maintain their designated uses.¹² Under limited circumstances, EPA can step in and promulgate water quality criteria for state surface waters when determined necessary for the waters to achieve their designated uses.¹³ Water quality criteria are primarily implemented through two Clean Water Act programs: the National Pollutant Discharge Elimination System (NPDES) and the TMDL program. In both of these programs, water quality criteria are the operative water quality goals for surface waters.¹⁴

Under the NPDES permitting program, surface water discharges must obtain NPDES permits.¹⁵ NPDES permits contain technology-based effluent limitations that reflect the pollution reduction achievable based on particular equipment or process changes.¹⁶ NPDES permits may also include water quality based effluent limitations when for compliance with water quality criteria.¹⁷

EPA's rule promulgates new specific water quality criterion for nitrogen and phosphorus that must now be written into NPDES permits for affected utilities. Under Federal Law, a water body that fails to achieve that applicable water quality criterion is considered "impaired;" will

¹¹ 33 U.S.C. § 1251(a).

¹² 33 U.S.C. §§ 1313(c)-(d).

¹³ 33 U.S.C. § 1313(c)(4)(B).

¹⁴ 40 C.F.R. §§ 130.3, 130.7.

¹⁵ 33 U.S.C. § 1342.

¹⁶ See 33 U.S.C. §§ 1314(b), (m), 1316.

¹⁷ 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. §§ 122.44(d), 122.45(d); Fla. Admin. Code R. 62-650.200(14), 650.400, 650.500. The water body's designated use and water quality criteria serve as "the regulatory basis for establishment of water-quality based treatment controls and strategies beyond the technology-based level of treatment required by [the Clean Water Act]." 40 C.F.R. § 130.3.

receive a TMDL (i.e. a nutrient load reduction target); and be subject to pollutant load reductions to restore the water body so that it is no longer considered impaired for that pollutant parameter.¹⁸ EPA notes that Florida is “one of the few states that has in place a comprehensive framework of accountability that applies to both point and nonpoint sources and provides the enforceable authority to address nutrient reductions in impaired waters based upon the establishment of site-specific total maximum daily loads.”¹⁹ In Florida, entities that indirectly influence surface water quality are subject to potential load reduction requirements through the TMDL program, so dischargers to ground water (e.g. via land application systems or rapid infiltration basins) may also be subject to treatment requirements based on the discharge’s impacts to surface water quality.²⁰

It is unreasonable for EPA to assert that their promulgated criteria will somehow not apply to NPDES permittees such as domestic wastewater utilities. EPA set these nutrient criteria, because they expressly determined that the water quality criteria are necessary to protect the environment (specifically, the designated uses of water bodies). While the Utility Council may disagree with their determination in Florida, the law now requires that water quality based effluent limits be set at levels to ensure discharges do not cause or contribute to violations of these newly promulgated water quality criteria.

The plain language of the rule sets ambient water quality criteria with no qualifications. Many entities asked EPA to make various qualifications in the rule (e.g. the addition of a biological verification requirement; exclusion of waters with EPA-approved nutrient TMDLs; etc.), but EPA declined to do so. As a result, discharges of nutrients must be limited to meet these ambient criteria. The Utility Council believes it is speculative and unreasonable to base a

¹⁸ 33 U.S.C. §303(d); Fla. Stat. § 403.067.

¹⁹ 75 Fed. Reg. 4174, 4175 (Jan. 26, 2010).

²⁰ Fla. Admin. Code r. 62-610.850(1)(a); 610.800(1).

cost analysis on assumptions that community wastewater treatment utilities will be able to successfully prepare, apply for, receive, and survive any third party legal challenges to some form of exemption from EPA's nutrient criteria rule.

The resulting costs of just these freshwater criteria that have been promulgated are extraordinary. Carollo Engineers, a reputable environmental consulting firm commissioned by the Utility Council to perform a cost analysis, estimates that domestic wastewater treatment utilities will spend \$4.2 to \$6.7 billion in capital upgrades to achieve the freshwater criteria alone, causing affected utilities to increase their annual sewer bills by an average of greater than \$700 per year.²¹ A copy of that cost estimate and a recent addendum is attached.

The majority of Florida's population (and hence permitted utilities) are in coastal regions, and will be affected by the upcoming marine or estuarine portion of the rule. We expect the costs to be substantially higher when that portion of the rule goes into effect.

Closing

EPA's intrusion into the State's water quality program sets unreasonable standards, derails existing effective programs, and has tremendous cost implications that will needlessly impact our ratepayers and burden our already stressed economies. Rather than discount these concerns, EPA should rethink its intervention into Florida water policy. Protecting the environment is the core business of our community domestic wastewater treatment utilities. Florida deserves a nutrient water quality program focused on cost-effective, measurable environmental programs that will continue to protect our pristine waters and improve our impaired waters as we grow.

²¹ See "Carollo Freshwater Cost Estimate," *available at* <http://www.fweauc.org/Positions.asp>.

On behalf of Utility Council members across the state, thank you for your time and efforts on this important issue.

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**FLORIDA WATER ENVIRONMENT ASSOCIATION
UTILITY COUNCIL**

**COSTS FOR UTILITIES AND THEIR
RATEPAYERS
TO COMPLY WITH EPA NUMERIC NUTRIENT
CRITERIA FOR FRESHWATER DISCHARGERS**

November 1, 2010



FLORIDA WATER ENVIRONMENT ASSOCIATION UTILITY COUNCIL

**COSTS FOR UTILITIES AND THEIR RATE PAYERS TO COMPLY WITH EPA NUMERIC
NUTRIENT CRITERIA FOR FRESHWATER DISCHARGERS**

TABLE OF CONTENTS

1.0	ASSUMPTIONS / BASIS OF ESTIMATES	2
2.0	DISCUSSION	4
APPENDIX A – FDEP INDEPENDENT COST ESTIMATE		9

LIST OF TABLES

Table 1	Summary of Estimated Project Costs and the Estimated Average Increase in Annual Sewer Rates for Affected Utilities and their Ratepayers to Implement Numeric Nutrient Criteria.....	6
Table 2	Summary of Estimated Project Costs and the Estimated Average Increase in Annual Sewer Rates Per the Extent of Upgrades Required	7

LIST OF FIGURES

Figure 1: Estimated Project Costs and Annual Sewer Rate Increases by Upgrade Type.....	2
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**FLORIDA WATER ENVIRONMENT ASSOCIATION UTILITY COUNCIL
COSTS FOR UTILITIES AND THEIR RATE PAYERS TO COMPLY WITH EPA NUMERIC
NUTRIENT CRITERIA FOR FRESHWATER DISCHARGERS**

Acronym List

AWT	advanced wastewater treatment
AWWTP	advanced wastewater treatment plant
gpcd	gallons per capita per day
CUP	consumptive use permit
DIW	deep injection wells
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FWEAUC	Florida Water Environment Association Utility Council
HLD	high level disinfection
MF	microfiltration
NNC	numeric nutrient criteria
O&M	operation and maintenance
RO	reverse osmosis
WRF	water reclamation facility

Florida Water Environment Association Utility Council

**COSTS FOR UTILITIES AND THEIR RATE PAYERS TO COMPLY
WITH EPA NUMERIC NUTRIENT CRITERIA FOR FRESHWATER
DISCHARGERS**

In response to the Draft *Water Quality Standards for the State of Florida's Lakes and Flowing Waters* proposed by EPA, a cost estimate for compliance with this rule that is specific to utilities with freshwater discharges has been prepared. A previous cost estimate was prepared to estimate increases in annual user fees that typical utility customers could experience from implementation of EPA's proposed numeric nutrient criteria approach for both fresh and marine/estuarine discharges. The updated cost estimate for freshwater dischargers only is summarized herein. Section 1 lists the assumptions used in preparing the cost estimates. The assumptions are also listed in the Excel file (Carollo_Freshwater_NNC_Costs.xls). The Florida Department of Environmental Protection (FDEP) prepared an independent cost analysis, which is also referred to in this report and attached as Appendix A. The original and updated Florida Water Environment Association Utility Council (FWEAUC) cost estimates as well as the FDEP cost estimate are provided.

Capital and operating cost increases, and the resulting increases in customer charges, are expected to vary greatly depending upon the physical location of each utility, its current treatment system, the suitability of local geologic formations for deep well disposal, and other factors. The range of estimated total project costs is between \$4.2 and \$6.7 billion, and the annual debt service, including incremental operating and maintenance costs, is expected to range from \$430 million to \$620 million per year. These costs are translated into estimated increases in annual customer charges for typical utilities to comply with the rule. Typical increases in customer charges are expected to range from \$570 to \$990 per year. The estimated rate increases to customers varies by category of solution, such as by use of deep well injection or by installation of extensive, tertiary treatment infrastructure. The typical increases in customer charges are summarized in Figure 1, which highlights the variability of costs that each utility could face.

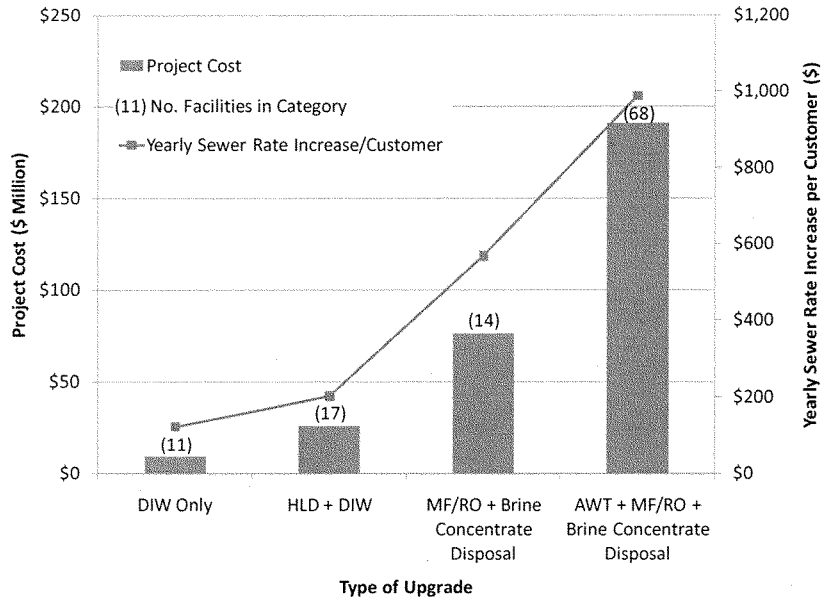


Figure 1: Estimated Project Costs and Annual Sewer Rate Increases by Upgrade Type

1.0 ASSUMPTIONS / BASIS OF ESTIMATES

The assumptions used to determine the updated costs are as follows:

- All water reclamation facilities listed in the current FDEP inventory of wastewater treatment facilities available on the FDEP website are assumed to be active facilities unless noted. Inactive facilities and septage/residuals disposal facilities were not included in the analysis. (<http://www.dep.state.fl.us/water/wastewater/facinfo.htm>).
- No industrial facilities are included.
- The FDEP list of Class I municipal injection wells is assumed current. (<http://www.dep.state.fl.us/Water/uic/index.htm>).
- Project costs include estimated construction costs plus 30% of the estimated construction costs for contingencies and another 20% of the construction costs for administrative, legal, engineering, and financing costs.
- The costs to upgrade privately owned domestic treatment facilities are included in this estimate.
- All plants that currently discharge to freshwater, that are located in Counties that already have deep injection wells (DIW) of any kind (industrial wastewater, RO concentrate, etc.), will be allowed to construct a DIW as their method of disposal with

the exception of Polk County. Polk County's one industrial well is so deep that municipal wells of that nature are assumed to be unlikely.

- Annual debt service is based on 30-year amortization schedule and 5% interest.
- Capital upgrades are assumed to be required for the existing design flow of each facility, while operating costs are based on an estimate of actual usage. Incremental O&M costs assume that all facilities are operating at 50% of design flow.
- The average customer size assumes 2.1 persons per household based on US Census information.
- A per capita flow of 100 gallons per day flow is assumed to estimate the population served by the listed water reclamation facilities.
- The range of project costs is based on two scenarios. In the base scenario, the cost estimate was prepared assuming that only existing facilities that are direct dischargers to freshwater as listed in the FDEP estimate of the cost to comply with the EPA freshwater numeric nutrient rule would be required to comply with the proposed nutrient criteria by either DIW effluent disposal or by upgrading to microfiltration MF/RO. The second, higher estimate of project costs, assumes that all the plants listed in the FDEP cost estimate and facilities listed by FDEP as wet weather and wetlands dischargers would be required to comply with the proposed nutrient rule by upgrading to MF/RO.
- Capital costs to upgrade existing facilities to meet Florida advanced wastewater treatment (AWT) limits are assumed to be \$8.20/gallon per day of permitted treatment capacity.
- A capital cost of \$5.00/gallon per day of permitted treatment capacity (feed water flow) is assumed to add tertiary microfiltration (MF) and reverse osmosis (RO) to existing facilities.
- A capital cost of \$3.10/gallon per day of treatment capacity (feed water flow) is assumed to construct brine concentrators and crystallizers for concentrate treatment.
- A capital cost of \$1.00/gallon per day of treatment capacity is assumed to construct necessary upgrades for tertiary filtration and high-level disinfection prior to deep well injection.
- Dried RO residuals were assumed to be acceptable for landfill disposal in sanitary landfills (i.e. the residuals are not hazardous materials)
- A water recovery of 80% is assumed for MF/RO treatment.
- A capital cost of \$1.10/gallon per day of treatment capacity is assumed to add a new deep well to a facility for effluent disposal.
- An incremental cost of \$1.00/1000 gallons treated is assumed for the annual operation and maintenance (O&M) costs associated with running AWT and MF/RO.
- An incremental cost of \$0.50/1000 gallons treated is assumed for the annual O&M costs associated with running equipment associated with tertiary filters and high-level disinfection (HLD).
- A cost of \$3.00/1000 gallons treated is assumed for the O&M cost associated with running a brine concentrator/crystallizer. This is based on the facility flow and is in addition to the costs for operating the AWT and MF/RO facilities.

- All water reclamation facilities are assumed to incur similar construction and operating costs (i.e. the differences that are expected from plant to plant in actuality are averaged out in this analysis).
- No costs were included for plants with existing DIWs.
- Where any flow discrepancies existed between the FDEP and the FWEAUC cost estimate, the flow listed in the EPA PCS database was used.
- No plants discharging to marine waters or South Florida canals are included in this cost estimate.

2.0 DISCUSSION

The minimum costs to the utility sector from EPA's proposed rule on numeric nutrient criteria for freshwaters were prepared using a base list of existing treatment facilities that currently discharge reclaimed water to freshwater lakes, rivers, and streams. This base list for this updated cost estimate includes the facilities used in the FDEP cost estimate with the exception of the Pinellas County's South Cross Bayou Water Reclamation Facility (WRF), the City of Clearwater's Northeast Advanced Wastewater Treatment Plant (AWWTP), and the Seacoast Utilities PGA WWTP. The South Cross Bayou WRF and Northeast AWWTP both discharge to marine waters. The PGA WWTP discharges to a South Florida canal. The upper end of the cost range was developed by adding to the base list those facilities that discharge to wetlands and intermittently to freshwaters during wet weather. The estimate for the base list plus wetland and wet weather dischargers includes those facilities listed as such by FDEP.

The following example is provided to illustrate how the unit cost assumptions were used to estimate the costs to upgrade facilities to meet the EPA rule. A 10 mgd facility supplying reclaimed water for reuse needs to upgrade their treatment process to provide AWT and MF/RO to meet the proposed numeric nutrient criteria. Upgrading to AWT costs \$8.20 per gallon of treatment capacity, or \$82 million for this example. The addition of MF/RO costs \$5.00 per gallon of treatment capacity, costing this plant an additional \$50 million. Concentrate disposal will be accomplished with a brine concentrator and crystallizer because DIWs are not possible in this area. At \$3.10 per gallon of treatment capacity, this is an additional \$31 million for the concentrators and crystallizers. The total capital cost for this project would be \$163 million, plus 30% of the construction cost for contingencies and another 20% for project costs for a total of \$254 million. Incremental O&M costs for the upgraded plant were estimated by assuming that the facility is operating at 50% of the total plant design capacity, or 5 mgd for this example. The additional O&M for AWT and MF/RO is \$1.00 per 1000 gallons treated, which equates to an additional \$5,000 per day or \$150,000 per month. The brine disposal O&M is an additional \$3.00 per 1000 gallons treated, which equates to another \$15,000 per day or \$450,000 per month. This is a total of \$600,000 per month in additional O&M costs for this facility.

The debt service at 5% interest over 30 years for the capital cost of the upgrades will be \$16.5 million per year. This equates to a debt service per 1000 gallons treated of \$4.53. To estimate the population for the service area of the 10 mgd facility at 50 percent capacity, a unit flow rate of 100 gallons of wastewater per capita per day (gpcd) is assumed. The

estimated population of this area is 50,000 people. Therefore, the capital cost per household per month, assuming an average household of 2.1 people, is \$57. Similarly, the O&M cost per household per month is \$25. This is a total additional cost of \$82 per month, or \$988 per year, for each household. A similar calculation was done for each freshwater discharger.

The updated FWEAUC cost estimates for facilities discharging to freshwaters is provided in Table 1. The original FWEAUC and FDEP cost estimates are also provided in Table 1 for comparison. The estimated total project costs for utilities in the State to comply with the Proposed Final Rule for Freshwaters is between \$4.2 and \$6.7 billion, depending on how wetland, wet weather and reuse systems are regulated. This agrees very well with the FDEP estimate of \$4.2 billion, which was based only on direct dischargers. Actual costs to the utility sector will be higher than this minimum base cost and are dependent upon how many predominately reuse and wet weather or wetland discharge facilities also are required to meet the more stringent discharge standards. At this time, the language in the rule is unclear as to how wetland, wet weather, and reuse systems will be regulated.

The annual debt service, including incremental operating and maintenance costs, is expected to range from a low of \$430 million up to \$620 million. Converting this debt service to average residential wastewater rates results in estimated increases in annual customer sewer rates needed to fund compliance with the rule that range from \$578 to \$696 per customer per year. These are the average values for all users in the entire state that now discharge to freshwaters.

The actual sewer rate increase by utility will be highly variable, depending upon the proximity of a utility to a geological area where deep well disposal is allowed, the extent of the utility's existing reuse system, the utility's desire to supplement existing groundwater supplies with the reclaimed water from MF/RO treatment to augment potable supplies indirectly, and other factors.

Table 1 Summary of Estimated Project Costs and the Estimated Average Increase in Annual Sewer Rates for Affected Utilities and their Ratepayers to Implement Numeric Nutrient Criteria.					
Source of Estimate	Plants Included	Project Cost	Annual Debt Service	Annual Debt Service (Including O&M)	Increase in Annual Operating Costs
Updated FWEAUC	Base List of Florida Freshwater Dischargers (Direct Discharges Only)	\$4,200,000,000	\$276,000,000	\$430,000,000	\$155,000,000
	Base List + All Other Freshwater Dischargers	\$6,700,000,000	\$438,000,000	\$619,000,000	\$181,000,000
Original FWEAUC	Florida Facilities with NPDES Permits	\$24,400,000,000	\$1,600,000,000	\$2,000,000,000	\$433,000,000
	All Florida Facilities	\$50,700,000,000	\$3,300,000,000	\$4,600,000,000	\$1,300,000,000
FDEP	Base List of Florida Freshwater Dischargers (Direct Dischargers Only) ⁽¹⁾	\$4,200,000,000	\$271,000,000	\$456,000,000	\$185,000,000
Notes: 1. The FDEP Base List includes South Cross Bayou WRF, Clearwater Northeast AWWTP, and Seacoast Utilities PGA WWTP, which are not included in the updated base list. These were excluded from the updated base list because they discharge to marine waters or South Florida Canals.					

79

Table 2 Summary of Estimated Project Costs and the Estimated Average Increase in Annual Sewer Rates Per the Extent of Upgrades Required

Type of Upgrade (Number of Facilities in this Estimate)	Project Cost	Estimated Yearly Sewer Rate Increase per Customer
AWT + MF/RO + Brine Concentrate Disposal (68)	\$191,000,000	\$990
MF/RO + Brine Concentrate Disposal (14)	\$76,000,000	\$570
HLD + DIW (17)	\$26,000,000	\$200
DIW Only (11)	\$9,000,000	\$120

The corresponding estimated increases in annual costs by the type of treatment plant upgrades assumed to be required are provided in Table 2. The types of upgrades listed in Table 2 are representative of those that would be required for plants to comply with the proposed numeric nutrient criteria for Florida's lakes and flowing waters. The type of upgrades required for a freshwater discharger to comply with the proposed rule will depend on the existing level of treatment at the plant and the proximity of the plant to a DIW. As a result of this variability, the required increases in sewer rates might be as low as \$120 per year for those areas able to use deep well injection, to nearly \$990 per year for those utilities relying on extensive MF/RO treatment. Only facilities in the same county as an existing DIW are assumed to have the option to discharge to a DIW, all others must use MF/RO. Facilities that are not meeting AWT limits must also upgrade their plants to AWT if using MF/RO, or upgrade to HLD if using DIW. Also shown in Table 2, is the number of facilities used in this cost estimate that were estimated to fall into each of these categories. As shown here, most of the facilities will require the more costly upgrades.

The availability of DIWs for effluent disposal will be a lower cost alternative for a utility when compared to construction of a new or expanded reuse system or upgraded treatment facilities. This could unfortunately reduce the amount of reclaimed water that is reused, and is contrary to the State's desire to promote the use of reclaimed water as an alternative water supply. Utilities that do not have the option of a DIW, must find another method to meet the numeric nutrient criteria such as extensive reuse or implementing a high performance treatment technology like MF/RO. The feasibility and cost competitiveness of reuse as a disposal alternative will depend on how reuse facilities can treat and discharge or store excess flows generated during wet weather. Currently the Apricot Rule encourages reuse by allowing reuse systems to discharge excess water during wet weather if the reclaimed water meets Florida AWT standards. If wet weather discharges must meet the numeric water quality criteria as currently proposed, there would be a strong disincentive for communities to implement, continue, or expand reuse systems. Other utilities faced with consumptive use permit (CUP) conditions for reuse and the need to meet the NNC rule, and unable to use a

DIW, may find it more economical to implement MF/RO to meet drinking water standards and directly inject the water into a potable aquifer. Ultimately, a currently unknown number of communities will be forced to implement MF/RO with brine concentrate disposal. These customers are expected to experience an increase in user charges of \$570 to \$990 per year per household.

This updated estimate includes costs for 110 facilities that will likely be affected by EPA's *Water Quality Standards for the State of Florida's Lakes and Flowing Waters*. These plants have a total capacity to discharge to freshwater of about 370 mgd. The majority of surface water dischargers in the State of Florida discharge to marine waters. An additional 81 facilities in Florida, with a total capacity of nearly 900 mgd, have NPDES permits. These facilities could be regulated under the second phase of EPA's proposed NNC rules. Therefore, these estimated costs to freshwater dischargers represent a fraction of the total cost that may be ultimately incurred for meeting the proposed numeric nutrient criteria.

APPENDIX A – FDEP INDEPENDENT COST ESTIMATE

**FDEP Review of EPA's
"Preliminary Estimate of
Potential Compliance Costs
and Benefits Associated with
EPA's Proposed Numeric
Nutrient Criteria for Florida"**

Prepared January 2010 by the Environmental Protection
Agency

Division of Environmental Assessment and Restoration

4/28/2010

Contents

Preliminary Estimate of Potential Compliance Costs and Benefits Associated with EPA's Proposed Numeric Nutrient Criteria for Florida	1
Overall Comment: The above cost estimates significantly underestimate those that would be incurred for compliance with EPA's proposed criteria.	2
Background on Preliminary Cost Estimates	3
Municipal WWTPs	4
Assessment Procedure.....	5
Industrial Dischargers	6
Assessment Procedure.....	7
Urban Storm Water	9
Assessment Procedure.....	9
Agriculture	10
Assessment Procedure.....	11
Septic Systems.....	12
Assessment Procedure.....	12
Benefits Analysis.....	13
Conclusions	14

Preliminary Estimate of Potential Compliance Costs and Benefits Associated with EPA's Proposed Numeric Nutrient Criteria for Florida

EPA's Economic Analysis stated

*EPA conducted a preliminary estimate of the potential incremental compliance and state resource costs associated with EPA's proposed nutrient criteria for lakes and streams in Florida. Incremental costs associated with the proposed rule represent the costs above and beyond the costs that would be incurred for compliance with the baseline criteria. For this analysis, baseline costs represent the costs necessary for compliance with FDEP's draft water quality standard (WQS) changes (Chapter 62-302 and 62-303; July 2009), and any costs incurred to reduce nutrient loads to waters on the existing state Clean Water Act (CWA) Section 303(d) list or with an existing total maximum daily load (TMDL). The preliminary cost estimates described in **Attachment #1** to this Report are based on criteria representative of these draft changes¹, and thus, represent potential baseline expenditures.*

*The incremental costs (cost savings) associated with implementation of the proposed numeric nutrient criteria include incremental compliance and government resource costs. **Exhibit ES-1** summarizes the preliminary estimates of compliance costs; actual costs will depend on the procedures for assessing waters for compliance and the site-specific source reductions needed to attain the criteria.*

Exhibit ES-1. Preliminary Estimates of Potential Annual Control Costs Under the Proposed Rule (2009 dollars) [DEP note – the costs listed in Exhibit ES-1 of the EPA document did not match the summary costs in the summary table (Exhibit 8-1) in Chapter 8 – it is assumed that the Chapter 8 costs, which are consistent with those set forth in the individual chapters, are correct. Therefore, the corrected costs are shown in the revised table below]

Source Sector	Potential Controls	Annual Costs (millions)
Major Municipal WWTPs	BNR to reduce TN and/or TP	\$42.7
Minor Municipal WWTPs	BNR to reduce TN and/or TP	\$9.3
Industrial Dischargers	Process optimization/source control	\$2.3
General Dischargers	Process optimization/source control	\$0.6
Urban Storm Water	Uncertain	Not estimated ¹
Agriculture	Nutrient management	\$27.9
	Riparian forest buffers	\$5.1
	Livestock fencing	\$1.9
Septic Systems	Upgrade to advanced nutrient treatment	\$12.4 – \$40.2
Total		\$102.1 – \$130.0

BNR= Biological Nutrient Removal

TN = total nitrogen

TP = total phosphorus

WWTP = wastewater treatment plant

¹Costs are not estimated because the need for incremental controls is uncertain.

The EPA report also notes that *"In addition, state resource costs to complete TMDLs for the 973 potential incrementally impaired waters could be approximately \$2.5 million per year, based on national average costs, assuming a 9-year implementation schedule. This estimate does not include the potential cost saving that could be associated with the 39 waters currently listed as impaired for nutrients that may not exceed the numeric criteria, or incremental costs and cost savings associated with completed TMDLs for which the current TN and TP targets are higher or lower than FDEP's draft criteria."*

Note that FDEP's draft numeric nutrient criteria differ slightly from those used to estimate preliminary baseline compliance costs.

Overall Comment: The above cost estimates significantly underestimate those that would be incurred for compliance with EPA's proposed criteria.

The Department performed a cost estimate that indicates that the EPA significantly underestimated the costs to achieve the proposed EPA criteria. One of the primary reasons is that EPA assumed for all the estimates that certain costs would have already been incurred in order to meet the Department's proposed numeric nutrient criteria (NNC). This assumption is invalid because the Department's proposed NNC have not yet been adopted. Therefore, all of the Department's estimates are based on additional costs that would be incurred above the currently implemented controls in order to achieve EPA's proposed criteria. In addition, the Department has used the best available technical information to perform a more comprehensive analysis, which has also resulted in increases in the cost estimates. The specific reasons for the increases are as follows and are described in more detail in the discussion regarding each of the assessed source sectors:

- For domestic wastewater facilities, the level of technology used by EPA to estimate costs was not sufficient to achieve the proposed criteria. Additional technologies, such as reverse osmosis, will likely be required to meet the proposed criteria.
- For industrial wastewater facilities, EPA used an assumption that process controls on the order of \$25,000 per year would be sufficient for industrial wastewater facilities to meet the proposed criteria. However, source controls alone will not be sufficient to meet the proposed criteria. Some industrial facilities, such as pulp mills, have organic wastewaters similar to domestic wastewater in nature, and will require tertiary treatment similar to domestic wastewater treatment systems to meet the proposed criteria. Other industrial facilities, such as fertilizer manufacturing facilities, have inorganic wastewater streams high in nitrogen and phosphorus that are not amenable to biological treatment and will require the use of chemical and physical treatment systems, such as reverse osmosis, to meet the proposed criteria.
- EPA failed to estimate any costs for the treatment of urban stormwater needed to meet the proposed criteria. Even though Florida has had stormwater treatment requirements for new development since the early 1980s, it is highly likely that "older" urban areas will need to construct stormwater system retrofits to meet the proposed EPA criteria.
- For agriculture, EPA significantly underestimated the affected acreage of agriculture (6.13 million acres versus 13.6 million acres for the FDACS estimate). In addition, the EPA cost estimate assumed that only a subset of typical BMPs (nutrient retention, forested buffers and livestock fencing) would be needed to achieve the criterion. In contrast, the FDACS estimate assumed that ALL typical BMPs would be necessary (FDACS has developed BMP manuals for a variety of agricultural operations, and the BMP

manuals developed to date and a map showing the locations of BMPs implemented are provided as supplemental information to DEP's comments). In fact, based on modeled reduction estimates for typical BMPs, the FDACS estimate concluded that additional on-farm water treatment/retention facilities would be necessary to achieve the EPA's proposed criteria.

A comparison of the Department's estimated annual costs for each source sector with the EPA estimated cost for that source sector is shown in Table 1, below.

Table 1 – A Comparison of FDEP estimated annual costs with EPA estimated annual costs (M\$)

Source Sector	Annual Costs (in Millions) ¹			
	FDEP Estimate		EPA Estimate	
	Low	High	Low	High
Municipal WWTPs	\$456		\$52	
Industrial & General Dischargers	\$2,113		\$3	
Urban Storm Water	\$1,967		-	
Agriculture ²	\$271	\$974	\$35	
Septic Systems	\$937	\$2,888	\$12	\$40
Total	\$5,744	\$8,398	\$102	\$130

¹Assumptions for annual cost estimates are set forth in individual source sector methodology descriptions.

²FDEP estimate for agricultural source sector prepared by Florida Department of Agriculture and Consumer Services, in cooperation with the University of Florida Institute for Food and Agricultural Sciences and Soil and Water Engineering Technology, Inc.

³FDACS estimates cover annual capital costs + O&M. Additional lost revenues would also be incurred and are described in more detail in the agricultural section.

Background on Preliminary Cost Estimates

The Department performed a cost estimate for each source sector identified in the EPA cost estimates. The methodology and assumptions used in deriving these estimates are described in detail in the section covering each source sector. Table 2 shows the potential source controls employed in the Department's estimate for each source sector and the resultant annual costs associated with those controls.

Table 2 -- FDEP potential controls and associated annual costs for source sectors

Source Sector	Potential Controls	Annual Costs (Millions)
Municipal WWTPs	Advanced Waste Treatment +Reverse Osmosis and brine disposal or Injection well ¹	\$456
Industrial Dischargers	Reverse Osmosis and brine disposal	\$2,113
Urban Storm Water	Retrofit to current stormwater treatment standards (retention & detention + chemical treatment)	\$1,967
Agriculture	All typical owner-implemented BMPs + on-farm water treatment/retention facilities	\$271 - \$974
Septic Systems	Upgrade to high nutrient removal Septic Systems	\$937 - \$2888
Total		\$5,744 - \$8,398

¹In counties with existing injection wells

Municipal WWTPs

EPA estimated 47 major and 53 minor municipal discharges to lakes and freshwater streams that would be affected by the proposed rule. EPA considered the limit of technology (LOT) for biological nutrient removal to be 3 mg/L for TN and 0.1 mg/L for TP. EPA's cost estimate acknowledged that "All of the proposed TN criteria are below the LOT" and "Proposed TP criteria for flowing waters are at or below the LOT in three of the five regions" and "proposed TP criteria for lakes are below the LOT". The EPA cost estimates were based on retrofitting existing biological treatment trains to achieve the LOT for TN and TP. The estimates noted that "where it may be technologically infeasible to attain the standards, a use attainability analysis may be needed".

The Department performed a cost estimate, which assumed technologies such as reverse osmosis could be used to meet the proposed criteria, or that facilities may elect to cease their surface water discharges through the use of less costly deep well injection. The Department's analysis indicates that the EPA estimates significantly underestimate the costs to achieve the proposed criteria for the following reasons:

- The EPA cost estimate assumed that only a few facilities would be required to upgrade to meet the EPA WQC because most facilities would already be upgraded to meet the proposed DEP numeric nutrient criteria (NNC). This assumption is invalid, since the proposed DEP NNC have not yet been adopted. This estimate includes costs associated with meeting the proposed EPA NNC over and above the cost of meeting current discharge limitations.
- The EPA cost estimate was based on a level of treatment (LOT) for biological nutrient removal that would not meet the EPA WQC. For example, in the panhandle region the EPA cost estimate was based on a LOT of TN < 3 mg/L and TP < 0.1 mg/L. However, EPA's WQC for the region was TN < 0.824 mg/L and TP < 0.043 mg/L.
- For the most part, the EPA Report used capital and Operational and Maintenance (O & M) unit costs derived from CAPDETWorks for various treatment schemes. Unit costs that were used in the EPA Report appeared to be low when compared to comparable facilities constructed in Florida.
- Costs for two facilities on EPA's list were not included since one was inactivated and the other no longer discharges to surface water.

To highlight EPA's significant under-estimation of costs, the city of Cross City (0.4 million gallons/day permitted capacity) estimated its capital costs to comply with the proposed nutrient criteria to be \$5,800,000. The EPA Report estimated Cross City's capital costs at \$422,799 (see Appendix A of EPA Report).

Table 3 below summarizes the Department's estimates for total capital costs, O & M costs, and annual costs for domestic wastewater treatment facilities in the State that currently discharge to freshwater streams and lakes:

Table 3 – Cost Estimates for Domestic Wastewater Facilities

Total Capital Cost for Retrofit (M\$)	Annual O & M costs (M\$)	30-year Annualized Costs (M\$)
\$4,167	\$185	\$456

Assessment Procedure

1. Only domestic wastewater facilities discharging to fresh waters (streams and lakes) with NPDES permits were included in the estimate. The lists of domestic wastewater facilities contained in both Exhibit 8 (page 7) and Appendix A of the EPA's *Preliminary Estimate of Potential Compliance Costs and Benefits Associated with EPA's Proposed Numeric Nutrient Criteria for Florida*, January 2010, ("EPA Report") were used.
2. Advanced biological treatment and reverse osmosis were assumed to be needed to meet the proposed EPA water quality criteria (WQC) for both nitrogen and phosphorus prior to discharge to surface waters. Disposal by injection wells after filtration/high level disinfection instead of surface water discharge were assumed feasible in lieu of advanced biological treatment and reverse osmosis in Florida counties with existing domestic injection well disposal systems.
3. Permitted flow capacity was used to calculate capital costs.
4. Unit capital costs to upgrade were based on:
 - For facilities that do not currently provide advanced biological wastewater treatment - \$16.30/gallon (advanced treatment (\$8.20/ gallon)+ reverse osmosis (\$5.00/ gallon)+ brine disposal (\$3.10/ gallon));
 - For facilities that currently provide advanced biological wastewater treatment - \$8.10/gallon (reverse osmosis (\$5.00/ gallon)+ brine disposal (\$3.10/ gallon)); and
 - For facilities that are located in counties with existing domestic injection wells that are assumed to cease their current surface water discharges - \$2.10/gallon (filtration/high level disinfection (\$1.00/gallon) + and injection well disposal (\$1.10/gallon)).
5. Twenty five percent was added to unit capital costs for planning, engineering and construction contingencies.
6. Fifty percent of the permitted flow capacity was used to calculate O&M costs as facilities typically operate at less than their permitted capacities.
7. Unit operation and maintenance costs were based on:
 - For facilities that do not currently provide advanced waste treatment - \$4.00/1000 gallons (advanced treatment/membrane filter/reverse osmosis (\$1.00/1000 gallons) + brine disposal (\$3.00/1000 gallons));
 - For facilities that currently provide advanced biological wastewater treatment - \$3.00/1000 gallons (brine disposal (\$3.00/ 1000 gallons)); and
 - For facilities that are located in counties with existing domestic injection wells that are assumed to cease their current surface water discharges - \$1.60/1000 gallons (filtration/high level disinfection (\$0.50/1000 gallons) + injection well disposal (\$1.10/1000 gallons)).
8. The 30-year annualized cost assumed a 5% interest rate.
9. The following unit costs were obtained from the report prepared for the Florida Water Environment Association Utilities Council, *Technologies to Meet Numeric Nutrient Criteria at Florida's Domestic Wastewater Reclamation Facilities*, March 2, 2010, by Carollo Engineers ("FWEA Report"). The unit costs

contained in the FWEA Report were extensively documented and determined by the Department to be reasonable.

- Unit capital costs - advanced treatment (\$8.20/ gallon), reverse osmosis (\$5.00/ gallon), brine disposal (\$3.10/ gallon), and injection well disposal (\$1.10/gallon); and
- Unit operation and maintenance costs - advanced treatment/membrane filter/reverse osmosis (\$1.00/1000 gallons), brine disposal (\$3.00/1000 gallons), and injection well disposal (\$1.10/1000 gallons).

10. The following unit costs were obtained from cost curves contained in EPA's Innovative and Alternative Technology Assessment Manual (EPA-430/9-78-009) updated for 2010 costs:

- Unit capital costs - filtration/high level disinfection (\$1.00/gallon); and
- Unit operation and maintenance costs - filtration/high level disinfection (\$0.50/1000 gallons).

Detailed costs for each NPDES domestic wastewater facility are set forth in Appendix 1.

Industrial Dischargers

The EPA estimate noted that "In most cases, it is more cost effective for industrial dischargers to control the source of nutrients in the effluent through BMPs, product substitution, process modifications, or process optimization than to treat the entire effluent prior to discharge." Their estimate also noted that such costs would be highly site specific. To illustrate the potential magnitude of costs, EPA estimated that, if dischargers spend an average of \$25,000 per year on source control and process optimization to reduce nutrient loads, total annual costs to the industrial and general-permitted dischargers (Exhibit 2-2) would be \$2.9 million.

The Department performed a cost estimate, which assumes that source controls alone would be insufficient to meet the proposed criteria, and that reverse osmosis would be required to meet the proposed criteria. The Department's analysis indicates that the EPA estimates significantly underestimate the costs to achieve the proposed criteria for the following reasons:

- For industrial wastewater facilities EPA used an assumption that process controls in the order of \$25,000 per year would be sufficient for industrial wastewater facilities to meet the proposed criteria. However, source controls alone will not be sufficient to meet the proposed criteria. Some industrial facilities, such as pulp mills, have organic wastewaters similar to domestic wastewater in nature, and therefore will require tertiary treatment similar to domestic wastewater treatment systems to meet the proposed criteria. Other industrial facilities, such as fertilizer manufacturing facilities have inorganic wastewater streams high in nitrogen and phosphorus that are not amenable to biological treatment, and will require the use of chemical and physical treatment systems, such as reverse osmosis to meet the proposed criteria.
- EPA assumed 94 Industrial Wastewater (IW) facilities would be affected by numeric criteria. The Department excluded certain Standard Industrial Code (SIC) categories unlikely to discharge nutrients and added other SIC categories, resulting in a net total of 78 facilities.

- EPA assumed a 20 year payment period with a fixed interest rate of 7%. The Department used the values of 30 years and 5% to be consistent with the estimates for domestic wastewater and urban runoff.

Table 4 below summarizes the Department's estimates for total capital costs, operational and maintenance costs, and annual costs for industrial wastewater facilities discharging to fresh water streams or lakes:

Table 4 – Cost Estimates for Retrofit of Industrial and General Dischargers

Total Capital Cost for Retrofit (M\$)	Annual O & M costs (M\$)	30-year Annualized Costs (M\$)
\$23,792	\$493	\$2,113

Assessment Procedure

1. This estimate is restricted to IW facilities that discharge to freshwater flowing streams and lakes under individual NPDES permits.
2. The list of facilities is further restricted to:
 - a. facilities that have numeric discharge limitations for any form of nitrogen and/or phosphorus in their NPDES IW permits,
 - b. facilities that are required to report the concentration of any form of nitrogen and/or phosphorus in their NPDES IW permits, and
 - c. other NPDES permitted IW facilities that are not currently required to monitor nutrients, but are in the SIC categories for a and b, above.
3. The following facilities are not included:
 - a. Potable water facilities (SIC 4941) that use membrane processes, primarily Reverse osmosis (RO), for demineralization are not included in this exercise. This exercise assumes that the reject wastewater stream from membrane separation processes will be disposed by other means than surface water discharge;
 - b. Stormwater Treatment Areas (STAs) (SIC 3822) developed for Everglades restoration efforts within the Everglades Protection Area have separate criteria and are not included.
 - c. NPDES permitted facilities in various SIC categories that meet the criteria in items 1 and 2, above, but which have not discharged to surface water within the past five years, based on U.S. Environmental Protection Agency's (EPA) Permit Compliance System (PCS) database.
4. RO is likely needed for treating IW effluent to meet numeric nutrient criteria. RO produces a concentrated wastewater stream that will need to be disposed by other means than surface water discharge.
5. Discharge estimation assumptions are as follows:

- a. The discharge flows used are based on data obtained from WAFR/PCS, as reported on Discharge Monitoring Reports (DMRs) from permitted facilities for the five year period from January 1, 2005 through December 31, 2009. Only data for outfalls with nutrient limits are used in the analysis.
 - b. Estimated annual discharges were assumed for 340 days/year of discharge, except for facilities that are known to have intermittent discharges, in which case actual or estimated days/year for discharge were used.
 - c. Monthly average flows were used as the flow basis in estimating annual O&M costs.
 - d. Daily maximum flow data were used as a rough equivalent of maximum design capacity for estimating capital costs.
6. Cost estimation assumptions are as follows:
- a. Costs assume that reverse osmosis (RO) will be used to provide tertiary treatment to meet the proposed numeric nutrient criteria.
 - b. Unit costs for reverse osmosis from the FWEA Report were used, under the assumption the unit costs were applicable to both domestic and industrial wastewater. However, costs for reverse osmosis for industrial wastewaters are likely to be significantly higher than those for domestic wastewater. Industrial wastewaters may be concentrated, higher strength wastewaters with more variation in their characteristics that may result in low RO membrane recoveries and require additional pre and post RO treatment.
 - c. A unit cost of \$3.00/1,000 gallons RO treatment with brine concentrator, cited in the FWEA Report, was used to estimate annual O&M costs.
 - d. Capital cost estimates assumed a rate of \$8.10/gallon of maximum design capacity per facility for construction (\$5.00/gal for RO system construction + \$3.10/gal for brine disposal system construction). An additional 25% was added to the construction cost for engineering and contingency.
 - e. The thirty year annualized cost assumed a 5% interest rate.
7. There is some limited experience and cost data available in the use of RO to treat process waters from gypsum stack systems associated with fertilizer manufacturing facilities (SIC 2874). These costs have been in the range of \$15-\$25 per thousand gallons of water treated using RO and are indicative of the high strength nature of process wastewater. These costs included both capital and O&M costs. During operation a fertilizer manufacturing plant does not discharge, except during unusual rain events. However, when a plant ceases operation, process water contained in the Gypsum stacks and cooling ponds must be treated and discharged over a five year closure period, followed by post-closure treatment and discharge of water draining from the gypsum stack systems over periods of up to 50 years. An average unit cost of \$20/1000 gallons was multiplied by the estimated process water volumes over the closure and post closure periods obtained from closure cost estimates developed by the owners of the gypsum stacks and maintained by the Department's

Bureau of Mining and Minerals Regulation. The total additional costs for treating 55.54 billion gallons of process water from gypsum stacks by RO to meet the proposed EPA criteria are estimated at \$1,110,800,000. A 30-year annualized cost was calculated using a 5% interest rate. The resultant annual costs were \$72 million.

Detailed costs for NPDES Industrial wastewater facilities in affected SIC categories are provided in Appendix 2.

Urban Storm Water

The EPA did not estimate costs for implementation of additional nonpoint source controls because “the need for incremental controls is uncertain”, although the EPA document did note that “Numeric nutrient criteria may affect urban storm water dischargers through changes to permit requirements or the TMDL and BMAP process.” In order to provide an estimate for such potential costs, the Department performed analyses as set forth in the following procedure. The estimate is restricted to NPDES municipal separate storm sewer systems (MS4) that are covered under either a Phase I individual permit or the Phase II Generic Permit and only those permitted MS4s that either have 100% of the stormwater discharge to freshwater bodies, or the relative portion of the MS4 that has a discharge to freshwater bodies. Total costs, O&M costs, annual costs and annual costs per household are in Table 5 below:

Table 5 – Cost Estimates for Retrofit of MS4 Projects¹

Capital Cost for Retrofit (M\$)	Annual O & M costs (M\$)	30-year Annualized Costs (M\$)	30-year Annual Cost per Household (\$)
\$17,101	\$855	\$1,967	\$359

¹The above costs do not account for urban nonpoint source runoff coming from lands within local government jurisdictions, especially for counties, that are not part of the permitted MS4 system. This urban nonpoint stormwater is covered by a Load Allocation within an adopted TMDL and local governments are responsible for meeting these load reductions. This, this estimation of urban stormwater costs underestimates the total costs likely to be incurred to reduce urban stormwater loadings as needed to meet the proposed EPA criteria.

Assessment Procedure

1. The estimated total urban land area for the MS4s in Florida was determined from the 2000 U.S. Census¹.
2. The subtotal of the pre-1982 urban area that discharged to freshwater was estimated from a GIS analysis. The analysis involved creating overlaying GIS layers of the urban areas and the freshwater WBIDs that overlapped the pre-1982 urban areas and then determining the freshwater subtotal from the resultant overlapping layers. The total urban area discharging to freshwater was determined to be 3,009,297 acres.
3. The subtotal of the area determined in step 2 that was developed prior to 1982 was then determined. For the purposes of this estimate, it was assumed that implementation of urban stormwater measures subsequent to the 1982 stormwater rules would achieve the proposed EPA criteria, but that urban areas

¹ The Florida Statutes that regulate the MS4 program reference the urbanized areas of the most recent decennial U.S. Census as the method for determining the regulated MS4 community. In addition, the urban boundaries were readily available as a GIS layer that could be used to estimate their area.

without such measures would not. The urban land use data from 1982² indicated that there were 3,141,631 urban land use acres at that time. That area increased to 4,032,659 acres based on the 2000 U.S. Census urban area information, for a percent change of approximately 22%. Therefore, for the purpose of this estimate it was assumed that this relative percentage would apply uniformly to all urban areas assessed. Therefore the urban area requiring treatment was determined by multiplying the urban areas discharging to freshwaters by 78% ($3,009,297 \times 78\% = 2,344,242$ acres).

4. Florida has undertaken numerous retrofit projects to address pollutant loading from municipal stormwater runoff, many of which required monitoring in order to show the effectiveness of the retrofit. The data from these projects have been compiled into a database by the Department, which include information on the acreage of the area that was retrofitted. This information was used to derive a cost per unit acre to retrofit urban areas for nutrient removal. The median cost per acre for such retrofit projects was \$7,295 per acre, with a range of \$863 per acre to \$37,002 per acre from the 10th to the 90th percentile. For the purposes of this estimate, the median value was used.
5. Using the acreage derived in step 3 and the unit area retrofit costs in step 4, the total capital cost to implement such retrofit projects was estimated as \$17,100,683,851.
6. The O&M costs were estimated based on literature available³. Although actual costs can often exceed this rate, a conservative estimate of 5% of the capital outlay was chosen for this estimate. The O & M costs were not escalated for inflation. The resultant estimated annual O & M costs were \$855,034,192.
7. A 30-year annualized cost was calculated using a 5% interest. The resultant annual costs were \$1,967,458,217.92
8. Using the 2000 Census data, the number of households in the State of Florida within the freshwater portion of the urban area was calculated at 5,475,652. This value was determined by dividing the urban area population (13,470,104) by the average number of persons per household (2.46) in 2000. The 30 year annualized cost per household was then calculated by dividing the 30 year annualized costs by the number of households. The resultant annual cost per household was approximately \$359.

Detailed costs for each MS4 are set forth in Appendix 3.

Agriculture

EPA estimated that annual costs for implementation of agricultural Best Management Practices (BMPs) would be \$27.8 million for nutrient management, \$5.0 million for forest buffers, and \$1.9 million for livestock fencing. Nutrient management costs were based on a useful life of 3 years and a discount rate of 7%, the forest buffer costs were based on a useful life of 30 years and a discount rate of 7%, and the livestock fencing costs were based on a 10-year useful life and a rate of 7%. These estimates assume that there are no O & M costs and that the Department's proposed numeric nutrient criteria are already in place.

² The 78 percent value is a statewide percentage taken from the document entitled *Land Use Changes in Florida's Urbanized Areas* (UF, 1991).

³ *The Use of Best Management Practices (BMPs) in Urban Watersheds* – U.S. EPA, 2004; Stormwater: The Journal for Surface Water Quality Professionals, Nov.-Dec., 2008.

The Florida Department of Agriculture and Consumer Services (FDACS), in coordination with the University of Florida Institute for Food and Agricultural Science and Soil and Water Engineering Technology, Inc., performed an independent cost estimate⁴ (Appendix 4) that indicates that the EPA estimates significantly underestimate the costs to achieve the proposed criteria for the following primary reasons:

- The EPA cost estimate assumed that only 6.13 million acres of agricultural land would be required to implement BMPs to meet the EPA WQC because most agriculture in the state would already have BMPs implemented to meet the proposed DEP numeric nutrient criteria (NNC) and that the proposed EPA criteria would have only an “incremental” impact. This assumption is invalid, since the proposed DEP NNC have not yet been adopted. The full estimate resulted in a gross area of affected agricultural land of 13.60 million acres.
- The EPA cost estimate assumed that only a subset of typical BMPs (nutrient retention, forested buffers and livestock fencing) would achieve the criterion. The FDACS estimate assumed that ALL typical BMPs would be necessary. In addition, based on modeled reduction estimates for typical BMPs, the FDACS estimate concluded that additional on-farm water treatment/retention facilities would be necessary to achieve the EPA’s proposed criteria. Thus, additional costs for the on-farm water treatment/retention facilities would be incurred. These additional costs account are reflected in the upper end of the range shown.

Total capital costs, annual operational and maintenance costs, and 20-year annual costs are in Table 6 below:

Table 6 – Cost Estimates for Agriculture

Total Capital Cost for BMPs (M\$)	Annual O & M costs (M\$)	20-year Annualized Costs (M\$)
855 – 3,069	171 – 614	271 – 974

In addition to the additional capital and O & M costs estimated to be incurred by the agricultural industry, the FDACS estimate also estimated regional economic impacts of production land displacement, since approximately 10 percent of agricultural land was estimated to be taken out of production due to implementation of on-farm water treatment/retention systems. Those economic impacts were estimated to be a \$631 million direct loss of annual agricultural industry output and a total direct loss (includes other affected sectors) of \$1.148 billion. The loss of employment was estimated to be 7,780 agricultural jobs and 14,545 total jobs.

Assessment Procedure

1. The net and gross area (acres) of land used in Florida for each agricultural industry or commodity subject to the proposed EPA standards was taken from the 2007 Census of Agriculture⁵ and the Forest Inventory and Analysis⁶ (USDA-Forest Service). Agricultural sectors were classified according the North American Industry Classification System (NAICS).

⁴ *Economic Impacts and Compliance Costs of Proposed EPA Numeric Nutrient Criteria for Florida Agriculture*. FDACS, U of F/IFAS, SWET, Inc. April 22, 2010.

⁵ USDA-NASS, *2007 Census of Agriculture*, Florida, Vol 1, Geographic Area Series, Part 9, State and County Data

⁶ USDA-Forest Service, *Forest Inventory and Analysis*. Data for Florida, 2007

2. The estimated per-acre costs for agricultural producers to implement BMPs were taken from a report prepared for the South Florida Water Management District⁷. BMPs included the full range of typical owner-implemented practices, such as fertilizer management, grazing management, and livestock exclusion from waterways. Additional on-farm water treatment/retention practices include wetland restoration, water recovery/re-use systems, and on-site water treatment/retention systems.
3. Initial capital cost estimates include materials, labor and engineering.
4. Total annual costs include O & M (estimated at 20 percent of the capital costs) and amortization of the capital investment at 10 percent interest over 20 years.

Septic Systems

The EPA cost estimate assumed that only a limited number of septic system upgrades would be necessary to meet the EPA proposed numeric nutrient criteria because many septic systems in the state would already have septic system upgrades necessary to meet the proposed DEP numeric nutrient criteria (NNC) and that the proposed EPA criteria would have only an "incremental" impact. As we have noted previously, this assumption is invalid, since the proposed DEP NNC have not yet been adopted. The EPA analysis estimated the number of septic systems in incrementally impaired waters at approximately 177,200. The EPA noted that the septic systems could be required to upgrade when they failed and based their annual costs on an average failure rate of 3.49%⁸. Their estimated costs to upgrade the failed systems to achieve nutrient removal were in the range of \$2000 to \$6500 per system. The annualized costs were estimated to range from \$12.4 million to \$40.2 million.

The Department performed a cost estimate for septic system upgrades necessary to achieve the proposed EPA criteria. The Department's analysis assumed that conventional septic systems on lots larger than three acres would be able to achieve the proposed EPA criteria⁹, thus no additional costs were assumed

Assessment Procedure

1. Florida Department of Health reviewed permit records to determine how many of Florida's 2.6 million septic systems are on lots less than 3 acres in size. The review indicated that approximately 83% of new septic systems were on lots less than 3 acres and approximately 90 % of old systems were on lots less than 3 acres¹. For the purpose of this estimate a value of 85% was chosen.
2. The Department's estimate for urban stormwater indicated that approximately 75% of Florida's urban areas discharge to fresh waters. It was assumed that proportion would be a reasonable assumption to make in order to calculate septic system costs.

⁷ Soil & Water Engineering Technologies, Inc. (SWET), 2008. *Nutrient Loading Rates, Reduction Factors and Implementation Costs Associated with BMPs and Technologies*, Appendix A.

⁸ Florida Department of Health (DOH). 2009. Onsite Sewage Treatment and Disposal Systems Installed in Florida. <http://www.doh.state.fl.us/environment/OSTDS/statistics/ostdsstatistics.htm>.

⁹ FDEP/FDOH developed a draft spreadsheet calculation tool that can be used to estimate appropriate type of septic system to achieve certain levels of treatment for various lot sizes. The 3 acre lot size is based on a standard 3 bedroom house with an estimated sewage flow of 300 gpd (Shanin SpeasFrost, FDEP, Personal Communication).

3. Construction costs for estimate were taken from an Interim Report prepared for the Department entitled *Onsite Sewage Treatment and Disposal Systems Evaluation for Nutrient Removal* January 7, 2010, Stormwater Management Academy, University of Central Florida. Costs for septic systems with high levels of nutrient removal ranged from \$9,320 to \$18,200 per unit. Operation and maintenance costs were also estimated from this report, which indicated values ranging from \$200 - \$1,800 per year.
4. 20-year annualized costs were calculated using an assumed interest rate of 5%. The O & M costs were not escalated for inflation.
5. The above method is a worst case scenario based on a complete replacement in the first year of all systems on smaller lots than 3 acres and discharging to groundwater that eventually becomes freshwater. The method produces annual cost estimates ranging from approximately \$1.6 – \$5.5 billion. Since immediate replacement of septic systems may not be justifiable or feasible, a more reasonable estimate and one more consistent with the EPA estimate would be a replacement rate of 5% a year, which is still higher than the repair rates of 0.5 – 1 % per year¹⁰

The resultant total capital costs, annual operational and maintenance costs, and 20-year annual costs are in Table 7 below:

Table 7 – Cost Estimates for Septic Systems

SEPTIC SYSTEM COST ESTIMATE CALCULATIONS		
Number of Septic Systems in Florida=	2,500,000	
Proportion of Septic Systems on Lots < 3 acres=	90%	
Proportion of Septic Systems discharging to fresh waters=	75%	
Total Number of Septic Systems to be Upgraded	1,687,500	
	Low	High
Costs for High Nutrient Removal Septic Systems=	\$9,320	\$18,200
O & M per Septic System=	\$200	\$1,800
Instant Replacement Total Cost=	\$15,727,500,000	\$30,712,500,000
Instant Replacement Total O & M over 20 years	\$337,500,000	\$3,037,500,000
Instant Replacement Annual Costs=	\$1,599,515,290	\$5,501,950,459
5% per year replacement annual costs	936,612,536	2,887,762,828

Benefits Analysis

The Department did not undertake a separate benefit analysis to compare with the EPA estimate. However, we would note that the Department's cost estimates lead to an annual cost of approximately \$313 - \$458 per person¹¹, compared to the Willingness to Pay values in EPAs estimate of \$0.34 - \$0.37 per person.

¹⁰ Eberhard Roeder, FDOH, Personal Communication.

¹¹ Based on the FDEP costs in Table 1 and an assumed Florida population of 18,328,340 people.

Conclusions

In summary, the cost estimates to comply with EPA's proposed numeric nutrient criteria compiled by the Department indicate that EPA underestimated the costs. The Department's estimates indicate annual costs ranging from \$6 - \$12+ billion a year. While the State of Florida is very interested in ensuring our waters are restored and protected, the magnitude of these costs underscore the need to develop correct and accurate criteria using the best science available. In addition, the costs also underscore the need to ensure that the implementation of numeric nutrient criteria is done in a manner that makes efficient and effective use of Florida's resources.

FWEA FOCUS

The EPA's NNC Approach for Florida: Some Case Studies of Effects on Florida Utilities

SECOND IN A SERIES

From the FWEA Utility Council

This is the second in a three-part series that the FWEA Utility Council and the *Florida Water Resource Journal* are featuring on the Environmental Protection Agency's (EPA's) controversial numeric nutrient criteria (NNC) program for Florida.

Much has been said about the EPA's NNC – the high costs which will ultimately be borne by the public, concerns about the science behind the promulgated criteria, and concerns that the environmental benefit will fall short of public expectations. In the April *Journal*, Paul Steinbrecher and David Childs reviewed the general criteria described in the EPA's recently promulgated freshwater NNC and then described a number of consequences of the rule.

One effect of the NNC which has been largely missing from public discussion is that NNC in many cases will also thwart existing effective programs that have improved water quality in our state. How

could NNC hurt water quality? The fact is, there are numerous major water quality improvement projects planned or underway that are part of local and regional efforts focused on water quality. Many of these were brought about by the Total Maximum Daily Load (TMDL) Program, although others are driven by local community objectives.

This month, the Utility Council has asked four of our members to describe their previous nutrient control efforts in their communities, and the negative effect that the NNC rule would have on those successful existing programs. The range of programs was selected to provide *FWRJ* readers with an understanding of the very broad range of circumstances that our various members face.

There are many more and varied situations throughout the state where members' previous investments would be hampered or "stranded" by the EPA's NNC rule. We thank our four contributing utilities for sharing their specific experiences with the membership. We hope you find these experiences enlightening.

Paynes Prairie Sheetflow Restoration Project – Gainesville, Florida

Rick Hutton

The Paynes Prairie Sheetflow Restoration Project is a major environmental restoration project which will improve water quality, protect drinking water, and restore 1,300 acres of natural wetlands within Paynes Prairie Preserve State Park. The \$25 million project is a partnership between Gainesville Regional Utilities (GRU), the city of Gainesville's public works department, the Florida Department of Environmental Protection (FDEP), the St. Johns River Water Management District, and the Florida Department of Transportation; it is broadly supported in the community.

The project was initiated in response to nutrient reduction requirements contained in the TMDL for Alachua Sink, a lake located within Paynes Prairie. It is summarized in Figure 1 (for an online video on the project, visit the city of Gainesville's Web site at <http://www.cityof-gainesville.org/tabid/326/Default.aspx>).

GRU's Main Street Water Reclamation Facility discharges to Sweetwater Branch, which flows through older areas of Gainesville. In its natural state, Sweetwater Branch flowed onto Paynes Prairie in a sheetflow pattern, which hydrated wetlands on the prairie; however, like many urban streams, Sweetwater Branch has been highly channelized and incised and receives significant stormwater flows.

Also, the natural sheetflow pattern onto the prairie has been disrupted by a man-made channel constructed in the 1930s, which bypasses the natural wetlands and routes the flow

directly to Alachua Sink. As a result, Sweetwater Branch carries nutrients from the Gainesville area directly to Alachua Sink and

Continued on page 40

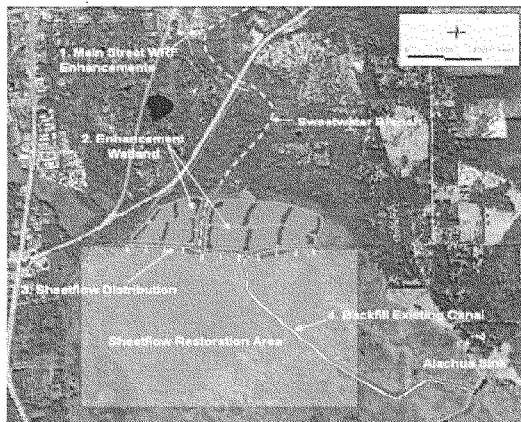


Figure 1. Paynes Prairie Sheetflow Restoration Project

Continued from page 39

deposits large amounts of trash and sediment onto the prairie.

The project is an integrated approach to solve these problems. It includes improvements to GRU's Main Street Water Reclamation Facility to remove phosphorus, construction of a 125-acre enhancement wetland, removal of the man-made bypass channel, and restoration of the natural sheetflow onto Paynes Prairie (see Figure 1).

The enhancement wetland will treat the entire baseflow of Sweetwater Branch; thus, it will effectively remove nutrients from all sources that enter the stream, including wastewater effluent, stormwater, septic tanks, and other sources. It will also remove trash and sediment.

The project will meet the nutrient reductions required in the TMDL for Alachua Sink, which was developed based on site-specific scientific studies, and it achieves a basinwide solution for achieving Alachua Sink's designated use; however,

the project will not meet the EPA NNC rule.

The NNC lake criteria for nitrogen (N) and phosphorus (P) are below the natural background levels for Alachua Sink and conflict with the site-specific nutrient TMDL derived for the sink. Because of this fact, GRU is forced to seek a site-specific criteria for Alachua Sink, despite the fact that a protective TMDL was established previously.

Another roadblock to the project is that it will not meet the NNC N and P criteria in Sweetwater Branch. Sweetwater Branch has not been listed as impaired for nutrients and exhibits no signs of nutrient impairment (e.g., no algal blooms or imbalances of flora or fauna due to nutrients); therefore, reducing nutrient levels in GRU's discharge to achieve the EPA's NNC in Sweetwater Branch will not improve the health of the biological community in the creek.

The application of the EPA's numeric nutrient criteria rules will create no environmental benefits whatsoever, but the criteria

may undermine an existing basinwide solution while simultaneously imposing substantial costs on GRU's ratepayers. Since the EPA's rule does not recognize existing site-specific TMDLs, GRU will have to spend approximately \$1 million to try to obtain site-specific criteria for both Alachua Sink and Sweetwater Branch.

If this effort is not successful, the Gainesville community may have to spend up to \$120 million to install reverse osmosis at its treatment plant and also may have to abandon the Paynes Prairie Sheetflow Restoration Project. This scenario would result in a fivefold increase in cost to the community, with no improvement in water quality. In fact, it would eliminate most of the benefits that this well thought-out, integrated project would bring.

Rick Hutton, P.E., is a supervising engineer in charge of strategic planning of water/wastewater systems at Gainesville Regional Utilities.

Clay County Utility Authority – Apricot Act/Dissolved Oxygen SSAC Considerations

By David Bolam and David Dilks

The Clay County Utility Authority (CCUA) was established by a special act of the Florida Legislature on October 1, 1994. The CCUA serves approximately 40,000 water and wastewater customers and 9,100 reclaimed water customers in the unincorporated areas of Clay County. CCUA management recognizes the value of producing highly treated wastewater effluent and the need to protect the environment, namely the Lower St. Johns River. To this end, the Authority has gone beyond current minimum design and regulatory standards, and since 1993 it has constructed advanced wastewater treatment for all its regional wastewater treatment facilities that discharge to surface waters.

Also, because of rapid population growth in Northeast Florida, the CCUA recognized during the early 1990s that it would soon be facing water supply issues similar to South and Central Florida. In 1994, the Authority implemented a public access reclaimed water program. Annual average daily use of reclaimed water has increased from 0.4 million gallons per day (mgd) in 1997 to 4.8 mgd during 2010, representing more than 50 percent of the total amount of wastewater treated by the CCUA.

Presently the state of Florida recognizes the need for back-up discharges for reclaimed water suppliers. The CCUA is moving toward achieving the APRICOT Act requirements for all its facilities and has already achieved the requirements for two of its facilities—Spencer's Crossing and Ridaught Landing—which have permitted APRICOT Act discharges.

As part of the Authority's comments sub-

mitted to the EPA on the proposed NNC rule, the CCUA declared that the proposed rule should provide for a specific exemption from meeting the criteria for discharges under Florida's APRICOT Act for the following reasons:

- ◆ The promotion and encouragement of water reuse is a formal objective for the state of Florida, and a specific law has been enacted which defines discharges from reuse facilities as "environmentally acceptable."
- ◆ CCUA APRICOT Act discharges have a negligible impact on water quality.
- ◆ The proposed rule provides the potential for discouraging water reuse by placing an unreasonable financial burden on discharges that currently are protected under the APRICOT Act.
- ◆ APRICOT Act facilities discharge forms of nitrogen that are significantly less likely to support algal growth than other sources of nitrogen.
- ◆ The environmental conditions that typically occur during periods of APRICOT Act discharge are less susceptible to nutrient impairment.

The Authority's request for a specific APRICOT Act exemption was not addressed by the EPA; therefore, the CCUA has hired an independent consultant, LimnoTech Inc., to conduct water quality modeling of Little Black Creek and its tributaries where both of the Authority's APRICOT Act outfalls are located.

This study is being performed in an effort to demonstrate that numeric nutrient criteria should not be applied as end-of-pipe NPDES permit limits. The approach includes the application of a linked watershed and water qual-

ity model to demonstrate that operation of these facilities at their currently permitted level will not prevent the attainment of beneficial uses in their receiving waters.

The watershed and water quality models were developed by the EPA's Region 4 as part of its draft TMDL development for the Black Creek watershed. They were applied, after some adjustment to reflect site-specific conditions, to predict nutrient concentrations in the unnamed tributary and Little Black Creek corresponding to the following assumptions for the CCUA APRICOT Act discharges:

- ◆ No discharge
- ◆ Discharge at existing concentrations and flows
- ◆ Discharge at maximum permitted concentrations and flows

Water quality model results show that the unnamed tributary and Little Black Creek attain the EPA's numeric nutrient criteria for phosphorus and nitrogen for all the above scenarios. The standards are attained without the need for a mixing zone because of 1) the intermittent nature of the APRICOT Act discharge, 2) the high degree of treatment provided, and 3) the fact that compliance with NNC is based upon annual average geometric mean concentrations.

These results indicate that the APRICOT Act discharges will neither cause nor contribute to the new water quality criteria being exceeded. Currently the LimnoTech study is under review by the FDEP.

Presently nutrient concentrations in Little Black Creek are at or below the EPA's numeric nutrient criteria for freshwater streams,

Continued on page 42

City of Ocala – Land Application/Reuse Implications

Jeff Halcomb

In response to increasing knowledge of the need to use reclaimed water to offset or reduce aquifer withdrawals, and also the desire to decrease nutrients in the effluents of wastewater treatment plants, the city of Ocala has begun making its citizens aware of the complexity of those issues. The city does not discharge directly to any surface water. It is 60 to 70 miles from the nearest saltwater and is located between the Silver River and Rainbow River spring sheds.

The city currently treats wastewater at its Water Reclamation Facility (WRF) #1, WRF #2, and WRF #3 treatment plants. Treated wastewater is then discharged to city and private golf courses, soccer fields, baseball fields, and agricultural sites.

In reviewing the future need for alternate supplies for potable water, conservation is paramount. One of the best options for an alternate water supply is to use reclaimed water to offset irrigation needs. In doing that, one of the benefits is obviously offsetting drinking water; the other is that the low nutrients in the reclaimed water are ideal for yards and landscapes. It is natural, the uptake of these nutrients is quick, and it will not burn a yard or the landscaping. In addition, it reduces the need for synthetic fertilizers, which often increase nutrient loads in stormwater discharges.

As an example, on a 190-acre sprayfield that the city owns, a landscaping company, "LI Turf", contracted with the city to grow turf and Sylvester Palm trees; the company now uses 100 percent less manufactured fertilizer

than would normally be used on turf of the same type and uses 50 percent less fertilizer than would be used in a similar application to grow palms if not using reclaimed water.

Paradoxically, the EPA's numeric nutrient criteria rules could inhibit the city's reuse program or force Ocala to implement additional treatments that will not create appreciable environmental benefits. Ultimately the city could be forced to treat this reuse water to near drinking water standards, at which point the turf and palm operations would then be forced to resume synthetic fertilizer applications. In other words, the local community might spend a tremendous amount for little, if any, nutrient reduction in the watershed.

We all want clean water. Much of the cost for clean water will come directly from public through taxes, utility rates, etc. Particularly in lean times, it is important that we spend community's money as efficiently as possible and get real benefits.

While NNC shares the same goal as TMDL (improving water quality), it does so by a much less efficient and much more costly mechanism. Instead of improving water quality, it creates uncertainty, sets criteria that are often unrealistic, and adds hurdles which undermine efforts underway. In the city of Ocala's case, it might cause growers to revert to synthetic fertilizer, reduce the beneficial use of reclaimed water to offset groundwater, and increase nutrient loadings to the watershed at great public cost.

Jeff Halcomb is director of water and sewer for the city of Ocala.

Continued from page 40

but the stream exhibits low dissolved oxygen concentrations and is deemed impaired. The FDEP proposed delisting Little Black Creek from the 303(d) impaired waters list because of low dissolved oxygen levels, but the EPA would not allow it to be delisted.

Low dissolved oxygen concentrations are common in dark water streams, but the CCUA may have to make a significant investment to request a site-specific alternative criteria (SSAC) for dissolved oxygen, with no assurance of a favorable ruling.

An unfavorable ruling on the SSAC for dissolved oxygen could place the Authority in the position of having to achieve compliance with the EPA's numeric nutrient criteria at the end of pipe for these intermittent APRICOT Act outfalls, which would require an additional investment in capital cost of more than \$51 million to install reverse osmosis and brine concentrator/crystallizer facilities at both plant locations.

In summary, the cost to achieve compliance end of pipe is so high that it forces the permittee to seek alternative compliance relief remedies. The expenses and time associated with conducting the studies to show compliance relief can be substantial, and if all such alternative approaches fail to achieve compliance relief, then the permittee is left with having to invest in the capital improvements to achieve compliance at the end of pipe after investing in all other potential compliance relief alternatives. In our opinion, this is an unreasonable and unnecessary regulatory approach for intermittent APRICOT Act discharges.

David Bolam, P.E., is chief engineer for the Clay County Utility Authority. David Dilks, Ph.D., is vice president at LimnoTech in Ann Arbor, Michigan.

City of Tampa – Potential Displacement of a Successful TMDL Program Investment

By David Hagan and Timothy Ware

The city of Tampa owns and operates the Howard F. Curren Advanced Wastewater Treatment Plant, which serves all of Tampa and portions of Hillsborough County. The site started as a primary treatment plant in the 1950s, when all treated wastewater was discharged to Tampa Bay.

Beginning in the 1970s, it was recognized regionally that the health of the bay was in jeopardy because of excessive nutrient loads from the city and from other dischargers in the Tampa Bay watershed. It was determined that all wastewater treatment plants that discharged within the Tampa Bay watershed needed to provide advanced wastewater treatment.

Studies noted the disappearance of sea

grasses as a leading indicator that the bay was sick. The sea grass beds were the foundation of life in the bay, and without them, fish population would diminish and the bay would cease to be viable.

Howard F. Curren, for whom the plant is named today, was successful in obtaining \$160 million in federal grants for the city to assist in its design and construction. After it was completed in 1978, Tampa had the largest advanced water treatment plant in the world.

From that time forward, Tampa collected data as part of a continuing effort to assess the health of the bay. As a result of these and other efforts combined in the bay region, sea grasses came back and provided an indicator of a healthy bay. Thus, even as the population of the region grew, the bay was being restored be-

cause of the efforts by Tampa and others in the region focused in partnership with the state on reducing nutrient loads.

By the late 1990s, continued growth again began to put the bay in jeopardy. Tampa Bay was put on the impaired waters list at that time for nitrogen. The region proactively created the Nitrogen Management Consortium to determine how nitrogen discharges to the bay could be limited.

The Consortium worked with the FDEP to establish a TMDL for nitrogen and to allocate a portion of this load to each of the dischargers to Tampa Bay. The Curren Plant was allocated a limit of 225.8 tons per year on a five-year rolling average, in addition to the concentration limit of 3.0 milligrams per liter.

The city consistently has discharged a ni-



trogen concentration of about 2.3 milligrams per liter since the 1970s, which represents exceptional performance for an advanced water treatment plant. For the last 20 years, the plant has treated an average of 55 to 60 million gallons per day. Its isolated location in the port of Tampa has made large-scale reuse options expensive.

The city does reuse over 3 million gallons per day through residential and industrial reuse. Even with its cost, reuse is gaining more attention within the city as a way to allow growth in the future and still meet the new TMDL. It is clear that the ongoing focused efforts of bay area communities and the FDEP have been successful in reversing a eutrophication trend that started in the 1970s and 1980s, and has now restored the bay to healthy conditions even while additional growth to near build-out levels has occurred.

The specific NNC has not yet been established for marine waters such as Tampa Bay; however, if they are like the freshwater criteria already adopted, Tampa would be forced to implement expensive treatment options for

marginal benefit. The Curran Plant is operating at the edge of its treatment capabilities and significant capital upgrades would be needed to meet lower limits.

Reuse is not an option to deal with a concentration limit, as it is with a load limit. Thus, the NNC, if developed using the same methods for marine waters as used for freshwaters, would cause the city to spend tens to hundreds of millions of dollars more on treatment, with much higher operating costs, at a time when the bay is healthy and continuing to improve.

David Hagan, P.E., is an associate with the engineering firm Greeley and Hansen. Timothy Ware, P.E., is manager of the Tampa Wastewater Treatment Plant and pumping stations.

Closing

The EPA's NNC rule, as currently promulgated, unconsciously does not recognize these types of existing programs and success-

ful nutrient management approaches. Instead, it requires that Florida's public needlessly expend resources to re-establish the efficacy of these programs at a minimum.

In the worst case, the NNC arbitrarily may completely displace many existing successful nutrient control programs and replace them with extremely expensive alternatives that will take much longer to implement with no discernable additional environmental benefit. The FWEA Utility Council remains highly focused on working with other affected stakeholders to try to influence a change in the EPA's approach.

A lot has been transpiring at both the federal and state levels since our first article in April. In July, David Childs will provide a comprehensive update of the legal issues, as well as efforts of our elected and appointed state leadership on this issue. In the meantime, it is extraordinarily difficult for our members to move forward effectively with existing nutrient management plans in the face of the uncertainty associated with the EPA's NNC approach in Florida. ◇

Mr. STEARNS. Thank you.
Mr. Dever?

STATEMENT OF WILLIAM DEVER

Mr. DEVER. Thank you, Chairman Stearns.

My name is Bill Dever, and I'm the president of the Florida Gulf Coast Building and Construction Trades Council. Our affiliated unions represent thousands of working men and women whose jobs often depend on investment in construction and maintenance in Florida's Gulf Coast region.

Thank you for the opportunity to speak about this issue that is so important to so many Floridians. Water is perhaps Florida's most precious and abundant resource, and we all agree that promoting clean and responsible water usage is important. But it's just as important to promote balanced approach to water policy, one that also recognizes our need for good-paying jobs, a healthy economy, and a lower economic burden, especially during this difficult economy.

Recent decisions by the EPA threaten to increase the burden on hard-working Floridians by unfairly singling Floridians out as the only Americans subject to new erroneous numeric nutrient criteria that will have an unwanted impact on many in Florida's building and construction trades community. In other words, Mr. Chairman, the people of Florida need both clean water and good jobs, and this should not be an either/or proposition.

But that is what the EPA's proposal is—water quality standards so expensive to achieve that any new job growth and even existing jobs would be lost. This is not the time, and Florida is not the place.

Based on projections made by Florida agencies and private sector industries, we are extremely concerned that the high cost of implementing these new regulations will lead directly to a reduction in new investment and construction jobs in our State. In my capacity as president of the Florida Gulf Coast Building and Construction Trades Council, I submitted a letter in June to President Obama that was signed by 14 leaders of our affiliated trade organizations.

In the letter, we warned the President about the negative economic impact these new mandates would have on our jobs and our way of life, and we urged the EPA to work in cooperation with the State of Florida to find an achievable solution that would not harm jobs and investments, which the people of Florida need.

I think the President would agree that this isn't a Republican or Democratic issue. Florida congressional delegation Members on both sides of the aisle are united against the imposition of these new EPA regulations. I thank Chairman Stearns and other Members of the Florida delegation for finding common ground and reaching consensus on this issue. We are proud to have the support of both Senators Bill Nelson and Marco Rubio, as well as support from nearly the entire Florida congressional delegation.

With about 1 in every 10 Floridians out of work, now is not the time for the EPA to impose costly new water mandates for Florida that will increase the cost of living and doing business in Florida. These mandates will impede our State's economic recovery, force Florida businesses to cut jobs, and increase the price of utilities,

food, and other necessities for Florida businesses, families, and consumers.

I urge all Members of Congress to join us in our opposition to these new mandates. The future of Florida's economic recovery depends on it.

Once again, thank you, Chairman Stearns, for your leadership on this issue. I look forward to working with you, as we continue to urge the EPA to stand down on the implementation of these mandates and allow Florida to manage its own waters. I would be happy to answer any questions you may have.

Thank you, sir.

[The prepared statement of Mr. Dever follows:]

FLORIDA GULF COAST BUILDING AND CONSTRUCTION
TRADES COUNCIL

IN AFFILIATION WITH

BUILDING TRADES DEPARTMENT-AFL-CIO

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One Page Summary of Bill Dever Testimony
President of the Florida Gulf Coast Building & Construction Trades Council
U.S. House of Representatives Committee on Energy and Commerce –
Subcommittee on Oversight and Investigations
“EPA’s Takeover of Florida’s Nutrient Water Quality Standard Setting: Impact on
Communities and Job Creation”
Tuesday, August 9, 2011
Orlando, Florida

- We are extremely concerned that the high cost of implementing these new regulations will lead directly to a reduction in new investment and construction jobs in our state.
- Recent decisions by the Environmental Protection Agency threaten to increase the burden on hardworking Floridians.
- The water quality standards are so expensive to achieve that any new job growth and even existing jobs would be lost.

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Testimony of Bill Dever
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Thank you Chairman Stearns. My name is Bill Dever and I am President of the Florida Gulf Coast Building & Construction Trades Council. Our affiliated unions represent thousands of working men and women whose jobs often depend on investment in construction and maintenance in Florida’s Gulf Coast region.

Thank you for the opportunity to speak about an issue that is important to so many Floridians.

Water is perhaps Florida’s most precious and abundant resource, and we all agree that promoting clean and responsible water usage is important.

But it is just as important to promote a balanced approach to water policy – one that also recognizes our need for good-paying jobs, a healthy economy and a lower economic burden, especially during this difficult economy.

Recent decisions by the Environmental Protection Agency threaten to increase the burden on hardworking Floridians, by unfairly singling Floridians out as the only Americans subject to new, onerous numeric nutrient criteria that will have an unwanted impact on many in Florida's building and construction trade community.

In other words, Mr. Chairman, the people of Florida need both clean water and good jobs, and this should not be an "either/or" proposition. But that is what EPA's proposal is – water quality standards so expensive to achieve that any new job growth and even existing jobs would be lost. This is not the time, and Florida is not the place.

Based on projections made by Florida agencies and private sector industries, we are extremely concerned that the high cost of implementing these new regulations will lead directly to a reduction in new investment and construction jobs in our state.

In my capacity as President of the Florida Gulf Coast Building & Construction Trades Council, I submitted a letter in June to President Obama that was signed by 14 leaders of our affiliated trade organizations.

In the letter, we warned the President about the negative economic impact these new mandates would have on our jobs and our way of life, and we urged the EPA to work in cooperation with the State of Florida to find an achievable solution that will not harm jobs and investments, which the people of Florida need.

I think the President would agree that this isn't a Republican or Democratic issue.

Florida Congressional Delegation members on both sides of the aisle are united against the imposition of these new Environmental Protection Agency regulations.

I thank Chairman Stearns and other members of the Florida Delegation for finding common ground and reaching consensus on this issue.

We are proud to have the support of both Senators Bill Nelson and Marco Rubio, as well as support from nearly the entire Florida Congressional Delegation.

With about 1 out of every 10 Floridians out of work, now is not the time for the EPA to impose costly new water mandates for Florida that will increase the cost of living and doing business in Florida.

These mandates will impede our state's economic recovery, force Florida businesses to cut jobs, and increase the price of utilities, food and other necessities for Florida businesses, families and consumers.

I urge all members of Congress to join us in our opposition to these new mandates. The future of Florida's economic recovery depends on it.

Once again, thank you Chairman Stearns for your leadership on this issue.

I look forward to working with you as we continue to urge the EPA to stand down on the implementation of these mandates and allow Florida to manage its own waters. I would be happy to answer any questions you may have.

Mr. STEARNS. Thank you, Mr. Dever.
Mr. St. John?

STATEMENT OF RON ST. JOHN

Mr. ST. JOHN. Thank you, Chairman Stearns, for inviting me today.

Mr. Barton, my mother was from Texas. So there's at least two people in this room that have a soft spot in their heart for Texas.

Mr. BARTON. Good.

Mr. ST. JOHN. Depending on which year you want to pick, agriculture is Florida's number-one industry. I think it's gone unrecognized as we move forward and the population of the globe continues to expand, I believe agriculture is going to be more important than Wall Street.

The comments that I make today are germane to north Florida, specifically the Suwannee River basin. I do represent the dairy industry. Today, we are regulated by the DEP of Florida. The regulations are in place to protect the surface and groundwater. But in our area, groundwater is the main issue.

These regulations are science based and require the dairies, through a nutrient management plan, to either recycle the effluent nutrients through plant uptake and feed those plants back to the cows or remove the nutrients offsite to replace commercial fertilizer, i.e., organic fertilizer replacing commercial fertilizer, for crops grown by others. We report quarterly, and our report card is the readings from monitor wells located down gradient from areas where the effluent is applied.

Today, the EPA of the U.S. is attempting to force through the DEP of Florida a much more stringent nutrient standard on surface waters, which in our area could mean new groundwater standards. The intent is to protect our rivers and springs from further degradation of water quality.

The Suwannee River starts in the Okefenokee Swamp in Georgia but is mostly spring fed from where it originates to the Gulf of Mexico. As part of their nutrient program, the EPA has already set TMDLs, total maximum daily loads, for several springs that contribute much of the Suwannee River's water.

These springs are from groundwater, not surface water. So the next logical move—not that logic has anything to do with this topic—is to change the groundwater standards from 10 parts per million, which is the national standard, to 0.35 parts per million, which is the proposed springs total maximum daily load standard.

The 10 parts per million standard today with good management is a realistic level for industry to comply with. A rule change from 10 parts to 0.35 is not attainable under any science-based model for any industry—power plants, agriculture, or even the thousands of septic systems in north Florida. Short of turning the Suwannee basin into a national park devoid of people, this is a completely unrealistic standard with no economic or science-based modeling in these decisions.

If the EPA should prevail, then our businesses will be put out of business. Even though we are protected by our existing National Pollution Discharge Elimination System permit we have with the DEP, these permits are renewable every 5 years and, therefore, do

not provide long-term protection because at the end of each permit cycle, the DEP can change the rules.

Please note that the current attempt by EPA to force such low nutrient standards across the entire State will cause similar impacts to other dairies and businesses like we are experiencing in the Suwannee water basin.

Thank you.

[The prepared statement of Mr. St. John follows:]



FLORIDA FARM BUREAU FEDERATION

The Voice of Agriculture in Florida

Testimony of

Ron St. John

Managing Partner of Alliance Diaries

to the

U.S. House of Representatives Committee on Energy and Commerce
Subcommittee on Oversight and Investigations

Regarding

“EPA’s Takeover of Florida’s Nutrient Water Quality Standard
Setting: Impact on Communities and Job Creation”

Tuesday, August 9, 2011

Orlando, Florida

Summary of Testimony

- Current regulations through the Florida Department are sufficient to effectively protect surface and ground water
- Proposed rule changes are not attainable under any science based model.
- These changes will put a significant strain on agriculture, possibly causing farms to go out of business.

Thank you Chairman Stearns and other members of the subcommittee for your willingness to accept testimony on this very important issue.

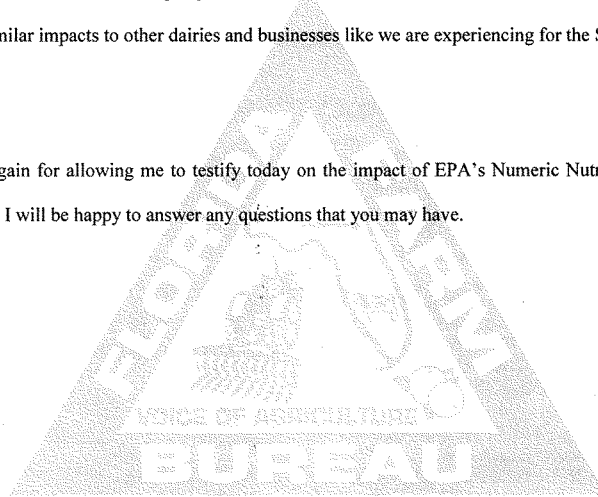
These comments are germane to north central Florida, specifically the Suwannee River Basin. I represent the dairy industry. Today we are regulated by the DEP of Florida. The regulations are in place to protect the surface and ground waters, but in our area groundwater is the main issue. These regulations are science based and require the dairies, through a nutrient management plan to either recycle the effluent nutrients through plant uptake and recycling the plants through the animals or remove nutrients off site to replace commercial fertilizer for crops grown by others. We report quarterly and our report card is the readings from monitor wells located down gradient from areas where the effluent is applied.

Today the EPA of the U.S. is attempting to force through the DEP of Florida, a much more stringent nutrient standard on surface waters, which in our area could mean new groundwater standards. The intent is to protect our rivers and springs from further degradation of water quality. The Suwannee River starts in the Okefenokee swamp in Georgia, but is mostly spring fed from there to the Gulf of Mexico. As part of their nutrient program, the EPA has already set TMDL's (Total Maximum Daily Load) for several springs that contribute much of the Suwannee Rivers water. These springs are from ground water, not surface water. So the next logical move (not that logic has anything to do with this topic) is to change the ground water standard from 10ppm to .35ppm, which is the proposed springs TMDL standard. The 10ppm standard today, with good management, is a realistic level for industry to comply with. A rule change from 10ppm to .35ppm is not attainable under any science based model for any industry, power plants, agriculture or even the thousands of septic tanks in the basin. Short of turning the Suwannee Basin into a National Park, devoid of people, this is a completely unreasonable standard, with no economic or science based modeling in these decisions.

If the EPA should prevail, then our businesses will be put out of business, even though we are protected by our existing N.P.D.E.S. (National Pollution Discharge Elimination System) permit we have with the DEP. These permits are renewed every 5 years, and therefore do not provide long term protection because at the end of each permit the EPA and DEP can change the rules.

Please note that the current attempt by EPA to force such low nutrient standards across the entire state will cause similar impacts to other dairies and businesses like we are experiencing for the Suwannee River Basin.

Thank you again for allowing me to testify today on the impact of EPA's Numeric Nutrient Criteria on my industry. I will be happy to answer any questions that you may have.



Mr. STEARNS. Thank you.
 Ms. Hammer Levy, welcome.

STATEMENT OF KELLI HAMMER LEVY

Ms. HAMMER LEVY. Chairman Stearns—can you hear me? I am sorry. Is it on?

Mr. STEARNS. I don't know. Just put it a little closer maybe?

Ms. HAMMER LEVY. Is it on?

Mr. STEARNS. There you go.

Ms. HAMMER LEVY. OK. Chairman Stearns and distinguished members of the committee, thank you for this opportunity to testify before you today on the impact of EPA's numeric nutrient criteria in Florida.

Florida is a national leader in water resources management, and a few key points to consider are that 34 percent of the water quality data in EPA's STORET database comes from the State of Florida. There are more stormwater utilities provided dedicated funding for water quality improvements in Florida than in any other State.

Florida has had State-wide policies on stormwater runoff for over 25 years, and each year, local governments spend around \$1 billion on water quality and flood control measures. Pinellas County has been active in protecting our aquatic resources since the 1970s, when we began our stormwater master planning process. And from 2000 through to 2014, we have spent or encumbered \$40 million for water quality improvement projects and programs, and these funds do not include the millions of dollars that we spend annually to implement the conditions of our stormwater NPDES permit.

Local governments, private business, and citizens around the State understand the importance of a healthy water environment to Florida's economy and our quality of life. However, it is critically important that water quality criteria are correct to avoid wasting public resources towards the development of site-specific alternative criteria, or SSACs, to correct deficiencies in the rule or towards meeting a numeric goal that results in no meaningful improvement.

So I want to talk a little bit about unresolved problems with EPA's criteria, building on what is right in Florida and suggestions for a path forward. EPA used two approaches to develop criteria in Florida's streams and lakes—the reference-based approach and the stressor response approach. Unfortunately, neither of these approaches alone can identify cause and effect.

The State of Florida advised for allowing for biological monitoring, and the advantage of this recommendation is that you can determine a clear link to actual impairment of use. EPA's own guidance states that a primary strength of biological criteria is the detection of water quality problems that other methods may miss or underestimate.

And further, the EPA's science advisory board cautioned that without a clear, positive link between nutrient levels and impairment, there is no assurance that managing to a number will lead to water quality improvement and that if the numeric criteria were not based on well-established causative relationships, the scientific

basis for the water quality standards would seriously be undermined.

And just as an example, in considering all the best bass fishing spots in the State, as determined by the Florida Fish and Wildlife Conservation Commission, excluding lakes not affected by the rule, those without data, and rivers that were on the list, we have 10 lakes remaining on that list. And of those 10 lakes, 6 would be impaired under this rule.

The EPA has advised communities with naturally high phosphorus in their soils to apply for a SSAC. But based on local SSAC development costs, this effort could cost Pinellas County over \$20 million without accomplishing any benefit to the environment.

If we build on what is right in Florida, we need to look at our successes, and Tampa Bay is a great example of that. To meet the requirements of an EPA-established TMDL, the Tampa Bay Nitrogen Management Consortium, comprised of more than 45 local governments, business, and agencies, developed voluntary nitrogen limits for 189 sources within the watershed and provided those limits as recommendations.

EPA and the State participated in this effort, but they did not lead it. The State and EPA have accepted those recommended nitrogen limits as meeting water quality requirements for Tampa Bay.

Key benefits identified by the consortium members included that the nitrogen allocations were equitable and based on sound science and that the collective process was cost effective for all the participants. And the result has been dramatic. Water quality is meeting the regulatory targets, and our seagrasses have expanded by more than 8,000 acres since 1999.

So, suggestions for a path forward. With this type of controversy brings courageous conversations. And while we may not hold the same opinions on EPA's rule, this controversy has brought us together. We have a responsibility to be good stewards of Florida's environment. There is a path forward if we can continue to work together.

The State has restarted their rule development process and is addressing many of the concerns with EPA's criteria echoed State wide and here today.

The State is actively soliciting feedback on the draft rule and will hold more public workshops in September. As a community, we can support our State environmental agency during this rule development process, be part of the conversation, and ask our legislators to help bring this effort to a successful conclusion that protects our natural resources, our quality of life, and our economy.

Thank you.

[The prepared statement of Ms. Hammer Levy follows:]

STATEMENT OF
KELLI HAMMER LEVY
WATERSHED MANAGEMENT SECTION MANAGER
PINELLAS COUNTY DEPARTMENT OF ENVIRONMENT AND INFRASTRUCTURE
before the
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES

“EPA’s Takeover of Florida’s Nutrient Water Quality Standard Setting: Impacts on
Communities and Job Creation”

August 9, 2011

Chairman Sterns, Ranking Member DeGette, and distinguished members of the Committee,
thank you for this opportunity to testify before you today on the impact of EPA’s Numeric
Nutrient Criteria in Florida.

Florida is a leader in water resources management:

- 34% of the water quality data in the EPA STORET database comes from Florida.
- In Florida there are more stormwater utilities providing dedicated funding for water quality improvements than in any other state.
- The first MS4 permittee in the Southeastern United States was Sarasota County.
- Florida has had statewide policies on stormwater runoff for 25+ years.
- Local governments spend around \$1B per year on water quality and flood control measures.

Pinellas County has been active in protecting our aquatic resources since the 1970s, when we began our stormwater master planning process. From 2000 to 2014 we have spent and/or encumbered forty million dollars for water quality improvement projects, pollutant source tracking studies, and comprehensive watershed planning efforts. These funds do not include the millions of dollars that we expend annually to implement the conditions of our National Pollutant Discharge Elimination System permit regulating our stormwater discharges, which include an extensive water quality monitoring program. In continuing with Pinellas County's commitment to watershed protection efforts, the Board of County Commissioners approved a stringent urban fertilizer use ordinance in 2010 to reduce nitrogen and phosphorous pollution to our local waterways. Lastly, in partnership with the Tampa Bay Estuary Program and other regional stakeholders, Pinellas County signed an interlocal agreement in 1998 to implement the Comprehensive Conservation and Management Plan for Tampa Bay. This partnership has resulted in dramatic increases in seagrass coverage, which now approaches 33,000 acres. This is the highest recorded seagrass acreage since the 1950s and is a result of improved water quality from projects implemented throughout the watershed by program partners.

Restoration and protection for Florida's water resources is a goal we all share. Local governments, private businesses, and citizens around the state realize the importance of a healthy water environment to Florida's economy and our quality of life. But we are very concerned with the technical deficiencies in EPA's rule for numeric nutrient criteria for Florida's lakes and flowing waters. It is critically important that water quality criteria are correct to avoid wasting precious public resources towards the development of site specific alternative criteria (SSAC) to correct deficiencies in the rule or towards meeting a numeric goal that results in no meaningful improvement.

I will discuss today unresolved problems with EPA's criteria, building on what is right in Florida, and suggestions for a path forward.

Unresolved Problems with EPA's Criteria

1. Streams: EPA's approach to setting stream criteria uses a reference-based approach. A general problem with using a reference-based approach is that it does not directly establish a quantitative target. Rather, it provides information on the levels of nutrients that may be consistent with full support of uses, but it does not identify causal relationships between nutrients and ecological conditions.^{1,2} In FDEP's comments to EPA concerning the limitations of this approach, as a stand-alone assessment, FDEP advised allowing for consideration of response variables like chlorophyll *a* and biological monitoring.³ For example, nutrient concentrations result from many possible rates of physical (e.g. stream reach and residence time), chemical (e.g. nitrification/denitrification), biological (e.g. algal primary production), and ecological (e.g. herbivore predation) processes. Such rates are often site specific, can vary over various time scales (e.g. minutes, days, years and decades), or result from episodic events including natural or anthropogenic perturbations. Despite the additional data requirement, the advantage of FDEP's recommendation is the establishment of a clearer link to actual impairment of use, rather than an approach lacking causative information that relies on concentration data alone.¹ EPA's guidance supports such a methodology stating "resident biota function as continual monitors of environmental quality, increasing the likelihood of detecting the effects of episodic events...that periodic chemical sampling is unlikely to detect." Furthermore, "a primary strength of biological criteria is

the detection of water quality problems that other methods may miss or underestimate. Biological criteria can be used to determine to what extent current regulations are protecting designated and/or existing aquatic life uses.”⁴

2. Lakes: While the EPA’s Science Advisory Board (SAB) acknowledged that the stressor-response based analysis (method utilized for setting nutrient criteria in Florida lakes) is a “legitimate, scientifically based method for developing nutrient criteria,” the SAB advised that the approach should not be used in isolation, but instead be incorporated with other available methodologies in a weight-of evidence approach. The SAB stated that “without a mechanistic understanding and a clear causative link between nutrient levels and impairment, there is no assurance that managing for particular nutrient levels will lead to the desired outcome. If the numeric criteria are not based upon well-established causative relationships, the scientific basis of the water quality standards will be seriously undermined.”⁵

Example: The Florida Fish and Wildlife Conservation Commission evaluated the best bass fishing spots in the State. In considering all the best spots, after excluding lakes not affected by the rule, those without data, and rivers, 10 lakes remained. Of those 10 lakes, 6 would be impaired under EPA’s rule.

3. EPA kept areas with significant naturally occurring phosphorous in the peninsular region, which is characterized by low phosphorous.

Example: Pinellas County has a phosphorous rich Hawthorn layer throughout the county. While the layer is not contiguous, streams run through these enriched areas and pick up phosphorous, transporting the nutrients to downstream areas of the stream and to receiving waters. Furthermore, the County’s two largest lakes sit on top of this layer. By

not employing a more rigorous process to delineate regional variability, the only solution to this problem is the development of costly SSAC. Based on FDEP's database, 65% of the streams in Pinellas County do not meet EPA's phosphorous criteria and 88% of the potentially impaired streams run through areas where the Hawthorn layer influences soil phosphorous concentrations. EPA's response to Pinellas County's comments concerning this issue was to apply for SSAC. Using estimates for SSAC development in the state of Florida, this effort may cost Pinellas County over \$20,000,000 without accomplishing any benefit to the environment.

4. Lastly, EPA's cost estimates are subject to a lot of uncertainty. EPA's reports states that to identify potential costs "EPA removed from the resulting list of waters those that are currently listed as impaired on Florida's 303(d) list of impaired waters, resulting in those waters that may be identified as impaired under EPA's rule that are not already classified as impaired."⁶ The assumption that waters currently on the impaired waters list would not require additional reductions as a result of EPA's rules was not validated and could account for millions of dollars in load reductions not recognized in EPA's analysis.

With these and other concerns raised by Florida stakeholders as well as FDEP, and EPA's SAB, it is clear that getting this wrong will lead to a shift in financial resources towards meeting criteria that may not be related to a problem or in developing SSACs to correct flaws in the rule. The collective goal should be to work towards state criteria that reflect the best available science and result in effective protective measures and restoration targets for our state's water resources.

Building on what is right in Florida – Learning from our Successes:

In Tampa Bay, local communities working with the Tampa Bay Nitrogen Management Consortium developed voluntary water quality goals and nutrient loading targets to support recovery of clear water and underwater seagrasses in the mid-1990s, and have collectively implemented more than 250 projects (resulting in 400 tons of nitrogen reduced) since 1996 to help meet the nutrient loading targets.

In 1998, the USEPA approved a regulatory Total Maximum Daily Load for Tampa Bay, and in 2007 stated that all permitted nutrient sources within the Tampa Bay watershed would be required to have an annual numeric limit, or allocation, for their nitrogen discharge to Tampa Bay. The Consortium (more than 45 local governments, business and agencies) decided to develop voluntary nitrogen limits for themselves and provide those limits as recommendations, rather than relying on the regulatory agencies to develop allocated numeric limits. EPA and the state FDEP participated in this effort, but did not lead it. Over a two-year period, Consortium members developed fair and equitable allocations for all 189 sources within the watershed. The FDEP and EPA accepted those recommended allocations as meeting water quality requirements for Tampa Bay.

Consortium members contributed funds to support a technical contractor to develop scientifically-sound options for allocations. Consortium members realized that, by combining their funds, the cost to each member is much reduced over what would be required for technical support individually. The Tampa Bay Estuary Program facilitates the Consortium, manages the technical support contractor, and collects the funds from Consortium members to provide this support.

Key benefits identified by the Consortium members included: allocations are equitable and based on sound science, the process and allocations were developed by Consortium participants (not regulatory agencies alone), and the collective process was cost-effective for all participants. The result? Water is now meeting clarity goals and regulatory requirements, and seagrass has expanded by more than 8,000 acres since 1999.⁷

Tampa Bay is just one example of how Floridians can come together to restore our environment. The water quality targets set for Tampa Bay did not come from a regulatory agency or a court mandate; the criteria were developed based on data collected by watershed stakeholders from a variety of agencies working towards a common goal. The result has been a success story for the continued recovery of Tampa Bay. Lastly, through this collaborative effort a cost effective means of continuing the restoration efforts has been developed and approved by all stakeholders.

Suggestions for a path forward

With controversy brings courageous conversations. We may not hold the same opinions on EPA's rule, but the controversy surrounding the issue has brought us together. We have a lot of work to do in protecting our aquatic resources and restoring waters that do not meet their designated uses. There is a path forward if we can continue to work together. FDEP has restarted their rule development process and is addressing many of the concerns with the EPA criteria echoed state-wide. FDEP is actively soliciting feedback on the draft rule and will hold more public workshops in September. What can we do? We can continue to support our state environmental agency during this rule making process, be active in reviewing the proposal, be part of the conversation, and ask our legislators to help bring this effort to a successful conclusion that protects our natural resources, our quality of life, and our economy.

Thank you, Mr. Chairman and Members of the Committee

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Mr. STEARNS. Mr. Guest?

STATEMENT OF DAVID G. GUEST

Mr. GUEST. Thank you. Thank you, Chairman Stearns.

I want to make it clear for the record here that I was invited to appear here yesterday about 10:30. I dropped my litigation practice. We put together our comments, filed by 4:00, and got in the car and drove here.

Mr. STEARNS. No, I recognize you are here, and I thank you for your patience because we wanted to get your testimony. So I am glad you took the time to come.

Mr. GUEST. And I want to emphasize to this committee that you guys can't really get the whole picture by listening only to the polluting industries and to the folks that are opposed to this rule. I think it's a good thing that you're bringing one person that believes that this is a good idea and can give you some background that is a really different story.

I think it would be highly advisable for this committee to listen to the members of the public that have appeared here so you can hear their stories about how they have been victimized by this pollution.

Now let me start out by saying toxic algae is a major problem in this State, and it's getting much worse as time passes. It is a threat to our families. It's a threat to our children. It's a public health threat. It's a threat to the safety of our drinking water.

There was a drinking water plant that was shut down because the water was poisonous in the last 4 months. There was a toxic algae outbreak on the Caloosahatchee River that was so severe that there were signs all over the river that said it was dangerous for people to get in the water. This is the United States, and it's dangerous to get in the water.

People's property values are being destroyed by this. We got a call 2 weeks ago from a lady on the Caloosahatchee River during that outbreak. She is broke. She's in financial trouble. She is selling her house because she can't pay for it anymore.

She got right up to the closing, and what happened? The buyer came up. They looked at the slime in the water, and they said, "Whoa. I'm not buying that house." That's what's happening from the slime here. It has a real economic consequence.

And you think about the tourists that come to Florida. They come here from all over the country. They come over from all over the world. They come out there, and they see a lake or a river that's covered with stinking green slime with a sign that says it's dangerous to get in it. Do you think they are going to come back? They're not even going to leave, they're going to go back and tell everybody around them that Florida is not a safe and clean place to go.

This is having a catastrophic effect on our economy, and it's killing employment. And you really can't just say let's let it go for a while.

My office manager went out to the Suwannee River 3 weeks ago, and she said that they went out to Fanning Springs, the springs that we've heard about. There is a sign at the spring that says if you get in the water, there is a risk you would get a rash. They

didn't pay much attention to it. And the kids went in, and one of them got this terrible rash all over them.

This is the United States. That shouldn't be happening here.

Now let me clarify one big point here: This is not a Federal takeover of any sort. What happened actually was the Bush administration made the decision that these were needed for Florida. It was made by Ben Grumbles from the Bush administration. He made a finding that what Florida was doing was inadequate and that numeric standards were needed.

The State didn't think it was a takeover because what happened was immediately following that, the State itself, the State Department of Environmental Protection, enthusiastically endorsed this determination. And they worked cooperatively.

What they ended up doing was they ended up with their own standards and their own process. It was ready to be adopted in August of 2009, and I was at the hearing. And what happened is our settlement agreement came out, and it said unless the State adopts within 15 months, the Federal Government will have to step in.

And what happened was instead of just approving it that day—it was on the agenda to be approved that day—they decided to throw the hot potato to the Federal Government. And what the Government did was they looked at the same data the DEP looked at. They used the same science because the DEP has great scientists, and they came up with almost exactly the same rule that the State did.

In fact, we heard the story about the springs; they're identical. In fact, the DEP, the Florida rule, is a little more stringent in its enforcement. That's really what happened here.

This isn't a Federal takeover of any kind. What happened was they got good science. They got good numbers. They got almost exactly the same rule as the EPA did, but they ran into a buzz saw of political opposition from polluters within the State, and they threw the hot potato to EPA so that they would take the heat and they wouldn't have to get sued by the polluters.

I'm in the litigation with the polluters. There are over 25 lawyers on every conference call representing the polluter under the sun. That's where the litigation is coming is from them. That's what's going on here.

And that's why I think you folks should look harder at this and give us a chance to let the public explain what's happening to them in this problem.

[The prepared statement of Mr. Guest follows:]

**House Of Representatives Committee on Energy and Commerce
Before the Subcommittee on Oversight and Investigations
Hearing Entitled: EPA's Takeover of Florida's Nutrient Water Quality**

August 9, 2011

Testimony Submitted by Earthjustice

David G. Guest, Attorney

Earthjustice, Florida Office

On Behalf Of

**Sierra Club, Florida Wildlife Federation, St. Johns Riverkeeper, Environmental
Confederation of Southwest Florida, and Conservancy of Southwest Florida**

SUMMARY OF TESTIMONY BY DAVID G. GUEST

This summer, as in many past years, Florida has been plagued by toxic algae outbreaks. Health officials have posted signs, warning residents and tourists to stay out of the water (and keep pets and children away) to avoid contact with potent liver and nerve toxins in algae. These toxic algae outbreaks are caused by sewage, fertilizer, and manure runoff, which bring excess phosphorus and nitrogen into the public's waters. These outbreaks clearly jeopardize the tourist-dependent economy of America's fourth-largest state – a place that draws visitors from around the globe.

This public health crisis is preventable. New limits for pollution from sewage, manure and fertilizer developed by the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection will go a long way toward preventing these harmful algae outbreaks by controlling pollution at its source. No private party has the right to contaminate the public's water, and this is why standards must be set to protect health and safety.

As it stands now, Florida has an unenforceable "narrative" nutrient standard that merely says that nutrients can't cause a biological "imbalance." This is like posting a speed limit sign on I-75 that reads "Drive At A Reasonable Speed Considering Weather, Traffic and Lighting Conditions As Well As Other Relevant Factors." Numeric standards, on the other hand, are precise and enforceable -- like speed limit signs that clearly say "SPEED LIMIT 55 MPH."

States are generally responsible for setting pollution limits and Florida proposed numeric limits on phosphorus and nitrogen in August 2009 that are virtually the same as EPA's limits. However, sewage industry opposition used its political muscle to stop Florida from adopting them. The Florida DEP then threw the hot potato to EPA and have them adopt the limits. EPA's limits use the same science and same data that Florida used. That's why the limits are almost the same.

TESTIMONY BY DAVID G. GUEST

This summer, as in many past years, Florida is facing a serious public health and economic crisis. All over the state, nasty toxic algae will break out on lakes, rivers, springs, and beaches, as it has in past summers. Health officials are posting signs, warning residents and tourists to stay out of the water (and keep pets and children away) to avoid contact with potent liver and nerve toxins in algae.

These toxic algae outbreaks are caused by sewage, fertilizer, and manure runoff, which bring excess phosphorus and nitrogen into the public's waters.

The toxic algae pollution has become so serious that The Florida Department of Health now hands out educational materials that ask people: "Have You been Slimed?" Callers to the state's Aquatic Toxins Hotline hear a recording which warns: "It is very important that pets, livestock and small children are kept out of water suspected of having a blue green algae bloom since there have been many reported animals dying after drinking highly contaminated water." This clearly jeopardizes the tourist-dependent economy of America's fourth-largest state – a place that draws visitors from around the globe.

This serious pollution is poisoning the rivers, lakes and streams that supply drinking water for Floridians' taps. A toxic algae outbreak shut down a drinking water plant that served 30,000 people on the Caloosahatchee River in 2008 and again this year.

Clearly, the Clean Water Act intends for tourists and residents to enjoy clean drinking water and waters safe for recreation, not water polluted with sewage, fertilizer and manure runoff. It is disturbing that people all over Florida have ended up at emergency rooms with breathing problems, rashes and sores just because they went to the beach, rode in a boat, jumped into a cool river, or allowed their toddler to splash in a sandy lake.

As Congress hears testimony about toxic algae outbreaks in Florida waters, it is important to realize that this public health crisis is preventable. The new limits for pollution from sewage, manure and fertilizer developed by the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection will go a long way toward preventing these harmful algae outbreaks by controlling pollution at its source.

No private party has the right to contaminate the public's water, and this is why standards must be set to protect everyone's health and safety.

Areas in Southwest Florida, including Sanibel Island tourist beaches, have suffered repeated noxious outbreaks of toxic green algae and red tide in recent years. The dirty outbreaks fouled drinking water supplies, killed fish, closed popular tourist beaches, and devastated the local economy. Visitors to Daytona Beach in 2007 saw lifeguards wearing face masks because algae toxins in the air made them cough and cause respiratory problems. Other popular beach areas will suffer the same fate if the EPA does not set these limits to stop water pollution. During a red tide outbreak in Jacksonville in 2007, the local health department received 15 to 20 reports every day of respiratory illness from beachgoers.

The famous St. Johns River outside Jacksonville was closed to fishermen last summer because a 100-mile long, disgusting toxic green slime outbreak poisoned fish, making them unsafe to catch or eat. The chief investigating scientist told the Florida Times-Union that in some fish, "Their eyes are bloody, their livers are bloody, their internal tissues are bloody." Toxin levels were recorded at 50 – 140 times higher than the World Health Organization's recommended limits and many people reported respiratory problems, raw throats, and irritated eyes.

This runoff will continue to poison Florida's waters and ruin the state's economy unless we establish firm standards for the public good.

It is past time to take action on behalf of the public's health. Florida's Department of Environmental Protection first issued a major report documenting the dangers of toxic algae blooms eleven years ago -- in 2000.

In 2001, The Orlando Sentinel reported on the health threat:

"Dangerous amounts of toxic algae -- one sample showed 354 times the level considered safe -- infest popular Central Florida lakes where people spend weekends swimming, fishing and skiing.

Twenty of the 23 lakes tested in a joint investigation by the Orlando Sentinel and Central Florida News 13 turned up enough of the toxic algae to cause vomiting, bloody diarrhea, trouble breathing, skin rashes, mouth ulcers, blisters and eye irritations in people who play in the water.

Accidentally swallow some of it -- and swimmers do ingest several mouthfuls on average -- and the risk widens to include damage to the liver or nervous system, and cancer."

In 2005, the St. Lucie River and estuary in Southeast Florida was covered with bright green slime and it wasn't safe to even touch the water. Waterfront property values in the area suffered a permanent decline of a whopping \$500 million after the outbreak.

In 2006, testing by DEP scientists revealed that half of Florida's rivers and more than half of the state's lakes had poor water quality and sewage, fertilizer and manure pollution was the major concern. "The actual number of miles and acres of waters impaired [by these pollutants] is likely higher," the DEP noted, "as many waters that have yet to be assessed may also be impaired."

The recent toxic algae crisis on the Caloosahatchee River is a grim reminder of why we need enforceable water pollution limits. Five million people visited Lee County, where the Caloosahatchee is located, in 2010, and tourism employs at least 50,000 people in the area.

The situation is dire: Lee County Commission Chairman Frank Mann told local television news reporters the Caloosahatchee “is as foul as I’ve ever seen it with pollution. In front of my own house there’s an algae scum nearly an inch thick. It smells as though you were standing by a septic tank with the lid taken off.”

One of your colleagues, U.S. Sen. Jim Inhofe, swam in the same type of toxic algae outbreak in Grand Lake, Oklahoma, the last week of June and said he became “deathly sick” that night with an upper respiratory illness. “There is no question,” Inhofe told a reporter from the Tulsa World, that his illness came from the toxic algae in the lake.

As it stands now, Florida has an unenforceable “narrative” nutrient standard that merely says that nutrients can’t cause a biological “imbalance.” This is like posting a speed limit sign on I-75 that reads “Drive At A Reasonable Speed Considering Weather, Traffic and Lighting Conditions As Well As Other Relevant Factors.” Numeric standards, on the other hand, are precise and enforceable -- like speed limit signs that clearly say “SPEED LIMIT 55 MPH.” In 2008, after watching algae outbreaks threaten water bodies across Florida and uncovering EPA documents which stated explicitly that numeric nutrient standards for phosphorus and nitrogen pollution were necessary under the Clean Water Act, Earthjustice filed suit against the EPA on behalf of Florida Wildlife Federation, Sierra Club, Conservancy of Southwest Florida, Environmental Confederation of Southwest Florida, and St. Johns Riverkeeper. The suit sought to require the EPA to promptly set numeric standards.

The litigation concluded in a Consent Decree in which the federal court found that sewage, fertilizer, and animal waste pollution have worsened or not been reduced from unacceptably high levels, and that Florida’s “narrative” standards had not solved the problem. The federal court’s conclusion that the settlement was fair, reasonable and in the public interest

was challenged by the polluting industries. The Eleventh Circuit Court of Appeals just rejected that challenge. EPA's final numeric standards for inland lakes and streams will take effect in March 2012. Standards for Florida's estuaries and for South Florida canals and streams will be finalized by August 2012.

Opposition from Florida's leaders to the EPA's numeric standards is a new political phenomenon.

Just two years ago, then-Florida DEP Secretary Michael W. Sole acknowledged the state's serious problem with the so-called "nutrients" phosphorus and nitrogen in this press release:

"Numeric nutrient criteria will significantly improve Florida's ability to address nutrient pollution in a timely and effective manner. The State of Florida recognizes that more needs to be done to address nutrient pollution in our rivers, streams, lakes and estuaries ... Excess nitrogen and phosphorus levels (nutrient pollution) in water bodies can cause harm to aquatic ecosystems and threaten public health.

Nutrient pollution can lead to water quality problems such as harmful algal blooms, low-oxygen "dead zones" in water bodies and declines in wildlife habitat. These effects also disrupt recreational activities and pose threats to public health."

States are generally responsible for setting pollution limits and Florida proposed numeric limits on phosphorus and nitrogen in August 2009 that are virtually the same as EPA's limits. However, sewage industry opposition used its political muscle to stop Florida from adopting them. The Florida DEP then threw the hot potato to EPA and have them adopt the limits. EPA's limits use the same science and same data the Florida used. That's why the limits are almost the same.

The new standards have been carefully developed. EPA and DEP scientists jointly reviewed 13,000 water samples at 2,200 sites around the state. This is not a "one size fits all

approach” as has been claimed by some – the limits are specifically crafted to consider the needs of different types of waterways in the state.

Unfortunately, much misinformation is being circulated about the cost of complying with the new standards. The opponents of the pollution limits have inflated their cost estimates by falsely claiming that all Florida sewer plants would have to treat water by reverse osmosis — the pricey method Saudi Arabia uses to convert seawater to fresh water. It’s not true: No plants in Florida would be required to use reverse osmosis to meet the new pollution limits. The EPA explicitly says that on the Frequently Asked Questions section of its website.

(<http://water.epa.gov/lawsregs/rulesregs/upload/floridafaq.pdf>, page 2)

Most sewage plants will need add-ons that use chemical treatment or biological uptake systems. The EPA’s fiscal impact review concluded that pollution prevention measures will cost each Florida household 11 to 20 cents per day.

(http://water.epa.gov/lawsregs/rulesregs/upload/florida_econ.pdf) At the request of Florida Sen. Bill Nelson, the National Academy of Sciences is now reviewing those economic calculations as well.

The public is firmly in support of the new standards. When the EPA asked the public to comment on the new water pollution limits, the agency received 22,000 comments, with 20,000 in support of the new standards.

The bottom line is that we know much more than we used to about the damage that this pollution causes to Floridians and the water they drink and use for recreation. Now that we know more, it is time to implement the pollution limits and prevent this public health threat from continuing.

Photos of algae outbreaks are available at:

<http://www.earthjustice.org/library/background/photos-florida-nutrient-pollution-and-algae-blooms.html>

We appreciate the opportunity to submit this testimony to the subcommittee. We respectfully request that this statement, along with the attachments including photographs that document this problem, be included in the hearing record.

Thank you.

Mr. STEARNS. Thank you.
Mr. Richardson?

STATEMENT OF DAVID RICHARDSON

Mr. RICHARDSON. Good afternoon. I'm David Richardson. I'm the assistant general manager for water and wastewater systems at Gainesville Regional Utilities. I'm responsible for all aspects of the water and wastewater system serving Gainesville and the surrounding area.

Thank you, Congressman Stearns and members of the Subcommittee on Oversight and Investigations, for holding this field hearing.

The recently adopted numeric nutrient criteria rule is undermining our widely supported environmental restoration project by introducing unnecessary regulatory burden, risk, and uncertainty. The new regulatory requirements will cost our customers up to \$120 million in compliance costs or, if we are lucky, a minimum of 1 million customer dollars to pursue highly uncertain regulatory relief.

Unfortunately, EPA's nutrient criteria rule will provide no additional environmental benefit for this project. I'm sure you must be wondering if this rule results in customer expenditures with no environmental benefit, why have we not worked with EPA during rule development to prevent this from happening?

We have. We've provided lengthy written comments and met personally with representatives from EPA's Office of Science and Technology during rule development. The essence of our comments to EPA was this. Our community already has an EPA-approved, site-specific numeric nutrient rule, known as the Alachua Sink nutrient total maximum daily load. And Gainesville Regional Utilities is participating in a \$26 million project, called the Paynes Prairie Sheetflow Restoration Project, to comply with that EPA-approved rule.

No environmental benefit will result from overlaying new generalized nutrient criteria rules on waters already subject to the science-based, site-specific nutrient rule. Only needless economic expenditures will result.

In spite of our extensive comments and requests, the numeric nutrient criteria rule adopted on November 14, 2010, provides no meaningful solution. At a minimum, the rule requires that we spend \$1 million demonstrating once more that our sophisticated wetland restoration project comports with EPA's new generalized mandates.

We feel whipsawed. Gainesville Regional Utilities has already demonstrated the appropriateness of this project to DEP and EPA through the total maximum daily load process and the National Pollutant Discharge Elimination System permitting process. The Paynes Prairie Sheetflow Restoration Project is a major environmental restoration project, which will improve water quality, protect drinking water, and restore 1,300 acres of natural wetlands within Paynes Prairie Preserve State Park.

The \$26 million project is a partnership among Gainesville Regional Utilities, City of Gainesville Public Works, DEP, the St. Johns River Water Management District, and the Florida Depart-

ment of Transportation and is broadly supported in our community. The project reflects thousands of hours of effort by local stakeholders.

To date, \$3.8 million has been spent on this project. Design is continuing, and construction is scheduled to start in 2012. When completed, the project will cost \$26 million. We must proceed with this project to comply with DEP and EPA permit conditions.

This project is incorporated in a National Pollutant Discharge Elimination System permit that EPA approved and DEP issued in 2010. Now, barely a year later, new regulations have been adopted that put this project in jeopardy. No site conditions have changed. No additional data suggests a different approach is needed. None of the underlying science that led to the development of this project has changed.

The only change is that EPA has adopted a new set of generalized nutrient rules that don't acknowledge or allow for the wide range of naturally occurring nutrient levels or allow solutions that are tailored to site-specific conditions. DEP and EPA still support this project, but demonstrating that this project meets the newly adopted numeric nutrient criteria regulation is costly and uncertain.

Gainesville Regional Utilities greatly appreciates the opportunity to provide these comments. We ask that this subcommittee please help us avoid spending customer money on activities that will not result in an environmental benefit.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Richardson follows:]

One Page Summary – Testimony from David Richardson, GRU August 9, 2011

**Impact of EPA's Numeric Nutrient Criteria on the Paynes Prairie Sheetflow Restoration Project
– More Regulation/More Cost/No Benefit**

Thank you Congressman Stearns and Members of the Subcommittee on Oversight and Investigations for holding this field hearing. The recently adopted numeric nutrient criteria rule (NNC) is undermining our widely supported environmental restoration project by introducing unnecessary regulatory burden, risk and uncertainty. The new regulatory requirements will cost our customers up to \$120 million in compliance costs or, if we are lucky, a minimum of 1 million customer dollars to pursue highly uncertain regulatory relief. Unfortunately EPA's nutrient criteria rule will provide no additional environmental benefit.

I'm sure you must be wondering, if this rule results in customer expenditures with no environmental benefit, why have we not worked with EPA during rule development to prevent this from happening. We have. We provided lengthy written comments and met personally with representatives from EPA's Office of Science and Technology during rule development.

The essence of our comments to EPA was this: our community already has an EPA-approved site-specific, numeric nutrient rule -- known as the Alachua Sink Nutrient TMDL -- and GRU is participating in a \$26 million dollar project -- called the Paynes Prairie Sheetflow Restoration Project -- to comply with that EPA-approved rule. No environmental benefit will result from overlaying new generalized nutrient criteria rules on waters already subject to this science-based, site specific nutrient rule; only needless economic expenditures will result.

In spite of our extensive comments and requests, the NNC rule adopted on November 14, 2010 provides no meaningful solution. At a minimum, the rule requires that we spend \$1 million demonstrating once more that our sophisticated wetlands restoration project comports with EPA's new generalized mandates. We feel whipsawed. GRU has already demonstrated the appropriateness of this project to FDEP and EPA through the TMDL process and the NPDES permitting process.

The Paynes Prairie Sheetflow Restoration Project is a major environmental restoration project which will improve water quality, protect drinking water and restore 1,300 acres of natural wetlands within Paynes Prairie Preserve State Park. The \$26M project is a partnership among Gainesville Regional Utilities, City of Gainesville Public Works, FDEP, the St. Johns River Water Management District, and the Florida Department of Transportation, and is broadly supported in the community.

The project reflects thousands of hours of effort by local stakeholders. To date, \$3.8M has been spent on this project. Design is continuing, and construction is scheduled to start in 2012. When completed, the project will cost approximately \$26M. We must proceed with this project to comply with FDEP and EPA permit conditions.

This project is incorporated in an NPDES permit that EPA approved and FDEP issued in 2010. Now, barely a year later, new regulations have been adopted that put this project in jeopardy. No site conditions have changed, no additional data suggests a different approach is needed, none of the underlying science that led to the development of this project has changed. The only change is that EPA has adopted a new set of generalized nutrient rules that do not acknowledge or allow for the wide range of naturally occurring nutrient levels, or allow solutions that are tailored to site specific conditions. FDEP and EPA still support this project, but demonstrating that this project meets the newly adopted NNC regulation is costly and uncertain.

GRU greatly appreciates the opportunity to provide these comments. We ask that this Subcommittee please help us avoid spending customer money on activities that will not result in an environmental benefit.

Testimony of David Richardson, Gainesville Regional Utilities, August 9, 2011

Impact of EPA's Numeric Nutrient Criteria on the Paynes Prairie Sheetflow Restoration Project – More Regulation/More Cost/No Benefit

Executive Summary

Thank you Congressman Stearns and Members of the Subcommittee on Oversight and Investigations for holding this field hearing. The recently adopted numeric nutrient criteria rule (NNC) is undermining our widely supported environmental restoration project by introducing unnecessary regulatory burden, risk and uncertainty. The new regulatory requirements will cost our customers up to \$120 million in compliance costs or, if we are lucky, a minimum of 1 million customer dollars to pursue highly uncertain regulatory relief. Unfortunately EPA's nutrient criteria rule will provide no additional environmental benefit for this project.

I'm sure you must be wondering, if this rule results in customer expenditures with no environmental benefit, why have we not worked with EPA during rule development to prevent this from happening. We have. We provided lengthy written comments and met personally with representatives from EPA's Office of Science and Technology during rule development.

The essence of our comments to EPA was this: our community already has an EPA-approved site-specific, numeric nutrient rule -- known as the Alachua Sink Nutrient Total Maximum Daily Load -- and Gainesville Regional Utilities is participating in a \$26 million dollar project -- called the Paynes Prairie Sheetflow Restoration Project -- to comply with that EPA-approved rule. No environmental benefit will result from overlaying new generalized nutrient criteria rules on waters already subject to this

science-based, site specific nutrient rule; only needless economic expenditures will result.

In spite of our extensive comments and requests, the NNC rule adopted on November 14, 2010 provides no meaningful solution. At a minimum, the rule requires that we spend \$1 million demonstrating once more that our sophisticated wetlands restoration project comports with EPA's new generalized mandates. We feel whipsawed. Gainesville Regional Utilities has already demonstrated the appropriateness of this project to FDEP and EPA through the Total Maximum Daily Load (TMDL) process and the National Pollutant Discharge Elimination System permitting process.

The Paynes Prairie Sheetflow Restoration Project is a major environmental restoration project which will improve water quality, protect drinking water and restore 1,300 acres of natural wetlands within Paynes Prairie Preserve State Park. The \$26M project is a partnership among Gainesville Regional Utilities, City of Gainesville Public Works, FDEP, the St. Johns River Water Management District, and the Florida Department of Transportation, and is broadly supported in the community.

The project reflects thousands of hours of effort by local stakeholders. To date, \$3.8M has been spent on this project. Design is continuing, and construction is scheduled to start in 2012. When completed, the project will cost approximately \$26M. We must proceed with this project to comply with FDEP and EPA permit conditions.

This project is incorporated in an National Pollutant Discharge Elimination System permit that EPA approved and FDEP issued in 2010. Now, barely a year later, new regulations have been adopted that put this project in jeopardy. No site conditions

have changed, no additional data suggests a different approach is needed, none of the underlying science that led to the development of this project has changed. The only change is that EPA has adopted a new set of generalized nutrient rules that do not acknowledge or allow for the wide range of naturally occurring nutrient levels, or allow solutions that are tailored to site specific conditions. FDEP and EPA still support this project, but demonstrating that this project meets the newly adopted NNC regulation is costly and uncertain.

Gainesville Regional Utilities greatly appreciates the opportunity to provide these comments. We ask that this Subcommittee please help us avoid spending customer money on activities that will not result in an environmental benefit.

Full Written Testimony

Gainesville Regional Utilities (GRU) is a multi-service utility owned and operated by the City of Gainesville. GRU serves the greater Gainesville area and provides one or more services to a population of approximately 190,000. My current position with GRU is Assistant General Manager, Water/Wastewater Systems. GRU is a member of the Florida Water Environment Association (FWEA) Utility Council. I serve as Vice President of the Florida Water Environment Association (FWEA) Utility Council. Today, I'm representing Gainesville Regional Utilities.

In accordance with my oversight and direction, GRU submitted detailed comments to EPA on April 28, 2010 regarding EPA's initially proposed "Water Quality Standards for the State of Florida's Lakes and Flowing Waters" and again on September 1, 2010 regarding EPA's supplemental notice of data availability. These comments outlined GRU's various nutrient reduction programs; detailed concerns regarding the scientific validity of EPA's proposed numeric nutrient criteria rules; and explained the rules' negative impact on GRU's operations, including an environmental restoration project being implemented to achieve an EPA-approved nutrient Total Maximum Daily Load (TMDL) for Alachua Sink.

GRU provides domestic wastewater collection, treatment, disposal, and reuse services for approximately 62,000 connections and a population of 164,000. GRU operates two water reclamation facilities: the Main Street Water Reclamation Facility and the Kanapaha Water Reclamation Facility. In accordance with a National Pollutant Discharge Elimination System (NPDES) permit issued by the State of Florida, GRU's Main Street Water Reclamation Facility discharges to a stream known as Sweetwater

Branch. Today's comments will focus on the Main Street Water Reclamation Facility discharge and downstream waterbodies.

Sweetwater Branch is an urban creek that flows through the City of Gainesville and then flows via a manmade canal into Alachua Sink and recharges the Floridan aquifer. (The Floridan aquifer is a 100,000 square mile underground freshwater system that underlies parts of five states in the Southeast and provides water to a number of Florida cities.) Sweetwater Branch is a rapidly moving stream that conveys a significant amount of stormwater, trash debris and sediment from urban areas in Gainesville during and after storm events. The majority of Sweetwater Branch headwaters have been piped and covered or concrete lined, and the remaining upper stream sections have been channelized and straightened. The Sweetwater Branch stream sections at the Main Street Water Reclamation Facility's point of discharge and downstream have been channelized, and there are spoil piles on both sides of the channel. The stream is highly incised due to scouring from storm events. Aquatic vegetation is uncommon in Sweetwater Branch due primarily to erosion and sedimentation; these processes alter the natural streambed, resulting in unfavorable conditions for plant growth and for growth of healthy populations of benthic organisms. The flow from Sweetwater Branch has been diverted directly to Alachua Sink via a man-made canal constructed in the 1930s. This results in deposition of trash and sediment on the prairie and into Alachua Sink, along with exacerbating nutrient loads to Alachua Sink. The Main Street Water Reclamation Facility contributes 70% of the Sweetwater Branch's mean daily flow (i.e. flow that is not influenced by significant rainfall) downstream of the point of discharge.

Sweetwater Branch was assessed by State of Florida Department of Environmental Protection (FDEP) and determined as not impaired for nutrients under Florida's TMDL program. However, its downstream water, Alachua Sink, was identified as nutrient-impaired, due to elevated levels of chlorophyll-a. Based on a three-year data collection effort for Alachua Sink from 2000-2002, it was determined that Alachua Sink's average annual total nitrogen (TN) concentration was 4.33 milligrams per liter (mg/L), and the average annual total phosphorus (TP) concentration was 1.279mg/L. Analysis of the water quality of Alachua Sink demonstrated that the long-term annual average TN/TP ratio is less than 10, indicating that the phytoplankton community of Alachua Sink is nitrogen limited (i.e. the growth rate of the phytoplankton is controlled by the availability of nitrogen). So, FDEP developed a numeric nitrogen TMDL that is based on the nitrogen loadings to Alachua Sink that will be protective of its designated uses, and the FDEP derived corresponding nitrogen allocations to entities that influence the nitrogen water quality of Alachua Sink. The nitrogen TMDL for Alachua Sink was approved by FDEP and EPA in 2006.

The nitrogen load reduction requirements of the Alachua Sink TMDL are detailed in FDEP's Orange Creek Basin Management Action Plan (BMAP), which was adopted by the FDEP on May 15, 2008. GRU is a stakeholder and member of the Orange Creek Basin Working Group (BWG) which developed the Orange Creek Basin Basin Management Action Plan through an open, collaborative process involving multiple stakeholders representing various agencies, environmental groups and the public. The Basin Working Group has been active since 2005, and has devoted an extensive amount of effort to identify appropriate TMDL pollutant load reductions and develop

solutions to address and meet the TMDLs. The effort has included extensive public outreach including many public meetings. GRU and City staff have devoted over 1,300 hours to the Basin Working Group meetings and outreach efforts. Thousands of hours have also been devoted by other agencies, public representatives, etc. The Basin Working Group includes members representing a number of public agencies as well as citizen and environmental interests including:

- *Alachua County (Public Works and Environmental Protection Departments);*
- *City of Gainesville (Public Works);*
- *Fish and Wildlife Conservation Commission;*
- *Florida Department of Transportation;*
- *Florida Department of Environmental Protection Northeast District Office;*
- *Florida Department Environmental Protection Bureau of Invasive Plant Management;*
- *Paynes Prairie Preserve State Park;*
- *Alachua County Health Department;*
- *Gainesville Regional Utilities (GRU);*
- *University of Florida;*
- *St Johns River Water Management District;*
- *Department of Agriculture and Consumer Services (Office of Agricultural Water Policy and Division of Forestry);*

- *Florida Forestry Association;*
- *Private timber interests;*
- *Marion County Clean Water Program;*
- *Alachua County and Gainesville citizen environmental advisory committees; and*
- *Community groups, including Sustainable Alachua County, Suwannee St. Johns Sierra Club, and Women for Wise Growth.*

The Paynes Prairie Sheetflow Restoration Project was developed by the Basin Working Group through the Basin Management Action Plan process to meet the Alachua Sink TMDL allocations (See Figure A). This project is estimated to cost \$26 million and is a cooperative effort between GRU, the City of Gainesville, the St. Johns River Water Management District, FDEP, Florida Department of Transportation, and Alachua County. The Gainesville community and the State of Florida have invested six years and \$3.8 million in the Paynes Prairie Sheetflow Restoration Project to date. The Paynes Prairie Sheetflow Restoration Project provides a comprehensive basin-wide solution for meeting the TMDL nutrient reduction requirements for multiple sources. The project includes improvements to the GRU Main Street Water Reclamation Facility to remove phosphorus. It also includes the construction of trash and sediment removal facilities and an enhancement wetland which will receive the flow from Sweetwater Branch and remove nutrients from all sources entering Sweetwater Branch, including the GRU Main Street Water Reclamation Facility, stormwater runoff, and contamination entering the creek from septic tanks, fertilizers and other sources. The artificial canal

connecting Sweetwater Branch to Alachua Sink will be removed, and the flow from the enhancement wetland will be discharged to natural wetlands on Paynes Prairie, restoring the natural flow pattern onto the prairie. The existing, natural wetlands will further remove nitrogen to meet background nitrogen concentration levels before discharging to Alachua Sink. This project will improve water quality in Alachua Sink, restore and rehydrate approximately 1,300 acres of natural wetlands within Paynes Prairie Preserve State Park, provide much needed water to the prairie, remove trash, debris and sediment, provide protection to the Floridan Aquifer, and provide recreation / wildlife viewing. The project is broadly supported by the community. A video has been produced that describes this project which can be viewed by visiting the City of Gainesville website at:

http://gainesville.granicus.com/ASX.php?view_id=6&clip_id=760&r=20d0ae70d8cbf48650e34605eb9dfd09&xp=n&intro=1&sn=gainesville.granicus.com&bitrate=&SESSI=8930d58bddd076e1c6edf8bdbbaab1&sn=gainesville.granicus.com

FIGURE A: Paynes Prairie Sheetflow Restoration Project



EPA's final numeric nutrient criteria rule is creating a serious risk of undermining the Paynes Prairie Sheetflow Restoration Project without providing any environmental benefits. EPA has finalized numeric nutrient criteria of 1.54 mg/L-TN and 0.12 mg/L-TP for streams in the peninsular eco-region, which apply Sweetwater Branch. GRU's effluent discharge into Sweetwater Branch has average nutrient concentrations of approximately 5 to 8 mg/L-TN and 1 mg/L-TP. Reducing nutrient levels in GRU's discharge to achieve EPA's numeric nutrient water quality criteria for streams will not improve the health of the biological community in Sweetwater Branch. As previously noted, Sweetwater Branch was not listed as impaired for nutrients and exhibits no signs of nutrient impairment (e.g. no algal booms or imbalances of flora or fauna related to nutrients) while being influenced by GRU's current discharges. Reducing nutrient levels in GRU's discharge will not benefit Alachua Sink, because the Paynes Prairie Sheetflow Restoration Project is being implemented to achieve nutrient loads to Alachua Sink that protect its designated use.

In order for GRU to meet the numeric nutrient criteria in Sweetwater Branch, GRU would either have to install non-conventional technologies to meet Numeric Nutrient Criteria at the Main Street Water Reclamation Facility discharge instead of or in addition to the Paynes Prairie Sheetflow Restoration Project, or install a pipeline to route the flow from Main Street Water Reclamation Facility directly to the enhancement wetland, thus by-passing the stretch of Sweetwater Branch downstream of the Main Street Water Reclamation Facility. This pipeline would have a capital cost of approximately \$8 million and annual operating cost of approximately \$175,000/yr. This pipeline would provide no ecological benefit to Sweetwater Branch or Alachua Sink, but

would significantly increase the project cost which the community must bear. GRU's other option is to pursue uncertain regulatory relief in the EPA rule — apply for a Site Specific Alternative Criteria.

The EPA Numeric Nutrient Criteria lake criteria for nitrogen and phosphorus, which may apply to Alachua Sink, also create significant risk for the project. EPA's nutrient criteria rules do not clearly distinguish among lakes, wetlands, and sinks. GRU does not believe that Alachua Sink should be lumped in with EPA's definition of lakes; however, if EPA treats Alachua Sink as a lake, the EPA Numeric Nutrient Criteria for lakes are below natural background levels for Alachua Sink and below the TMDL criteria which FDEP established based on scientific evaluation of Alachua Sink. If GRU is unable to obtain Site Specific Alternative Criteria (SSAC) for Alachua Sink, GRU will have to install non-conventional treatment at Main Street Water Reclamation Facility at a capital cost of \$120 million and operating cost of roughly \$11 million/year resulting in a 66% rate increase.

GRU is seeking site specific alternative criteria for Sweetwater Branch and attempting to discern whether site specific alternative criteria are necessary for Alachua Sink. GRU will spend approximately \$1 million for consulting and legal services on these efforts. From the perspective of protecting the environment this additional analysis is unnecessary and provides no benefit, since there has already been an extensive amount of analysis of this basin through the TMDL and Basin Management Action Plan processes. If GRU is unable to obtain a site specific alternative criteria for Sweetwater Branch, it will cost an additional \$8 million to construct a pipeline (as described above) to by-pass Sweetwater Branch, with no environmental benefit. If a site specific

alternative criteria are indeed necessary for Alachua Sink and GRU is unable to obtain them, GRU may have to spend \$120 million in capital cost (as described above) to construct non-conventional treatment modifications (such as reverse osmosis) to meet numeric nutrient criteria, with no environmental benefit. Due to budget constraints, these expenditures could eliminate GRU's ability to participate in the Paynes Prairie Sheetflow Restoration Project and its ability to comply with NPDES permit requirements tailored to implement the Paynes Prairie Sheetflow Restoration Project. GRU now faces a dilemma due to the regulatory uncertainty created by EPA's nutrient criteria rules, which do not take into account programs being implemented to achieve EPA-approved nutrient TMDLs. Because EPA's numeric nutrient criteria rules apply to waters that are already subject to EPA-approved, basin-wide nutrient TMDL solutions, such as Sweetwater Branch and Alachua Sink, the rules impede the ability of GRU and other stakeholders to implement projects that will reduce nutrient loads to Florida waters and meet the goals of the Clean Water Act.

GRU appreciates the efforts of this Subcommittee to investigate the policy and economic consequences of EPA's nutrient rules. Please help us avoid spending customer money on activities that will not result in an environmental benefit. Please help us save the Paynes Prairie Sheetflow Restoration Project.

Mr. STEARNS. Thank you.

I will start with my questions. It is nice to have two constituents really from Trenton, Gilchrist and from Gainesville. So I am also—very rare do I have two constituents on a panel.

Mr. St. John, you made the pretty dramatic statement that your industry could be out of business I think you said in perhaps 5 years if these were implemented. And that is a pretty strong statement. Because the EPA and their nutrient standards for phosphorus and nitrogen would make it more difficult for the farms and for the people milking cows and things like that because how would this—because their runoff would be so regulated that they couldn't implement?

Is that—

Mr. ST. JOHN. It was mentioned that the EPA does not control agriculture. But inadvertently, they do. If they were to change—

Mr. STEARNS. That is what I want to get at. How does it inadvertently—

Mr. ST. JOHN. Well, if they were to change the 10 parts per million to 0.35—

Mr. STEARNS. OK.

Mr. ST. JOHN [continuing]. We would then, through a change of permit, be asked to comply with the 0.35.

Mr. STEARNS. And a typical farm, Gilchrist County, that has cows, how would this specifically impact it?

Mr. ST. JOHN. Bottom line, if that's moved to 0.35, we cannot comply because we recycle our nutrients through plants. I like to think we are the ultimate recyclers.

Mr. STEARNS. You recycle your nutrients through the plants?

Mr. ST. JOHN. That's right, feed the plants—

Mr. STEARNS. And you couldn't comply?

Mr. ST. JOHN. No. No, sir. It's such a small limit of nitrogen that would escape, and it does, with these 3-inch rains. You know, that's why it's 10 parts per million and not less. Our alternative would be haul all our effluent to a landfill or move it out of State.

Those are cost prohibitive, and we would not be able to—

Mr. STEARNS. So you would go to another State that doesn't have that high requirement?

Mr. ST. JOHN. I would hope the Federal Government would buy us out for a large sum of money, and I would retire and live happily ever after.

[Laughter.]

Mr. STEARNS. You wouldn't have to deal with it.

Now you say, you know, I agree with agriculture is extremely important to the State of Florida, and people think of tourism as the number-one industry. But agriculture oftentimes is considered the number one in Florida.

But you have heard Mr. Guest talked about the Suwannee River, and he has talked about other things where this pollution is in such a dire strait that people don't feel comfortable they can go swimming. Or if they do, they get a rash. So, in your mind's eye, is there a way to compromise on this, either through technological advancement, or you just think the standard is too strict and it should be less? That would be your opinion?

Mr. ST. JOHN. Well, first, let me comment on the Suwannee River. We have a place on the Suwannee River. And of course, in our litigious society, the State put posts up at every major spring to avoid some litigation if someone gets hurt jumping into the spring. My family, everyone that comes to visit us, swims in the Suwannee.

Mr. STEARNS. You have no trouble?

Mr. ST. JOHN. We don't get a rash. But anyway, I'm not—I'm not here to—I just—when someone talks about the Suwannee, I get a little defensive.

Mr. STEARNS. Yes, I understand.

Mr. ST. JOHN. I think the 0.35 is no place in this country can that comply, even septic systems.

Mr. STEARNS. It is not even—it is not the State of Florida. It is just, it is an unreasonable statute?

Mr. ST. JOHN. Yes, I believe that.

Mr. STEARNS. OK. Mr. Steinbrecher, you heard the first panel. Is there anything that you heard in the first panel, either from Keyes Fleming or from Mr. Budell that you would like to comment on?

Mr. STEINBRECHER. Thank you, Chairman, I would.

Mr. STEARNS. You know, one of the things I got concerned about is this litigation in which Mr. Budell said that no variances will ever be provided because there will be suits. And for all intents and purposes, either for nitrogen or for phosphorus, there will be no settlements. And so, I mean, you might—

Mr. STEINBRECHER. I would exactly like to hone in on that. EPA's assurances to us this morning, unfortunately, are not in the rule. None of those things related to you are in the rule. What's in the rule is certain numbers.

And so, Ms. Keyes Fleming says but they'll—utilities and others will be allowed to meet some other number. But some other number, using some other technology, isn't in the rule. They're just not there.

So we're supposed to believe that these new rules that displace existing EPA-approved rules are desperately needed on one hand, and then, on the other hand, we're supposed to believe that almost everybody is going to get an exemption from them somehow. That's what their cost estimate is based upon. It doesn't make sense.

Mr. STEARNS. Mr. Dever, you had indicated you represent the Florida Gulf Coast Building and Construction Trade Council, and that represents a lot of the affiliated unions, right?

Mr. DEVER. Yes, sir.

Mr. STEARNS. How many unions does that represent?

Mr. DEVER. We've got 14 that signed on right now.

Mr. STEARNS. OK.

Mr. DEVER. Carpenters, laborers, et cetera.

Mr. STEARNS. Right. And in your experience then, you don't think this is a partisan matter in any way, do you? Or—

Mr. DEVER. No, sir. I don't.

Mr. STEARNS. And I think as Mr. Guest pointed out, some of this got started under the Bush administration. But what you are saying is that the impact of this on the regional construction will be pretty dramatic?

Mr. DEVER. It certainly can be. Yes, sir. This is a fragile industry. We are already at 10 percent unemployment, just slightly higher than that. We need to create ways to create more jobs, not create the fear of losing them. I think——

Mr. STEARNS. But tell me specifically how the EPA would affect these construction workers? Can you make it more personal?

Mr. DEVER. Yes, sir.

Mr. STEARNS. Take some of your unions and——

Mr. DEVER. Based on what I've read——

Mr. STEARNS. Yes.

Mr. DEVER [continuing]. The EPA is showing a total cost right now between \$135 million and \$206 million, and——

Mr. STEARNS. OK. We hear figures like that, but tell me specifically what would happen. Would it be the cost for the building materials, or would it be the cost for complying with the regulation for the home or environmental standards——

Mr. DEVER. Just the creation of——

Mr. STEARNS [continuing]. Dealing with nitrogen and phosphorus? How would——

Mr. DEVER. Yes, sir. Creation and investment of new jobs in the State could be diminished. For example, in the industrial sector, we do a lot of work in the phosphate industry. The phosphate covers central Florida, where we're at. We have a lot of competition right now from other geographical parts of the world, down in South America——

Mr. STEARNS. Where there are not these——

Mr. DEVER. They have no criteria of this nature.

Mr. STEARNS. OK.

Mr. DEVER. So this will have an impact.

Mr. STEARNS. All right. My time has expired.

Mr. Barton is recognized. He is on the committee.

Mr. BARTON. I don't mind letting Ms. Brown go first, if she would rather?

Ms. BROWN. OK.

Mr. STEARNS. It is your call, Mr. Barton, because you are on the committee, and you certainly have the choice to decide.

Mr. BARTON. Well, I think to be balanced, we ought to let——

Mr. STEARNS. OK. Ms. Brown is recognized for 5 minutes.

Ms. BROWN. I am glad you mentioned the word "balance." Because in looking at the committee, I want to say that may be what Mr. Guest thinks, it is not balanced. It is like 5-to-1. But I think it is about equal, Mr. Guest, with your testimony. So we are doing good.

But no one wants to be called a polluter, and calling names is not going to help us get where we need to go. And so, I would—I mean, I am not—I am saying what it is that we need to do to move forward. Basically, the State of Florida had 6 years, did nothing.

So, in some cases, you are saying it doesn't make any sense in agriculture. What can we do as we move forward to work out this situation, or if it is no reason, I am not going to sit here and tell you that I am going to support doing away with clean water. I am not. What I am going to tell you is I will work with you and work

with the communities, and I am very grateful that the chairman has called this meeting together.

What can we do to move our State forward? The reason why we don't have construction in many different areas is a variety of reasons. If you think about high-speed rail, we sent back \$3 billion, which is 60,000 jobs. So don't get my blood pressure up for no reason.

So let's talk about what we can do together as one team, moving the State of Florida forward, and I want to start with you, Mr. Guest, because you think you are outnumbered. Not true.

Mr. GUEST. Well, thank you, Congresswoman Brown.

I think that the short answer to that is that we need to get away from the hysteria about this and start working together as a team. We need to acknowledge the truth that there is this nightmarish problem that's growing. We also need to acknowledge that you can't have a compliance cost that's going to break the bank.

We need to be truthful about the law. This is a State responsibility. The State produced a rule, and it's essentially identical to what the State—to what EPA came up with.

The springs rule—actually, the springs rule is the State rule. The State rule is actually more stringent than the EPA rule, and for good reason. Because the kids that go in those springs do get rashes, and if you let them testify, they'd be telling you that today.

So we need to get people together to talk about how we can implement this in a practical, reasonable, timely way that doesn't break the bank. And that will protect our economy, that will increase jobs, that will protect property values. It will protect the public. That's how to do it.

Ms. BROWN. Mr. Guest, let me ask you a quick question before we go on. Have you been involved in any of the discussions with the State? Because EPA said they have been talking to the State.

Have the State been—since they are not here, I have to ask you.

Mr. GUEST. Yes. Oh, absolutely. We are in constant communication with the State. And we have reached out to the industry, to the sewage folks, to the farming people. We've reached out and said how can we work together to make this system work and end this problem?

And we just haven't gotten enough traction to get those folks to say, yes, let's sit down and work this out. And that's what we really need to do.

Ms. BROWN. So probably what you think needs to happen is we need to have another meeting that is more of not a hearing, but maybe a roundtable discussion, get everybody in the room, lock the door, and say you can't leave until we solve it?

Mr. GUEST. I think it would be better to do it industry by industry. But, yes, absolutely. This problem is solvable. You know, agriculture, to be—people need to be totally honest about this. The Clean Water Act doesn't regulate agriculture. The State does that, other than the exotic factory farm things, which there are very few of those.

The Clean Water Act doesn't do that; the State does that. And so, when the State says, well, the price tag is this much, it can't possibly be true because it's the State that implements the regula-

tions. The State sets the regulations. This act and this rule doesn't actually affect agriculture at all.

Ms. BROWN. Right. But I understand what they were saying. They were saying if the State adopts certain standards, it is going to affect agriculture eventually?

Mr. GUEST. Well, hope so. But it's going to take a change of law to get there. It's going to take a new statute, and I think it'd be a great idea for you all to think about amending the Clean Water Act so it applied to agriculture. That's something you should consider because of the gravity of this problem. But it doesn't do it now.

And I hope the State legislature does it sometime, too. But unless they do, it won't.

Ms. BROWN. My understanding is hearing from certain Members, they want to do away with the Clean Water Act completely, which is ludicrous. We got here because the States weren't doing what they were supposed to do.

Now we need to have a procedure that we could work together to move it forward. My time is out, but I need a response from one of the other participants.

Yes, sir?

Mr. STEINBRECHER. Ms. Brown, thank you.

I appreciate everything you said. My opinion is that it wasn't because the State wasn't doing it. I think Florida—I've spent my career in this field, and I think the State of Florida has one of the most outstanding water quality control programs in the entire Nation. This was about settling a lawsuit, and it was done badly. I really appreciate your question about how do we get beyond this because we got a mess now.

I would suggest, as actionable items, that EPA adopt all existing formerly EPA-approved nutrient TMDLs for the State of Florida, unless there is some overriding reason that maybe the science on a couple of them wasn't up to snuff for some reason. But if they've already looked at the issue, we've spent millions and millions of dollars on many of these and they exist, and we've got hundreds of millions of dollars of public infrastructure in our own area based on those scientific endpoints.

So, one, adopt those. Two, agree to do exactly what you're talking about, which is put the flowing waters portion of the rule in abeyance. They talk about lakes and springs as well. But the flowing water portion of the rule is the most objectionable scientific part, and agree to spend the appropriate time to go and set more scientifically based standards.

Those would be my suggestions.

Ms. BROWN. Thank you.

Mr. Chairman, I yield back.

Mr. STEARNS. Yes. Mr. Barton is recognized for 5 minutes.

Mr. BARTON. Thank you. Thank you, Mr. Chairman.

Mr. St. John, my uncle owned a dairy. He is retired now. And my other uncle was an inspector of dairies, and he is retired now. So I have some family history in the dairy industry. And of course, I like dairy products quite a bit.

Mr. Guest, we do appreciate you being here. I think it is—although you are outnumbered, it certainly doesn't mean you are

outmanned, so to speak, because of the issue. I would like to ask you a few questions.

Are you one of the plaintiffs in the lawsuit, or are you an attorney that represents the plaintiffs?

Mr. GUEST. I apologize for not clarifying that, Representative Barton. I'm counsel for the conservation organizations that brought this matter to the court back in 2008, I guess it was.

Mr. BARTON. OK. So you are a professional representative, although it is clear by your testimony that you share the views of the plaintiffs that you represent, that you think that they are carrying the gospel in terms of their message.

Mr. GUEST. The short answer to that is yes. We've been counseled, our firm has served as legal counsel, protecting clean water for communities for over 20 years. And yes, we concur with our clients that public health should come first.

Mr. BARTON. Now you heard my questions in the second round about requiring some standing to sue. I am not for revocation of the citizen lawsuit. I do think all of our environmental laws could stand a review, given when they were passed and what the society was then and what they are now. But I am not for revocation or repeal of Safe Drinking Water Act or the Clean Water Act or the Clean Air Act.

In fact, I am, along with Mr. Stearns, a co-sponsor of the Clean Air Act amendments of the mid 1990s. But I do think it is a fair question whether it is time to put some cost-benefit analysis into these laws, to set some requirements for standing to sue, to consider putting in some loser pay requirements, things of this sort.

In your case in this lawsuit, the plaintiffs that brought the suit, my guess is, aren't sharing in the cost of the litigation, that that is being borne by some national or State group. Am I right about that?

They have to give their names, and they have to live in the State. I mean, they are obviously involved, and they are named in the suit. But in terms of defraying the cost of it, I would think they probably don't have to do that.

Mr. GUEST. Well, no, actually, they do. How it works is that the Sierra Club is a national organization, I believe the biggest one by far. And of course, they share in the cost because it's national, and this is their local chapter. The Florida Wildlife Federation is a State-wide group with, I think, 13,000, 14,000 members, and they share in the cost.

And so, there is the Conservancy of Southwest Florida. That, quite frankly, doesn't pay very much. They don't have very much money. But the cost is shared that way. So people have major contributions, to make it clear. But the litigation itself isn't terribly expensive, although it costs us a lot. It costs a lot in time.

Mr. BARTON. And I would assume that you don't do it pro bono, although it is possible that you do.

Mr. GUEST. No. We don't charge our clients. We're nonprofit. We are a nonprofit organization. And we would be prohibited—

Mr. BARTON. But somebody pays you some money?

Mr. GUEST. People that care about the cleanliness and the safety of our environment make donations so that we can protect the community and protect the public health.

Mr. BARTON. And all these people that have testified, they are just wrong? The young lady next to you is just a gross polluter, and the gentleman next to you, and these people don't care about Florida water quality. And they just, they want to dump every bit of phosphorus they can into the lakes and rivers of Florida and all that?

It is just the only people between them and absolute disaster is your law firm and the people that back you up?

Mr. GUEST. No. No, these are good people. They are honest corporate citizens, and we hold them in high respect. But we believe that they are misinformed. They've gotten whipped up by the hysteria, and a perfect example of that is the stuff that you folks are talking about today, that this is a Federal takeover.

If you actually read the settlement agreement that brought us here this day, if you look at paragraph 7 of that agreement, what it says is that the EPA does not have to even propose, propose any standards if the State has acted in several months—

Mr. BARTON. Now, the EPA regional administrator and the gentleman from the Florida Department of Agriculture both agreed that the lawsuit that your group brought was based on timing. Do you disagree with that?

That the State wasn't acting quickly enough? That was my understanding.

Mr. GUEST. That's not quite exactly right. Without giving you a complex answer, the answer is, yes, there was a timing component to it certainly. In short, the State was—had a set of standards, but they were basically the same as the EPA standards.

In August of 2009, they were agenda'd for approval. They ran into a buzz saw about this issue from industries that were adversely affected by the rules. The State then declined to go through with the agenda item and approve it and threw the hot potato to EPA for them to get stuck with it—

Mr. BARTON. OK.

Mr. GUEST [continuing]. With the State data, the State time—

Mr. BARTON. My time has expired. But I want to go to Mr. Steinbrecher and give him—the Region 4 EPA said, the administrator, that the cost of compliance to utilities would be 11 cents a day, which would add, that is about 30 bucks a month. I mean, about 3 bucks a month, which would be around \$36, \$40 a year.

Your number is \$750 a year, which is basically 60–70 bucks a month. What is the big difference there? Why is your number so much higher than the EPA's number?

Mr. STEINBRECHER. EPA didn't cost out the cost of compliance with their rule. They actually assumed—they passed rules that say, I'll give you just the nitrogen standard.

The nitrogen standard varies throughout Florida in those five regions from something like 0.6 or 0.7 milligrams per liter to 1.7. That's what's in their rule.

But what they costed out was advanced wastewater treatment at existing wastewater treatment plants, which is what most of us do now. That gets you to 3 milligrams per liter. So they did not, in fact, calculate the cost of compliance. You have to add other technologies to meet their numbers.

Mr. BARTON. Do you think your group would support a modification of the Clean Water Act to require or at least allow for a true cost-benefit analysis?

Mr. STEINBRECHER. I think we've absolutely got to start doing that, and I've been ashamed by what I've seen here. I'm a professional engineer. This isn't rocket science.

In my field, we know how to cost out the technologies to get you virtually any number you want between where you are at and zero. We have been doing that for a long time now. So this is established professional practice, and it simply was not done in this case and recorded properly.

Mr. BARTON. I am no longer a professional engineer, but I was licensed in Texas until I got elected to Congress. So I still am an engineer, but I am not registered at this point in time.

I yield back, Mr. Chairman.

Mr. STEARNS. Thank you.

The gentleman, Mr. Bilirakis, is recognized for 5 minutes.

Mr. BILIRAKIS. Thank you, Mr. Chairman. I appreciate it.

Mr. Richardson, I know you mentioned this in your testimony. You indicated that the Paynes Prairie Sheetflow Restoration Project is a major environmental restoration project that is \$26 million—it is a \$26 million endeavor with partners, of course, the utilities, certain entities like Gainesville Regional—go Gators, by the way—and the FDEP and, of course, the Florida Department of Transportation.

You said that you have already spent—the project has already spent \$3.8 million. Again, you may have mentioned this, but pardon me. I want to get this clear. It is worth repeating.

Did you think you would be able to complete the project if these rules went into effect?

Mr. RICHARDSON. Well, what we know is that the project as designed will not strictly meet the numeric nutrient criteria. So our two choices are to pursue this uncertain variance process, and we are estimating that that will cost us at least \$1 million.

We heard from Mr. Budell earlier that it's unlikely that SSACs—that any of these variance processes will be granted. So that's extremely discouraging. If we have to strictly meet the numeric nutrient criteria on Paynes Prairie, we would do something very different than this restoration project. We would build facilities at a cost of about \$120 million instead of \$26 million.

And unfortunately, the Paynes Prairie Restoration Project is not in increment. Like I say, we would go a different direction from the beginning. We received a permit in 2010 that requires us to do this project. Unfortunately, the project does not meet the newly established generalized nutrient criteria.

Mr. BILIRAKIS. Thank you very much.

And I want to welcome my fellow Pinellas County resident, Ms. Hammer Levy. And I also want to commend and thankful—I am very thankful to Pinellas County and the Department of Environment and Infrastructure for their prudence, their stewardship of taxpayers' dollars.

My guess is Pinellas County would be hard pressed to come up with the extra \$20 million to develop specific alternative criteria that will not result in meaningful improvement. Is that correct?

Ms. HAMMER LEVY. Yes. When we submitted comments back to EPA and actually had the opportunity to speak with staff on why certain areas of the State where there is phosphorus-rich soil that impacts our streams and our lakes, why those areas outside the Bone Valley were not considered, and unfortunately did not get much of an answer back, but that we should apply for a site-specific alternative criteria in order to address that deficiency.

When we looked at the cost of doing a site-specific alternative criteria in the State of Florida, they have been done for developed oxygen, we utilized the cost for that process, and it ranged between, I believe, around \$80 to \$400 per acre, dependent on how urban you were. And obviously, we are very urban, but we still chose the middle number, which is about \$200 per acre, which is where the \$20 million comes from.

So, you know, when you look at a Pinellas County, you know, we have \$20 million to spend, I would rather do projects to restore Lake Tarpon, many of our streams, work on the Anclote River, work on Lake Seminole, which we have over \$20 million invested in Lake Seminole, than to go and try to apply for a criteria, a site-specific alternative criteria, which these gentlemen and others have said that it's not a guarantee. It's a very laborious process. It takes a lot of data.

I'm a scientist, mind you. This is my bread and butter. This is what I do for a living. This is my passion. So I want to do the right thing. And I want to use the public's money in a wise manner. And I don't want to waste it—

Mr. BILIRAKIS. And we are grateful for that.

Ms. HAMMER LEVY. I don't want to waste it on trying to go through a process that doesn't need to happen.

Mr. BILIRAKIS. Thank you very much.

I yield back, Mr. Chairman.

Mr. STEARNS. All right. Mr. Ross is recognized for 5 minutes.

Mr. ROSS. Thank you, Mr. Chairman.

Mr. Steinbrecher, you raised an interesting point in your opening statement when you said that the numeric nutrient criteria is rooted in poor science and litigation. And I think it is important that litigation has as some unintended consequences that for the sake of settlement certain policies are made, not for the sake of the good, but rather for the sake of the settlement.

And as Ms. Keyes Fleming testified to here today about reverse osmosis, that it is not going to be required. In fact, it is the preamble. But would it not be just as likely that litigation, yes, ensued by any group, anybody with standing, could result in the imposition of having reverse osmosis being made a part of the compliance?

Mr. STEINBRECHER. Every—I'm the director of environmental permitting for the second-largest utility in the State. Every Clean Water Act legal opinion I've gotten on this effort says you absolutely have to meet the standards, not some other number.

Mr. ROSS. In other words, if you were told by the EPA because we put in our preamble that you don't have to use reverse osmosis, but their standards require it to meet that, the only way you could meet that standard is reverse osmosis, do you think that would be a solid defense to say, hey, we don't need to do reverse osmosis?

Mr. STEINBRECHER. No. The fact that that's in the preamble or that the Region 4 administrator says we are not going to—

Mr. ROSS. Is suggestive?

Mr. STEINBRECHER. Is suggestive. It is not the law. We asked—Mr. Ross, I'm glad you asked this. The utilities asked them to put that in the rule. We asked them to also adopt existing formerly EPA-approved, site-specific nutrient standards that have millions of dollars of science behind them, adopt that in the rule. They did not do that. They chose not to.

Mr. ROSS. Why is that? Do you have any idea?

Mr. STEINBRECHER. I would only be speculating on it, Mr. Ross.

Mr. ROSS. Would it be your opinion also that of the estimated amount of \$750 per household may be a correct or accurate amount that may be borne by each household for the implementation?

Mr. STEINBRECHER. It is absolutely the proper order of magnitude. If you said—and it's an order of magnitude estimate. If you said to me, well, maybe it's \$400. I would say that's right. Maybe it's \$1,000. But it's not \$10 or \$20 or \$50. No, it's hundreds of dollars per year per resident if your utility is affected by this rule.

Mr. ROSS. Mr. Richardson, would you agree?

Mr. RICHARDSON. Yes, I would. And as a matter of fact, in our case, we are—currently, our customers are paying about \$32 a month. We would project to strictly comply with the numeric nutrient criteria, it would increase that to about \$55 a month, a \$22 per month increase.

We need to point out about 23 percent of our county is below the poverty level. We're always very, very concerned about any rate increases. Rate increases to meet standards that don't improve the environment are particularly troublesome to us.

Mr. ROSS. Thank you.

Ms. Levy, any comment? I worked with your agency back when I was in the legislature, served part of the Tampa Bay area. I remember going through the reverse osmosis project that they had there with Tampa Bay water. Rather exciting, but fortunately, everything worked out for the best.

Any cost estimates that you think compliance might have in your constituency?

Ms. HAMMER LEVY. Well, I think one of the problems that I saw with EPA's analysis is that they only looked at those waters that would be newly impaired under this rule. OK? So they assumed that those waters that the State had already deemed impaired would not need additional reductions, and that's a leap. That is—that was not validated.

So that could account for millions of dollars in load reductions that were not considered in EPA's evaluation.

Mr. BARTON. Could you allow Mr. Guest to answer the question to Mr. Steinbrecher about why they didn't put the specific standard in—

Mr. ROSS. Yes, please, Mr. Guest, you may answer.

Mr. GUEST. Yes. I would. I'm delighted that you asked me that question because it's a great question.

I have gone to the utility people more than once and said let us get together and go to DEP and EPA just to get a rule change so that you can't possibly imagine a lawsuit anymore. So we'll just put

it right down in black and white that there will be no reverse osmosis anytime, anywhere, ever, period.

I want those folks to join us and get that in writing in a rule, and I can't get "yes" out of them. Now let's try it here. Can I get "yes" today?

Mr. STEINBRECHER. I would like that in the rule.

[Laughter.]

Mr. ROSS. But Mr. Guest, let me make sure I understand. In your opening testimony, you talked about the DEP's numeric nutrient quality criteria standards, and you were OK with those?

Mr. GUEST. Yes.

Mr. ROSS. In fact, like you said, that they were pretty much the same as EPA's, but for biological verification, I think some of the TMDLs that were taken into consideration. But they were pretty much identical?

Mr. GUEST. More or less.

Mr. ROSS. And today, they would have been implemented, but for one thing—a lawsuit that was filed by you?

Mr. GUEST. Nope, that's not right. They weren't implemented because of a lawsuit that was going to be filed by them. That's why the DEP didn't adopt it.

Mr. ROSS. It was going to be—

Mr. GUEST. They were issuing lawsuits going right down their throat with every lawyer in Tallahassee, ripping them to shreds. And that's what they—

Mr. ROSS. But they didn't file a lawsuit, did they?

Mr. GUEST. They didn't file it because they didn't get a chance to because DEP saw that wave attacking them, and they threw that hot potato to DEP. And those same lawyers that were going to shred those good guys at DEP are now on EPA. And I see 25 of them at a time. If you want to slow down litigation—

Mr. ROSS. But you would have been OK with the Florida's—

Mr. GUEST [continuing]. That's the where—that's where to do it.

Mr. ROSS. You would have been OK with Florida's NNC standards?

Mr. GUEST. They are the same as EPA's. Absolutely.

Mr. ROSS. Exactly. I see my time is up.

Mr. BARTON. Let him answer. What he just said, that it was the threat of your lawsuit that caused the Florida EPA—the Florida Department of Environmental Protection to back away. Do you agree with that?

Mr. STEINBRECHER. These are matters of fact. In January of 2009, then-EPA Administrator Grumbles made a need determination to settle a lawsuit. That's what started all this. It's not based on science.

Mr. BARTON. So his group's lawsuit?

Mr. STEINBRECHER. Correct. To settle his group's lawsuit. That is a matter of fact.

We do need the right standards, and we agree on that. Well, I don't know if we agree on that part. We need the right standards.

Mr. BARTON. You all agree you need a standard.

Mr. STEINBRECHER. We are not—the utilities are not opposed to standards. We want the right standards, not litigious.

Mr. STEARNS. All right. The gentleman's time is expired.

I think we will go a second round here. So——

[Disruption in room.]

[Laughter.]

Mr. STEARNS. Mr. Barton, you participated so well, I hope you will make it quick here.

Mr. BARTON. You all don't have lunch in Florida?

Ms. BROWN. No, no lunch.

[Laughter.]

Mr. STEARNS. We are going to go through here. Ms. Levy, Mr. Ross asked you a question where you talked about the diverse ecosystem in Pinellas County. The criteria that was used by EPA to show a cause-and-effect relationship between the pollutant and biological response, you gave one example. Do you have any more examples that you can think of here?

Ms. HAMMER LEVY. I can go back to the example, actually, the one that you used, the Cross Bayou system.

Mr. STEARNS. OK.

Ms. HAMMER LEVY. Where the State's—the Florida Fish and Wildlife Conservation Commission's Florida Wildlife Research Institute down in St. Petersburg has ranked the oyster bed system at the south end there as nearly pristine, but the water quality does not meet——

Mr. STEARNS. EPA standards?

Ms. HAMMER LEVY [continuing]. EPA's stream criteria.

Mr. STEARNS. Right.

Ms. HAMMER LEVY. Now if we look ahead to the draft rules that DEP are working on right now, they would allow for the inclusion of such biological criteria, which could affect a determination whether it be impaired or not. So if the nutrient levels were a little higher, but the biology was healthy, then it would not be deemed impaired.

And so, that's something that I think everyone needs to understand and start to be involved in, in reviewing the rule that DEP is working on right now. Because they are starting to allow for those types of considerations that would affect how this rule is implemented at the State level.

Mr. STEARNS. Mr. Steinbrecher, you have mentioned four things that you would like done, and you said adopt rules that are more appropriate. You said something about the flow of water put in abeyance, specify the time set, and then talked about more science.

Do you want to just reiterate those? Because I think those are four of a breakthrough, which at least your side would think would solve this problem, going to Ms. Brown indicated how do we solve this problem? And Mr. Guest is saying he is trying to solve the problem, too.

Mr. STEINBRECHER. Thank you, Chairman Stearns.

I would say, I guess, three things. Take the time to get the right standards. If we're going to have numeric standards to augment what the State's narrative program already does, let's take the time and get it right.

One of those things is adopt existing TMDLs that are EPA-approved TMDLs. They've already vetted many water bodies. The three Ms. Keyes Fleming mentioned at the beginning—the St. Johns, the Caloosahatchee, and the St. Lucie—have existing EPA-

approved nutrient standards. They should adopt those rather than have this generalized rule supersede them.

So that's a simple thing that could be done quickly and commit to continuing to work on the flowing waters portion of the rule. That is the portion that most parties agree they have not been able to bring cause-and-effect science to at all. So those standards are particularly arbitrary.

Could I follow up with something for Mr. Barton?

Mr. STEARNS. Sure. Sure.

Mr. STEINBRECHER. He asked a minute ago, and I wish I had read, I have a law memorandum going back to 2009, and this is from an EPA administrator. And it makes much clearer my answer to your question is the administrator writing, when they are contemplating settling this lawsuit, they say in the beginning of the memo, "We are being sued."

Then they go on and say, and this is the quote, "EPA does not agree with the plaintiffs' allegation that we made a Clean Water Act determination in our 1998 strategy that numeric nutrient criteria are necessary for Florida to meet the requirements of the" Clean Water Act.

Boom. To me, this is the smoking gun memo. They go on and say there is——

Mr. STEARNS. Mr. Steinbrecher, can you provide that for the record?

Mr. STEINBRECHER. I will.

Mr. STEARNS. Yes. By unanimous consent.

[The information follows:]



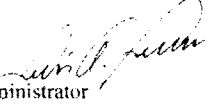
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 22

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

MEMORANDUM

SUBJECT: One-time Delegation of Authority for the Purpose of Determining Pursuant to Section 303(c)(4)(B) of the Clean Water Act Whether the State of Florida Needs New or Revised Water Quality Standards for Nutrients

FROM: Luis A. Luna 
Assistant Administrator

TO: Stephen L. Johnson
Administrator

ISSUE

The purpose of this memorandum is to request a one-time Delegation of Authority to the Assistant Administrator for the Office of Water to determine pursuant to Section 303(c)(4)(B) of the Clean Water Act (CWA) whether the State of Florida needs new or revised water quality standards for nutrients. This authority may not be redelegated.

BACKGROUND

On July 17, 2008, plaintiffs Florida Wildlife Federation, Inc. and other environmental groups filed a lawsuit alleging that EPA failed to perform a nondiscretionary duty to promptly propose numeric nutrient criteria for Florida. *Florida Wildlife Federation, et al. v. EPA*, No. 4:08cv00324 (N.D. Fla.). The plaintiffs allege that EPA made a CWA section 303(c)(4)(B) determination in 1998 that numeric criteria for nitrogen and phosphorus were necessary in Florida in order to meet the requirements of the CWA. The plaintiffs maintain that EPA made this determination in its 1998 "National Strategy for the Development of Regional Nutrient Criteria." The plaintiffs allege that this determination triggered EPA's nondiscretionary duty to promptly propose federal criteria for Florida. Because Florida has not adopted numeric nutrient criteria, the plaintiffs seek a declaration from the court that EPA has failed to perform its

nondiscretionary duty under Section 303(c)(4) to promptly propose numeric nutrient standards for Florida, and they ask the court to require EPA to take this action.

EPA does not agree with the plaintiffs' allegation that we made a CWA determination in our 1998 Strategy that numeric nutrient criteria are necessary for Florida to meet the requirements of the CWA. There is, however, some risk that the court could agree with the plaintiffs that the 1998 Strategy constitutes a CWA determination that nutrient criteria are necessary in Florida. Such a ruling could spur similar litigation in other states. Presently, 49 states have one or more 303(d) listings for waters impaired by nutrients.

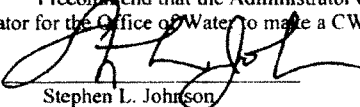
The litigants have highlighted that water quality in Florida is declining due to nutrient pollution and that numeric nutrient criteria are needed to address the environmental degradation. In response to this lawsuit, we believe that we should collect and analyze nutrients-related information pertaining to Florida and decide whether to make a Section 303(c)(4)(B) determination that revised nutrient standards are necessary for the State of Florida to meet the requirements of the CWA. Making such a determination could give EPA a basis to propose a settlement to the plaintiffs or to request that the court dismiss the case. While making a determination may not resolve the litigation, we believe it is an option we should seriously consider and therefore are requesting delegation of authority. A CWA Section 303(c)(4)(B) determination can only be made by the Administrator or the Administrator's duly authorized delegate.

REVIEW AND ANALYSIS

The Office of Human Resources determined that the proposed Delegation is a one-time Temporary Delegation, and thus is not subject to an Agency-wide review via the Directives Clearance process. Per OHR Directive rules, proposed Temporary Delegations of Authority do not require Agency-wide review since these delegations are in effect for limited duration ranging from one day not to exceed one year, and do not automatically renew without being submitted for a new approval. The Office of General Counsel concurs with this request, and this authority may not be redelegated.

RECOMMENDATION

I recommend that the Administrator delegate the authority to the Assistant Administrator for the Office of Water to make a CWA Section 303(c)(4)(B) determination.

Approved: 

Stephen L. Johnson
Administrator

Date: _____

DEC 28 2000

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 29 2000

THE ADMINISTRATOR

MEMORANDUM

SUBJECT: One-time Delegation of Authority for the Purpose of Determining Pursuant to Section 303(c)(4)(B) of the Clean Water Act Whether the State of Florida Needs New or Revised Nutrient Standards

TO: Benjamin H. Grumbles
Assistant Administrator, Office of Water

I hereby delegate to the Assistant Administrator for the Office of Water the authority to determine, pursuant to Section 303(c)(4)(B) of the Clean Water Act, whether the State of Florida needs new or revised water quality standards for nutrients.

This delegation is limited to the purposes stated above and may be exercised only within the limitations of the Clean Water Act. This authority may not be re-delegated.

A handwritten signature in black ink, appearing to read "S. L. Johnson", is positioned above the printed name.

Stephen L. Johnson

Mr. STEINBRECHER. "There is, however, some risk that the court could agree with the plaintiffs that the 1998 strategy constitutes a [Clean Water Act] determination that nutrient criteria are necessary in Florida. Such a ruling could spur similar litigation in other States."

And then they go on to discuss why don't we just settle this. A colloquialism some have used would be "Throw Florida under the bus. That will settle the issue so we can do other things elsewhere."

VOICE. Sounds good to me.

[Laughter.]

Mr. STEARNS. Mr. Dever and Mr. St. John, you have heard Mr. Steinbrecher this morning propose what he is saying would be a solution to this problem. Do you have any suggestions or anything else that you might suggest that—he outlined three or four things that he felt should be done. Do you want to add to that?

Mr. DEVER. No, sir. Just a balance, just a good balance.

Mr. STEARNS. OK.

Mr. DEVER. I'm sure he is—I'm sitting between some intelligent folks here. Again, just a good balance. This thing is not balanced.

Mr. STEARNS. Mr. St. John?

Mr. ST. JOHN. I don't like the word "balance." But I think there is a lot of common ground that from where the both sides seem to be.

One thing that I would point out, Mr. Barton, you mentioned food. I think in our society there is a complete disconnect between water and food. Here we are talking about recreation. We are talking about people swimming. We are doing all this.

I'll tell you what. Everything you eat has water in it. If it doesn't, it did, and there is a complete disconnect in Washington. And these scientific parts and research, they are disconnecting water and food, and just think about—

Mr. BARTON. Well, my stomach is not getting any food because of this hearing so I am just—

[Laughter.]

Mr. ST. JOHN. When you mentioned food, that rang the bell about water and food.

Mr. STEARNS. All right. I will keep under my time. My time is expired.

Ms. Brown, you are recognized for 5 minutes. You are up.

Ms. BROWN. Yes, let me be quick. Mr. Richardson, Mr. Stearns and I both represent Alachua County, and they are the most environmental conscious areas, period, and you know it and I know it. So the point of the matter is we need to make sure, as we move forward, that we take that into consideration because the council or the city commission, they are going to be harder than probably any other area that we represent.

So, I mean, you know that as you come and talk with us about what we can do as we move forward. I would like to know your recommendations, and I would like all of the recommendations in writing as to what we could do. I personally would like to know those recommendations.

Mr. Guest, we have seen that we have found some areas that we could agree on. I would like that—you talked about the utilities. I

met with all of them, well, a lot of them all over Florida, as to what we could do.

But keeping in mind facts are facts, the committee punted. The committee could not pass the recommendation so they kicked it. And that is when the court came about. I would like to know and basically what I am hearing is the State is stronger than the EPA.

Now are there vows, a way that we could deal with the State? Because if I am hearing what the EPA administrator said to us earlier—and I am not an attorney, and I am not a scientist. But I was a counselor in my previous life. What I would like to know what it is that we could do?

I think the EPA said if the State came up with the rules and regulations, then they would back out. But we need to make sure that the State have this vow that we are talking about also. Because in certain areas, maybe they want to be stronger in Alachua County, but you may need special provisions. We all understand food and water, but also the fertilizer, and I mentioned what happened with the Everglades.

So there are certain areas like the Tampa Bay area that is a major problem because of some of the phosphate and other stuff that we do in that area. So the question is how do we come up with the solution that we can all agree on and move forward and make those recommendations to EPA and the State of Florida?

We have a problem. The State of Florida is not in the room. So we don't know where they are. We don't know what they are negotiating. So, with that, any response from Mr. Guest, since you are outnumbered, and anybody else?

Mr. GUEST. Well, yes, absolutely. I think that—

Mr. STEARNS. Can you put the mic closer to you? That would be helpful.

Mr. GUEST. Yes, I think there is three or four really big, important things that we could do. One is, as I said, let's get the parties together.

Ms. BROWN. I agree with that.

Mr. GUEST. Let's get it in black and white that we are not using reverse osmosis. Let's get it in the rule in whatever form we need to do to satisfy those folks. Let's just do that.

And I urge you folks to try to get them to get that on the table and write it down so that this doesn't come up again. That is where the \$700 a month comes from, and that goes away when you fix that problem.

Two is, I think, that a point is well, well taken. A huge amount of work has been done already. There are about 250 TMDLs for nutrients around the State, and all but a handful of those are really good science. And we need to just get those done and move past that quickly and easily.

There is a handful of those that are not faithful to science and need to get fixed. Let's just get it down to those and not worry about the rest.

And the big thing that I would like you all to consider is that agriculture really just isn't regulated, other than the CAFOs, the factory farms. And it's a problem. They're a major source of this.

So I would like you all to try to think of something creative, work with the agricultural industry, work with the States, work with the

people that live on rivers, work with the health people, and come up with some practical way to get agriculture into the Clean Water Act. That's really what we need.

Ms. BROWN. No, I want a response from others. Yes, Mr. Richardson, I pointed him out. I know you might want to say something.

Mr. RICHARDSON. Absolutely agree that Alachua County is environmentally very conservative. We worked through the TMDL process, total maximum daily load, involved stakeholders. We had wide involvement, and this project that we are trying to construct is widely supported by the community.

So a key to solving this is recognizing the TMDLs that have been appropriately established. And I've heard that theme many times on this panel. It's fair to say that we originally requested that of EPA during the rulemaking.

So while I'm extremely optimistic and hopeful that they would be recognized, we've made that comment before, and they have not been recognized.

Ms. BROWN. Mr. Richardson, where is the State of Florida on this issue?

Mr. RICHARDSON. The State of Florida, their original regulation did recognize TMDLs.

Ms. BROWN. OK. So what we are seeing is maybe this is an area that we could work to get this particular issue addressed?

Mr. RICHARDSON. I think recognizing the TMDLs and TMDL process would be very helpful to where we are right now. As I indicated, however, GRU and many other agencies have already made that request of DEP—I'm sorry, EPA during the rulemaking, and they were not adopted.

Ms. BROWN. OK. But what I am also saying is what is the State of Florida saying? Have you talked with them? You see, they are the ones to implement it. And as what was told to us this morning, and we all heard it, that if the State comes up with their own adoption, then the EPA won't take over.

Mr. RICHARDSON. Well, it is my understanding that the original DEP rule did acknowledge the TMDL process and recognize TMDLs.

Ms. BROWN. Do you have that in writing?

Mr. RICHARDSON. I don't have it in writing. I do not have it in writing.

Ms. BROWN. We are dealing with people that you have got to have it in writing and approved by the courts and reviewed by the attorneys, and then the judges and everything else.

Ms. HAMMER LEVY. There was a discussion about adopting existing TMDLs as SSACs. But there were some, including Pinellas County, that were concerned because we actually have well over a dozen TMDLs in abeyance because we are very concerned about the science that was used to adopt them.

But if a process could be used where, as Mr. Guest said, we have stakeholder buy-in to move forward with those TMDLs that have been scientifically vetted and are accepted by the community, the Tampa Bay TMDL is one of those, the 1998 EPA-promulgated TMDL is one of those that we have moved forward as a community to adopt and to implement.

Ms. BROWN. Thank you.

Thank you, Mr. Chairman.

Mr. STEARNS. Mr. Barton is recognized for 5 minutes.

Mr. BARTON. I don't think I will take 5 minutes, Mr. Chairman.

I do want to compliment you on holding this hearing. It is obviously of great importance to not only Florida, but to the country. Unless all these folks in the audience are paid staffers of the congressmen and women up here, they are very interested in it, and they are voluntarily here. Unlike myself who can't leave until the hearing is over because your staffer is taking me back.

Mr. STEARNS. I have got you captured here.

Mr. BARTON. Which means you are going to get to buy me lunch, Mr. Chairman.

Mr. STEARNS. I have got to buy you lunch.

Mr. BARTON. Yes, and it is not going to be at McDonald's.

Mr. STEARNS. Right here on the campus.

Mr. BARTON. All right. But I am not an expert on this, but just listening, it appears to me that, one, and I was being facetious about throwing Florida under the bus. We don't want any State thrown under any bus.

We have an issue where these nutrients and phosphorus, the primary emitters or generators apparently are the utilities, agriculture, and municipalities. And the State of Florida has over time developed site-specific, but non-numeric criteria for addressing the problem. And the environmental groups feel like the timing has not been as quick as it should be, and perhaps the standards are not as tight as they should be.

And so, they have brought this lawsuit, and it has national consequences because apparently Florida is a prototype or a leading indicator for the rest of the country. So we are where we are. But this proposed numeric standard that the Federal EPA has put out has got huge economic consequences, and I don't think that is being made up.

I don't think you could have this many groups saying what they are saying unless they believe that there are real world consequences. But the regional administrator who was here and the groups, the stakeholders, that have testified appear to believe that there still can be, if I understand Mr. Guest, who represents most of the plaintiffs, an agreement, and I think that is a good thing.

So what we need to do is continue your oversight. Bringing the publicity and transparency of the oversight role puts if not pressure, it puts the spotlight on both the Federal, State, and stakeholders, and that is a good thing.

So this has been a worthwhile field hearing, and it has kept me out of the heat of Epcot Center for about 6 hours. So that is a good thing on my part.

[Laughter.]

Mr. BARTON. It just means when I get back, I will have to buy my son some great trinket. For those of you that don't know my son, he is 5 years old. He will 6 in September. He comes to Washington a couple of times a year.

He loves going to the floor of the House. He loves going to the receptions, but he hates going to the committee because he says it

is boring. And I will say had he come to this hearing, he would have said it is not boring because it has been informative.

So I am going to yield back, and thank you again. And I want to compliment the non-committee congressmen and women that are here. They don't have to be here. And to have Congresswoman Brown here and both Congressman Bilirakis and Congressman Ross shows how serious they take the issue, too, that they will spend their time at a hearing that they don't have to come to.

And all three would be good committee members. So if you and I don't do a good job, we are probably going to get booted, and they are going to be put on in the next Congress.

But thank you for holding the hearing, Mr. Chairman.

Mr. STEARNS. All right. Thank you for your participation.

Mr. Bilirakis, for 5 minutes.

Mr. BILIRAKIS. Thank you. Thank you, Mr. Chairman.

Briefly, I want to thank you for inviting us and allowing us to sit on the committee. I really appreciate it very much. This is a very important issue to us, obviously, our constituents and the stakeholders, and I think we have accomplished a heck of a lot today. It has been very productive.

So I really appreciate you holding this hearing, and I would like to sit on other hearings in Washington, D.C., with regard to Energy and Commerce, but particularly on this issue. So maybe we can address that a little later.

But this is very—the unintended consequences could be drastic for our constituents, and we have to stay on this issue. So thanks for inviting me here today.

I want to thank all who testified as well, and it was very productive. Appreciate it very much, and I yield back.

Mr. STEARNS. Thank the gentleman.

Mr. Ross is recognized for 5 minutes.

Mr. ROSS. Thank you.

And in light of everyone in this room, including my colleague Mr. Barton's nutritional content criteria, I will be brief.

One of the things that you spoke of, Mr. Steinbrecher, that I have to address and it has to do with we take our water as we find it in the State of Florida. And we are very much interconnected with Alabama and Georgia when it comes to our waterways. And yet we can't control what they send downstream, and we are responsible for that. Would you agree?

Mr. STEINBRECHER. Many of our utility members that are in those regions where waters are flowing from those States believe that, yes, that the rule would have to back up into those States as well and that somehow we would also, at the same time, be responsible for cleaning the waters in Florida that flow from those States.

Mr. ROSS. Correct. Because as you talked about, one of the hardest things to identify is the flow criteria. And if all of a sudden, we have to look at the source of the flow and the source of the flow is somewhere in Tennessee for the Chattahoochee River or wherever, we are responsible for that as a State, and that is an illogical application of this NNC, is it not?

Mr. STEINBRECHER. It is an actual legal end result of this rule, that entities in Florida will be held responsible for waters flowing into the State.

Mr. ROSS. And Mr. Dever, as a man who represents businesses and trades, would it not be then an unfair competitive advantage for those in the northern States, which are still southern, of course, but such as Alabama and Georgia, to consider relocating there instead of Florida because of such a water criteria?

Mr. DEVER. Absolutely. The cost, that's a major issue. Job creation, all of that is tied to it. There is a lot of unknowns in this. That's got our interest up.

Fixed-income folks, you know, this cost, these numbers that we're tossing around here today, it's going to land somewhere. A lot of those folks can't afford that, and that's what's resonating through our halls.

Mr. ROSS. And finally, Mr. Guest, as I understand it, your main objection to the rule is the SSAC, the proposed rule?

Mr. GUEST. Well, no. The issue is a very narrow one, which is having certain regions—let me clarify—

Mr. STEARNS. Let me just put the mic up to you so we can get you recorded.

Mr. GUEST. Sorry. I apologize. No, it was the region wide. It was like a quarter of the State becomes one SSAC. We are fully endorsing the SSAC process.

Let me, if I may, just—

Mr. ROSS. It is a regional SSAC is what you are saying, not site specific.

Mr. GUEST. Yes, exactly. That's the issue.

Mr. ROSS. That is what you are objecting to?

Mr. GUEST. Exactly.

Mr. ROSS. And so, as long as that stays in the rule, you will continue to object?

Mr. GUEST. As long as, yes, regional SSACs only. But let me, if I may answer a legal question—

Mr. ROSS. Yes, sir.

Mr. GUEST [continuing]. Because I think I can help you out. As far as the streams, the rivers that come from Alabama and Georgia, the Clean Water Act does allow the Governor of Florida to make the point sources subject to clean water permitting in those upstream States to comply with Florida standards. So they are not responsible.

Mr. ROSS. But they have enforcement powers to do so?

Mr. GUEST. Yes. Yes, yes. You go to Federal court. The statute says that, Section 42. The other piece of it is that there are a few. There are a handful of those. And that's something you might want to look at, for the Governor to look at.

The other piece is that most of that, most of the damaging pollution is actually coming from agriculture upstream, and that's not regulated by the Clean Water Act. And that's a reason for you to think about how you can bring agriculture into the act and make them a full participant.

Mr. ROSS. Thank you.

Mr. Chairman, I thank you for the opportunity and thank you for holding the hearing. I yield back.

Mr. STEARNS. Mr. Ross, thank you very much for being here.

And I would like to thank all of the witnesses for participating in our hearing today, and I remind Members that they have 10

business days to submit questions for the record, and I ask the witnesses to all agree to respond promptly if any of the Members have further questions.

Mr. STEARNS. And I ask unanimous consent that the contents of the document binder that we have provided here be introduced into the record and to authorize staff to make any appropriate redactions.

Without objection, so ordered. The document binder will be entered into the record with any redactions that staff determines are appropriate.

[The information appears at the conclusion of the hearing.]

Mr. STEARNS. And with that, the Oversight Subcommittee is adjourned.

[Whereupon, at 1:15 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 16 2011

OFFICE OF
WATER**MEMORANDUM**

SUBJECT: Working in Partnership with States to Address Phosphorus and Nitrogen
Pollution through Use of a Framework for State Nutrient Reductions

FROM: Nancy K. Stoner
Acting Assistant Administrator

TO: Regional Administrators, Regions 1-10

This memorandum reaffirms EPA's commitment to partnering with states and collaborating with stakeholders to make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to our nation's waters. The memorandum synthesizes key principles that are guiding and that have guided Agency technical assistance and collaboration with states and urges the Regions to place new emphasis on working with states to achieve near-term reductions in nutrient loadings.

Over the last 50 years, as you know, the amount of nitrogen and phosphorus pollution entering our waters has escalated dramatically. The degradation of drinking and environmental water quality associated with excess levels of nitrogen and phosphorus in our nation's water has been studied and documented extensively, including in a recent joint report by a Task Group of senior state and EPA water quality and drinking water officials and managers.¹ As the Task Group report outlines, with U.S. population growth, nitrogen and phosphorus pollution from urban stormwater runoff, municipal wastewater discharges, air deposition, and agricultural livestock activities and row crop runoff is expected to grow as well. Nitrogen and phosphorus pollution has the potential to become one of the costliest and the most challenging environmental problems we face. A few examples of this trend include the following:

- 1) 50 percent of U.S. streams have medium to high levels of nitrogen and phosphorus.
- 2) 78 percent of assessed coastal waters exhibit eutrophication.
- 3) Nitrate drinking water violations have doubled in eight years.

¹ *An Urgent Call to Action: Report of the State-EPA Nutrients Innovations Task Group*, August 2009.

- 4) A 2010 USGS report on nutrients in ground and surface water reported that nitrates exceeded background concentrations in 64% of shallow monitoring wells in agriculture and urban areas, and exceeded EPA's Maximum Contaminant Levels for nitrates in 7% or 2,388 of sampled domestic wells.²
- 5) Algal blooms are steadily on the rise; related toxins have potentially serious health and ecological effects.

States, EPA and stakeholders, working in partnership, must make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to our nation's waters. While EPA has a number of regulatory tools at its disposal, our resources can best be employed by catalyzing and supporting action by states that want to protect their waters from nitrogen and phosphorus pollution. Where states are willing to step forward, we can most effectively encourage progress through on-the-ground technical assistance and dialogue with state officials and stakeholders, coupled with cooperative efforts with agencies like USDA with expertise and financial resources to spur improvement in best practices by agriculture and other important sectors.

States need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary. Nonetheless, our prior work with states points toward a framework of key elements that state programs should incorporate to maximize progress. Thus, the Office of Water is providing the attached "Recommended Elements of a State Nutrients Framework" as a tool to guide ongoing collaboration between EPA Regions and states in their joint effort to make progress on reducing nitrogen and phosphorus pollution. I am asking that each Region use this framework as the basis for discussions with interested and willing states. The goal of these discussions should be to tailor the framework to particular state circumstances, taking into account existing tools and innovative approaches, available resources, and the need to engage all sectors and parties in order to achieve effective and sustained progress.

While the Framework recognizes the need to provide flexibility in key areas, EPA believes that certain minimum building blocks are necessary for effective programs to manage nitrogen and phosphorus pollution. Of most importance is prioritizing watersheds on a state-wide basis, setting load-reduction goals for these watersheds based on available water quality information, and then reducing loadings through a combination of strengthened permits for point-sources and reduction measures for nonpoint sources and other point sources of stormwater not designated for regulation. Our experience in almost 40 years of Clean Water Act implementation demonstrates that motivated states, using tools available under federal and state law and relying on good science and local expertise, can mobilize local governments and stakeholders to achieve significant results.

It has long been EPA's position that numeric nutrient criteria targeted at different categories of water bodies and informed by scientific understanding of the relationship between nutrient loadings and water quality impairment are ultimately necessary for effective state

² *Nutrients in the Nation's Streams and Groundwater: National Findings and Implications*, US Geological Survey, 2010.

programs. Our support for numeric standards has been expressed on several occasions, including a June 1998 National Strategy for Development of Regional Nutrient Criteria, a November 2001 national action plan for the development and establishment of numeric nutrient criteria, and a May 2007 memo from the Assistant Administrator for Water calling for accelerated progress towards the development of numeric nutrient water quality standards. As explained in that memo, numeric standards will facilitate more effective program implementation and are more efficient than site-specific application of narrative water quality standards. We believe that a substantial body of scientific data, augmented by state-specific water quality information, can be brought to bear to develop such criteria in a technically sound and cost-effective manner.

EPA's focus for nonpoint runoff of nitrogen and phosphorus pollution is on promoting proven land stewardship practices that improve water quality. EPA recognizes that the best approaches will entail States, federal agencies, conservation districts, private landowners and other stakeholders working collaboratively to develop watershed-scale plans that target the most effective practices to the acres that need it most. In addition, our efforts promote innovative approaches to accelerate implementation of agricultural practices, including through targeted stewardship incentives, certainty agreements for producers that adopt a suite of practices, and nutrient credit trading markets. We encourage federal and state agencies to work with NGOs and private sector partners to leverage resources and target those resources where they will yield the greatest outcomes. We should actively apply approaches that are succeeding in watersheds across the country.

USDA and State Departments of Agriculture are vital partners in this effort. If we are to make real progress, it is imperative that EPA and USDA continue to work together but also strengthen and broaden partnerships at both the national and state level. The key elements to success in BMP implementation continue to be sound watershed and on-farm conservation planning, sound technical assistance, appropriate and targeted financial assistance and effective monitoring. Important opportunities for collaboration include EPA monitoring support for USDA's Mississippi River Basin Initiative as well as broader efforts to use EPA section 319 funds (and other funds, as available) in coordination with USDA programs to engage creatively in work with communities and watersheds to achieve improvements in water quality.

Accordingly the attached framework envisions that as states develop numeric nutrient criteria and related schedules, they will also develop watershed scale plans for targeting adoption of the most effective agricultural practices and other appropriate loading reduction measures in areas where they are most needed. The timetable reflected in a State's criteria development schedule can be a flexible one provided the state is making meaningful near-term reductions in nutrient loadings to state waters while numeric criteria are being developed.

The attached framework is offered as a planning tool, intended to initiate conversation with states, tribes, other partners and stakeholders on how best to proceed to achieve near- and long-term reductions in nitrogen and phosphorus pollution in our nation's waters. We hope that the framework will encourage development and implementation of effective state strategies for managing nitrogen and phosphorus pollution. EPA will support states that follow the framework but, at the same time, will retain all its authorities under the Clean Water Act.

With your hard work, in partnership with the states, USDA and other partners and stakeholders, I am confident we can make meaningful and measurable near-term reductions in nitrogen and phosphorus pollution. As part of an ongoing collaborative process, I look forward to receiving feedback from each Region, interested states and tribes, and stakeholders.

Attachment

Cc: Directors, State Water Programs
Directors, Great Water Body Programs
Directors, Authorized Tribal Water Quality Standards Programs
Interstate Water Pollution Control Administrators

Recommended Elements of a State Framework for Managing Nitrogen and Phosphorus Pollution

1. Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions

- A. Use best available information to estimate Nitrogen (N) & Phosphorus (P) loadings delivered to rivers, streams, lakes, reservoirs, etc. in all major watersheds across the state on a Hydrologic Unit Code (HUC) 8 watershed scale or smaller watershed (or a comparable basis.)
- B. Identify major watersheds that individually or collectively account for a substantial portion of loads (e.g. 80 percent) delivered from urban and/or agriculture sources to waters in a state or directly delivered to multi-jurisdictional waters.
- C. Within each major watershed that has been identified as accounting for the substantial portion of the load, identify targeted/priority sub-watersheds on a HUC 12 or similar scale to implement targeted N & P load reduction activities. Prioritization of sub-watersheds should reflect an evaluation of receiving water problems, public and private drinking water supply impacts, N & P loadings, opportunity to address high-risk N & P problems, or other related factors.

2. Set watershed load reduction goals based upon best available information

Establish numeric goals for loading reductions for each targeted/priority sub-watershed (HUC 12 or similar scale) that will collectively reduce the majority of N & P loads from the HUC 8 major watersheds. Goals should be based upon best available physical, chemical, biological, and treatment/control information from local, state, and federal monitoring, guidance, and assistance activities including implementation of agriculture conservation practices, source water assessment evaluations, watershed planning activities, water quality assessment activities, Total Maximum Daily Loads (TMDL) implementation, and National Pollutant Discharge Elimination System (NPDES) permitting reviews.

3. Ensure effectiveness of point source permits in targeted/priority sub-watersheds for:

- A. Municipal and Industrial Wastewater Treatment Facilities that contribute to significant measurable N & P loadings;
- B. All Concentrated Animal Feeding Operations (CAFOs) that discharge or propose to discharge; and/or
- C. Urban Stormwater sources that discharge into N & P- impaired waters or are otherwise identified as a significant source.

4. Agricultural Areas

In partnership with Federal and State Agricultural partners, NGOs, private sector partners, landowners, and other stakeholders, develop watershed-scale plans that target the most effective practices where they are needed most. Look for opportunities to include innovative approaches, such as targeted stewardship incentives, certainty agreements, and N & P markets, to accelerate adoption of agricultural conservation practices. Also, incorporate lessons learned from other successful agricultural initiatives in other parts of the country.

5. Storm water and Septic systems

Identify how the State will use state, county and local government tools to assure N and P reductions from developed communities not covered by the Municipal Separate Storm Sewer Systems (MS4) program, including an evaluation of minimum criteria for septic systems, use of low impact development/ green infrastructure approaches, and/or limits on phosphorus in detergents and lawn fertilizers.

6. Accountability and verification measures

- A. Identify where and how each of the tools identified in sections 3, 4 and 5 will be used within targeted/priority sub-watersheds to assure reductions will occur.
- B. Verify that load reduction practices are in place.
- C. To assess/demonstrate progress in implementing and maintaining management activities and achieving load reductions goals: establish a baseline of existing N & P loads and current Best Management Practices (BMP) implementation in each targeted/priority sub-watershed, conduct ongoing sampling and analysis to provide regular seasonal measurements of N & P loads leaving the watershed, and provide a description and confirmation of the degree of additional BMP implementation and maintenance activities.

7. Annual public reporting of implementation activities and biannual reporting of load reductions and environmental impacts associated with each management activity in targeted watersheds

- A. Establish a process to annually report for each targeted/priority sub-watershed: status, challenges, and progress toward meeting N & P loading reduction goals, as well as specific activities the state has implemented to reduce N & P loads such as: reducing identified practices that result in excess N & P runoff and documenting and verifying implementation and maintenance of source-specific best management practices.
- B. Share annual report publically on the state's website with request for comments and feedback for an adaptive management approach to improve implementation, strengthen collaborative local, county, state, and federal partnerships, and identify additional opportunities for accelerating cost-effective N & P load reductions.

8. Develop work plan and schedule for numeric criteria development

Establish a work plan and phased schedule for N and P criteria development for classes of waters (e.g., lakes and reservoirs, or rivers and streams). The work plan and schedule should contain interim milestones including but not limited to data collection, data analysis, criteria proposal, and criteria adoption consistent with the Clean Water Act. A reasonable timetable would include developing numeric N and P criteria for at least one class of waters within the state (e.g., lakes and reservoirs, or rivers and streams) within 3-5 years (reflecting water quality and permit review cycles), and completion of criteria development in accordance with a robust, state-specific workplan and phased schedule.



Florida Department of Environmental Protection

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Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

April 22, 2011

Ms. Lisa P. Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, Northwest
Washington, DC 24060

Dear Ms. Jackson:

Please find enclosed a Petition from the Florida Department of Environmental Protection requesting that the U.S. Environmental Protection Agency (EPA) withdraw its January 2009, determination that numeric nutrient criteria are necessary in Florida. It also requests that EPA restore to the state its responsibility for the control of excess nutrients, including the pursuit of nutrient criteria. We are confident that EPA will find the information in the petition compelling and grant the petition after review.

As clearly demonstrated by the petition, the State of Florida, including its citizenry, local governments and businesses, is very committed to addressing excess nutrients pollution. We look forward to your timely response.

Sincerely,

Herschel T. Vinyard Jr.
Secretary

c: Gwendolyn Keyes Fleming

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

In re: Florida Department of Environmental
Protection's Petition for Withdrawal of EPA's
303(c)(4)(B) Determination for Florida,
Repeal of 40 C.F.R. § 131.43, and
Related Actions.

PETITION

The Florida Department of Environmental Protection ("FDEP") hereby petitions the United States Environmental Protection Agency ("EPA") to take the following actions; 1) withdraw its January 2009, determination that numeric nutrient criteria are necessary in Florida; 2) initiate repeal of 40 C.F.R. § 131.43; and 3) discontinue proposing or promulgating further numeric nutrient criteria in Florida.

On March 16, 2011, EPA issued a memo to all EPA's Regional Administrators, entitled "Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions" (the "EPA memo" or "March 16, 2011, memo") that details the elements "necessary for effective programs to manage nitrogen and phosphorus pollution," which is attached hereto as Attachment 1. The EPA memo provides a useful benchmark for evaluating the strength of a State's nutrient reduction program.

As demonstrated herein, Florida's program is one of the strongest in the country when measured against the elements set forth in the EPA memo, or by other objective standards. Based on the strength of Florida's nutrient pollution control program, which includes a commitment to nutrient standards, FDEP submits EPA should rescind its January 2009, determination. This action will reestablish the proper regulatory framework in Florida, whereby

States designate the uses of their waters and set criteria that are protective of those uses, and EPA should simply review the changes to water quality standards proposed by the States. 33 U.S.C. § 1313(a)(3)(A) and (c)(2)(A); *see also Natural Resources Defense Council v. U.S. E.P.A.*, 16 F.3d 1395, 1399 (4th Cir. 1993) (“While the states and E.P.A. share duties in achieving this goal [of protecting water resources], primary responsibility for establishing appropriate water quality standards is left to the states. EPA sits in a reviewing capacity of the state-implemented standards, with approval and rejection powers only.”).

FDEP requests that EPA respond to this Petition within 30 days of filing. Failure of EPA to timely act can interfere with the Florida’s ability to implement the activities described by this petition. Additionally, granting this petition will confirm to the States that EPA is committed to a reasoned approach to evaluating the success of state programs and will stand behind the EPA Memo.

Background

According to EPA, Florida has one of the preeminent programs in the nation to address excess phosphorus and nitrogen pollution in its waters. “Florida is one of the few states that have in place a comprehensive framework of accountability that applies to both point and nonpoint sources and provides the enforceable authority to address nutrient reductions in impaired waters based upon the establishment of site specific total maximum daily loads.” 75 Fed. Reg. 4174, 4175 (Jan. 26, 2010). As outlined below, in measuring Florida’s program against the eight elements in the EPA memo, the State of Florida, in partnership with its regional water management districts and local governments, is a national leader in developing innovative and comprehensive tools and programs to detect, assess, prevent and/or remedy nutrient problems in the State’s waters.

For instance, Florida has placed substantial emphasis on the monitoring and assessment of its waters as a cornerstone of its water quality program, and, as a result of this valuable objective, has collected significantly more water quality data than any other State. *See* EPA's January 14, 2009, Necessity Determination for Florida, p. 6. Greater than 30% of all water quality data in EPA's national water quality database, STORET, comes from Florida.¹ STORET, <http://www.epa.gov/storet>. Florida has used this extensive data to, among other things, accurately and scientifically assess whether individual waterbodies are impaired for nutrients; promulgate nutrient restoration goals first through Pollutant Load Reduction Goals ("PLRGs") and then through Total Maximum Daily Loads ("TMDLs"); calculate protective nutrient water quality-based effluent limits ("WQBELs") for NPDES dischargers; and adopt restoration plans setting forth restoration requirements on both point and nonpoint sources on a watershed-wide basis (i.e., Basin Management Action Plans ("BMAPs"), Surface Water Improvement and Management ("SWIM") plans, and legislatively-mandated plans for targeted waters).²

Overall, Florida's efforts have resulted in significant reductions in ambient phosphorus concentrations since the early 1980s despite the explosive growth of Florida's population during this same period. 2008 Integrated Water Quality Assessment for Florida: 305(b) Report and 303(d) List Update, p. 34, available at http://www.dep.state.fl.us/water/docs/2008_Integrated_Report.pdf. However, Florida continues to further refine and enhance its programs and implement specific restoration plans high priority

¹ FDEP doesn't substitute quantity of sampling for the quality of those samples. Rather than accepting any collected sample, FDEP requires stringent quality assurance for water quality samples to be used for regulatory purposes. *See* Fla. Admin. Code Ch. 62-160.

² Florida has also utilized this extensive data in adopting a protective numeric phosphorus criterion for the Everglades Protection Area that has been upheld in both state and federal courts. *See* Fla. Admin. Code R. 62-302.540(4)(a).

watersheds to both protect its many healthy waters from nutrient impairment and achieve nutrient reductions in those that are impaired by nutrients so that water quality improvements are fully realized.

FDEP has also used the vast water quality data, collected at substantial cost to Florida taxpayers, to study the subtle relationships between nutrient concentrations and healthy aquatic ecosystems with the intention of deriving appropriate numeric nutrient criteria for its waters. As part of this process, FDEP has created a number of biological assessment tools, including the Stream Condition Index and the Lake Vegetation Index. FDEP has submitted to EPA statewide numeric nutrient criteria development plans to document its ongoing efforts, with the last development plan being submitted in March 2009.

Despite Florida's status as a national leader in nutrient reduction efforts and FDEP's great progress on the complex science needed to support defensible numeric nutrient criteria, on January 14, 2009, EPA, under the previous administration, issued a § 303(c)(4)(B) determination that numeric nutrient criteria were necessary in the State of Florida, but in no other State.³ The 2009 "necessity" determination led to EPA settling a frivolous lawsuit alleging that EPA had already made such a necessity determination in its 1998 Clean Water Action Plan. The settlement agreement was subsequently memorialized as a Consent Decree in *Florida Wildlife*

³ While the necessity determination implies that Florida's situation is unique, excess nutrients are a problem in every State. See, e.g., USGS Circular 1350: Nutrients in the Nation's Streams and Groundwater, 1992 – 2004 (2010), available at <http://pubs.usgs.gov/circ/1350/pdf/circ1350.pdf>. EPA has not utilized its 303(c)(4)(B) authority to promulgate numeric nutrient criteria elsewhere and has declined to set numeric nutrient standards in the Mississippi River basin even though EPA has been petitioned twice (in 2003 and 2008) to do so. See EPA's Response to Sierra Club Petition Regarding Defined Portions of the Mississippi and Missouri Rivers, available at <http://water.epa.gov/scitech/swguidance/standards/SierraClub.cfm>; and Petition to Establish Numeric Nutrient Standards for the Mississippi River, available at <http://www.cleanwaternetnetwork.org/resources/petition-establish-numeric-standards-and-tmdls-nitrogen-and-phosphorous>.

Federation v. Jackson, Case No. 08-00324, Consent Decree, DE 153 (N.D. Fla. December 30, 2009), and is currently on appeal. FDEP was not a party to that litigation and did not participate in the negotiations resulting in the settlement and consent decree.

Pursuant to the settlement agreement, on December 6, 2010, EPA promulgated numeric nutrient criteria for Florida's lakes and flowing waters. 75 Fed. Reg. 75762 (Dec. 6, 2010) (codified at 40 C.F.R. §131.43). EPA remains obligated to propose numeric nutrient criteria for the remainder of Florida's waters (except for wetlands) by November 14, 2011, and finalize those numbers in rule by August 15, 2012. *See Florida Wildlife Federation*, Joint Notice to the Court of Extension of Consent Decree Deadlines, DE 184 (N.D. Fla. June 7, 2010).

FDEP urges EPA to withdraw its determination. This action will allow Florida to address nitrogen and phosphorus pollution through State and local programs, including the FDEP's pursuit of nutrient water quality standards.

Overview of Florida's Nutrient Reduction Program

The State of Florida has a comprehensive set of legislatively mandated programs, implemented at the State, regional and local levels, which work in unison to protect waters from nutrient pollution and reduce nutrient loading from all sources of pollution, not just federally-regulated point sources. The core of Florida's program focuses on NPDES permitting with appropriate effluent limits,⁴ extensive monitoring of its waters, identification of those waters that are impaired, setting load reduction targets for those waters identified as impaired, and implementing watershed restoration plans covering both point and nonpoint sources. Over the

⁴ For wastewater sources that discharge nutrients, WQBELs are specifically derived to protect State waters from nutrient impairment under "worst case" conditions. *See* Fla. Admin. Code R. 62-650.300(3)(h). Before FDEP is able to issue a wastewater permit, the permit applicant must provide upfront "reasonable assurance" that the permittee can meet all conditions in their permit, including the permit effluent limit – a more rigorous permitting standard than contained within the Clean Water Act. *Compare* Fla. Admin. Code R. 62-620.320(1) *with* 40 C.F.R. § 122.44(d).

years, Florida has expended great time and resources in undertaking these activities. While many of these efforts emanate from the typical Clean Water Act NPDES and TMDL programs, there are a number of programs unique to Florida that complement the standard Clean Water Act tools and in many instances go far beyond the mandates of the Clean Water Act.

For instance, under the Clean Water Act, once a TMDL is set and incorporated into NPDES permits, mandated federal actions are at an end. No comprehensive implementation plan is required. *See* EPA's TMDL website, available at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/glossary.cfm> ("Current 303(d) regulations do not require implementation plans, though some state regulations do require an implementation plan for a TMDL."); *see also Sierra Club v. Meiburg*, 296 F.3d 1021 (11th Cir. 2002). Florida, on the other hand, has a number of watershed-based approaches that result in restoration plans covering both point *and* nonpoint sources. These watershed plans include BMAPs, SWIM plans, and legislatively-mandated restoration efforts directed at a number of specific watersheds like the Everglades and Lake Okeechobee. *See, e.g.*, §§ 373.451 - .4595 and 403.067(7), Fla. Stat.

Florida has already adopted aggressive nutrient load reduction limits for major waterbodies across the State through its TMDL and SWIM programs. Currently, there are 135 adopted nutrient TMDLs and 47 SWIM plans (many with PLRGs) for major waterbodies including: Lake Okeechobee, the Caloosahatchee Estuary, the St. Lucie Estuary, the Indian River Lagoon, Tampa Bay, the Lower St. Johns River, the Suwannee River, the Santa Fe River, the Ocklawaha Chain of Lakes, the Winter Haven Chain of Lakes, Lake Jesup, and many first magnitude springs across the State including Manatee, Fanning, and Wekiva Springs. Florida has also established comprehensive restoration and/or protection plans for most of our high priority waters including the Everglades, Lake Okeechobee, the St. Johns River and Estuary, the

Ocklawaha Chain of Lakes, Tampa Bay, Sarasota Bay, and the Florida Keys coastal waters, among others.

These efforts, combined with the point and nonpoint source strategies discussed below, already have shown significant, positive results in many of Florida's watersheds. EPA itself has documented a number of Florida's nutrient reduction successes including Lake Apopka, Tampa Bay, Sarasota Bay and Indian River Lagoon. *See* EPA Region 4's Watershed Improvement Summaries, http://www.epa.gov/region4/water/watersheds/watershed_summaries.html#fl.

In Sarasota Bay, EPA acclaims the successes of the nutrient reduction efforts in that watershed:

"The broadest measure of Sarasota Bay water quality and ecosystem health is the presence of seagrass in the estuary, so critical for the proper function of an estuary. Seagrass coverage in Sarasota Bay has significantly increased, approaching the 1950 extent of coverage. . . . The Sarasota Bay Estuary Partners instrumental in this outstanding Seagrass restoration and recovery effort include Florida Department of Environmental Protection, Southwest Florida Water Management District, Manatee and Sarasota County, city of Sarasota, city of Bradenton, town of Longboat Key, city of Bradenton Beach, city of Holmes Beach and Anna Maria Island."

Reducing Excessive Nutrient Enrichment in Sarasota Bay, available at http://www.epa.gov/region4/water/watersheds/documents/sarasota_bay.pdf.

Moreover, Florida has a number of nationally preeminent programs including its long-standing post-construction stormwater program for all new or modified development (since 1981), its land purchasing program (protecting over 5.3 million acres of land to date representing 15% of the State – Florida spent more than any other State in the nation to acquire conservation lands from 1998-2005), and its reuse of reclaimed water. Florida also has a broad agricultural nonpoint source program setting forth best management practices ("BMPs") for most of the primary agricultural commodities in the State as well as BMPs specific to targeted areas of the State. All of these programs, as well as others, complement one another and result in Florida's

nutrient program being, unquestionably, a national leader.

These various programs are further discussed below in the context of evaluating Florida's water quality program pursuant to the EPA memo.

**Florida Has as a Strong Nutrient Reduction Program as Measured Against
EPA's March 16, 2011 Memo or Any Other Objective Standard**

EPA's March 16, 2011, memo outlines eight minimum elements needed in a comprehensive State nutrient reduction program. Florida undoubtedly exceeds all eight of these requirements, and is a national leader in most of these categories.

FDEP meets or exceeds all eight of the memo elements as follows:

1. Prioritize Watersheds on a Statewide Basis for Nitrogen and Phosphorus Loading Reductions

Florida has long utilized a watershed-based approach to address nutrient pollution in Florida. The 1987 SWIM Act directed the regional water management districts to develop management and restoration plans for preserving or restoring priority waterbodies. §§ 373.451 – 373.4595, Fla. Stat. One of the key goals established in a SWIM Plan is the development of a PLRG, which are a precursor and are similar in nature to the more recent TMDLs, designed to preserve or restore designated uses and attain water quality standards in SWIM waterbodies. The legislation initially designated six SWIM waterbodies: Lake Apopka, Tampa Bay, Indian River Lagoon, Biscayne Bay, the Lower St. Johns River, and Lake Okeechobee. Currently, 47 waterbodies are on the priority list. *See* SWIM Website, <http://www.dep.state.fl.us/water/watersheds/swim.htm>.

The 1999 Florida Watershed Restoration Act, Section 403.067, Florida Statutes, provides for the systematic assessment of impaired waters and development and implementation of scientifically-sound TMDLs for those Florida waters verified as impaired. FDEP's "Impaired

Waters Rule” provides the scientific methodology for assessing waterbody impairment and includes numeric thresholds for assessing nutrient impairment. Fla. Admin. Code Ch. 62-303. Prioritizing the development of individual TMDLs has largely been dictated by EPA in the 1999 TMDL consent decree in *Florida Wildlife Federation, Inc. v. Browner*, Case No. 98-00356 (N.D. Fla. 1999). However, as limited resources allow, FDEP also prioritizes TMDL development based on factors primarily related to public health (including potential impacts to drinking water supplies and exposure through recreational activities), environmental significance, and its rotating basin schedule. See Fla. Admin. Code R. 62-303.500 and .700.

Between the various SWIM Plans, BMAPs, and restoration programs for legislatively targeted watersheds, Florida has already identified its high priority waters and, for most of these waters, established nutrient load reduction targets.⁵ Some examples of high priority waterbodies that the State has made a significant investment in actions to reduce nitrogen and phosphorus pollution are:

Lake Apopka: Since the 1980s, Florida has invested millions of dollars in efforts to reduce phosphorus inputs to Lake Apopka and remove phosphorus from the lake, resulting so far in a 41% decrease in lake phosphorus and a 34% increase in water clarity since 1992. See St. Johns River Water Management District Lake Apopka Restoration website, <http://www.floridaswater.com/lakeapopka/>.

Tampa Bay: Nutrient pollution problems documented in Tampa Bay in the 1960s and 1970s have been successfully addressed through the implementation of advanced wastewater treatment of domestic wastewater, increasing reuse, reduced NOx emissions, and significant investments in stormwater treatment. As a result of the reductions in nutrient loading, seagrass

⁵ FDEP’s monitoring efforts, including both targeted watershed monitoring and statewide basin trend monitoring, are discussed in element seven below.

coverage has increased to the highest levels since the 1950s in spite of a 500% increase in population in the area during this same period. *See* Tampa Bay Estuary Program website, <http://www.tbep.org/>.

Indian River Lagoon (“IRL”): Through the combined efforts of State and Federal Agencies, five Counties and other partners, nutrient loadings goals to the IRL have been achieved by reducing and eliminating point source discharges, and implementing measures to reduce nutrient loads from septic systems, stormwater discharges, marinas and boating. The monitoring data indicate decreasing levels of nitrogen, phosphorus and chlorophyll a, and improving dissolved oxygen and seagrass coverage throughout the IRL. *See* St. Johns River Water Management District’s Its Your Lagoon website, <http://www.sjrwmd.org/itsyourlagoon/>.

Everglades: Nutrient loadings to the Everglades have been greatly reduced through a combination of almost 60,000 acres of constructed treatment wetlands and mandatory agricultural BMPs. The State is close to completing \$1.1 billion in water quality restoration projects which reflects an unprecedented State commitment to nutrient pollution reduction for a waterbody in the United States. Over the past 15 years, the State’s efforts have prevented more than 3,500 metric tons of phosphorus from reaching the Everglades. 2011 South Florida Environmental Report, Volume I, available at http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2011_sfer/v1/vol1_table_of_contents.html.

Lake Okeechobee Watershed: The State is in the process of implementing the first phase of a Lake Okeechobee Watershed Restoration Plan, the cost of which is estimated to be between

~\$1.3 - \$1.7 billion. Lake Okeechobee Protection Plan Update, March 2011, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/lopp_update_2011.pdf.

St. Lucie and Caloosahatchee River Watersheds: Under legislation passed in 2007, multi-billion dollar restoration plans for the St. Lucie and Caloosahatchee River Watersheds have been developed and subsequently ratified in 2009 by the Florida legislature. St. Lucie River Watershed Protection Plan, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ne_slrwpp_main_123108.pdf; and Caloosahatchee River Watershed Protection Plan, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ne_crwpp_main_123108.pdf.

Lower St. Johns River: FDEP cooperatively worked with multiple interests and stakeholders to adopt a billion dollar BMAP in 2008 to address nitrogen and phosphorus pollution in the Lower St. Johns River. Loading reductions from implementation of the BMAP are already being realized. *See* 2010 Progress Report, Lower St. Johns River Basin Management Action Plan. Available at http://www.dep.state.fl.us/water/watersheds/docs/bmap/lshr_prog_rpt2010.pdf.

2. Set Watershed Load Reduction Goals Based Upon Best Available Information

As previously noted, Florida has already established restoration goals for most high priority waters in the State, including all the high priority waters specifically discussed under element one. For a complete list of 406 FDEP and EPA established nutrient TMDLs for the State of Florida, please refer to EPA's website at http://iaspub.epa.gov/tmdl_waters10/attains_impaired_waters.tmdls?p_pollutant_group_id=792.

FDEP has one of the most comprehensive and technically-sophisticated TMDL process in the nation. FDEP's nutrient TMDLs are only possible as a result of the extensive investments in both water quality monitoring data and modeling efforts, including actively funding cutting edge modifications to various modeling tools being used to assess impacts to Florida's surface and ground waters. For instance, in the case of the Lower St. Johns River, more than one million dollars was expended to enhance the Chesapeake Bay model. Significant site-specific improvements were based on extensive additional water quality monitoring, which was used to develop, calibrate, and validate a three dimensional model to assess complex tidal hydrodynamics and water quality changes, with the intent of being able to more accurately determine the critical conditions and the areas where impacts were the greatest.

In addition, Florida has funded the development of the Watershed Assessment Model ("WAM"), a very powerful tool for watershed-scale modeling. WAM can model nutrient loading and transport from small, individual watersheds or large complex basins, including agricultural, urban and native land uses, and natural and channelized streams, springshed groundwater systems, and tidal areas. WAM has been used by FDEP for development of TMDLs and/or restoration plans in numerous areas of the state (e.g., the Suwannee River, Peace River, and the Caloosahatchee Basin) and Florida's regional Water Management Districts also utilize WAM for assessing watershed water and nutrient budgets. Moreover, WAM and other modeling tools are used in the development of BMAPs, which can rely heavily on the use of land use loading models and associated Geographic Information System tools to properly represent and assess local attributes in creating a suite of cost-effective management practices needed to reduce point and non-point sources.

3. *Ensure Effectiveness of Point Source Permits in Targeted/Priority Sub-Watersheds*

FDEP has a multi-pronged approach for controlling nutrient loading from NPDES point source dischargers.⁶ These efforts include: eliminating significantly reducing the volume of wastewater discharges to surface waters, encouraging reuse of domestic wastewater, aggressively identifying nutrient impaired waters and setting TMDLs for those waters, incorporating protective water quality based effluent limits into permits, and adopting comprehensive watershed-wide restoration programs to address both point and nonpoint sources with the assistance of government-funded regional restoration projects. And as noted above, Florida conducts more water quality sampling than any other State to ensure the effectiveness of these programs.⁷

Currently, less than 10 percent of all domestic wastewater treatment facilities in the State even discharge to surface waters (197 out of 2,118 facilities), and over 25% (51 facilities) of the surface water discharges provide full advanced wastewater treatment (“AWT”). Few, if any, States can meet that record of success. Section 403.086(1) of the Florida Statutes was passed in the 1980s to specifically require AWT for domestic wastewater facilities discharging to Old Tampa Bay, Tampa Bay, Hillsborough Bay, Boca Ciega Bay, St. Joseph Sound, Clearwater Bay, Sarasota Bay, Little Sarasota Bay, Roberts Bay, Lemon Bay, or Charlotte Harbor Bay, or any water or tributary flowing into any of these waters. Additionally, in 1990, Chapter 90-262, Laws

⁶ In 1995 Florida received NPDES program approval from EPA. 60 Fed. Reg. 25,718 (May 1, 1995); 33 U.S.C. § 1342(c). Prior to receiving program approval, Florida had in place a comprehensive program regulating wastewater discharges into both surface and groundwater and merged that pre-existing permitting program into its NPDES approved program. See § 403.088, Fla. Stat.

⁷ FDEP also has a robust compliance and enforcement program, averaging over 3,680 inspections of wastewater facilities each year for the past 10 years and assessing over \$2.6 million in enforcement penalties in 2010.

of Florida, was passed to protect the Indian River Lagoon (“IRL”) system⁸ by prohibiting new discharges or increased loadings from domestic wastewater treatment facilities, and reducing or eliminating nutrient loadings to surface water from existing domestic wastewater treatment facilities that discharge to the IRL system. The result has been an annual 90% reduction in nutrients and suspended solids to IRL. Indian River Lagoon (2010 EPA Fact Sheet), available at http://www.epa.gov/region4/water/watersheds/documents/indian_river_lagoon.pdf. Similar legislation for the protection of the Florida Keys and the Wekiva Study Area was passed in 1999 and 2005, respectively. *See* Chapter 99-395, section 6, Laws of Florida; and § 369.318, Fla. Stat.

In the early 1980’s, Florida recognized the importance of reusing wastewater for both wastewater management and water resource management. Reuse offers an environmentally sound means for managing wastewater that dramatically reduces environmental impacts associated with discharge of wastewater effluent to surface waters. In addition, use of reclaimed water provides an alternative water supply for many activities that do not require potable quality water, which serves to conserve available supplies of potable quality water. These facts prompted Florida to actively encourage and promote reuse as a formal state objective.

Two decades later, Florida leads the country in the reuse of domestic wastewater, and in 2006, Florida’s Water Reuse Program was the first recipient of the EPA Water Efficiency Leader Award. The total reuse capacity of Florida’s domestic wastewater treatment facilities has increased from 362 million gallons per day (“MGD”) in 1986 to 1,559 MGD in 2009. Florida Reuse Activities Website, <http://www.dep.state.fl.us/water/reuse/activity.htm>. The current reuse capacity represents approximately 62 percent of the total permitted domestic wastewater treatment capacity in Florida. In 2006, Florida averaged nearly 37 gallons/day/person of reuse,

⁸ The IRL system extends from Jupiter inlet, north to Ponce de Leon Inlet, including Hobe Sound, Indian River Lagoon, Banana River, and Mosquito Lagoon and their tributaries.

compared to the next two best states -- California, which reuses approximately 16 gallons/day/person, and Virginia, which reuses approximately 1.5 gallons/day/person. *See* Reuse Inventory Database and Annual Report Website, <http://www.dep.state.fl.us/water/reuse/inventory.htm>. Additionally, legislation was passed in 2008 that will result in the elimination of 300 MGD of domestic wastewater discharges into the Atlantic Ocean in Southeast Florida (i.e., Palm Beach, Broward and Miami-Dade Counties) through a gradual transition to water reuse. Chapter 2008-232, Laws of Florida.

Since its inception, Florida's State Revolving Fund Clean Water program has committed more than \$3 billion to plan, design, and build wastewater facilities across the state. Over forty percent of that amount has been directed towards advanced wastewater treatment and reuse facilities.

In permitting domestic and industrial wastewater discharges, the State of Florida has had a program designed to assess the impacts of permitted point source discharges on surface waters and include appropriate WQBELs since the late 1970s, long before it received NPDES program approval.⁹ In the case of the Little Wekiva River system, WQBELs have been included in permits as early as 1975. Since receiving program approval, over 140 nutrient WQBELs have been included as specific conditions in FDEP-issued NPDES permits.

More recently, effluent limitations for most traditional point source dischargers of nutrients are derived based upon waste load allocations from TMDLs set for the receiving waterbody. However, for NPDES facilities discharging into waters without a TMDL, FDEP continues to independently derive WQBELs, as appropriate. *See* Fla. Admin. Code Ch. 62-650.

⁹ Regulation of concentrated animal feeding operations is discussed below under element 4.

4. *Agricultural Areas*

FDEP works closely with Federal and State agricultural partners and the agricultural community to address nutrient loading from agricultural operations. In fact, according to the American Farm Bureau Federation (“AFBF”), Florida has the most aggressive and comprehensive program implementing agricultural source controls (i.e., BMPs) in the nation. Personal Communications - Don Parrish, Senior Director of Regulatory Relations, AFBF. The State of Florida adopts agriculture BMPs by rule in the Florida Administrative Code and State law requires these BMPs to be implemented as part of State-adopted watershed restoration plans, known as basin management action plans (“BMAPs”). § 403.067(7), Fla. Stat. Agricultural nonpoint sources covered in a BMAP are subject to enforcement by FDEP or the applicable regional Water Management District, for failure to implement BMPs or conduct monitoring. *Id.*

To date BMPs have been adopted in rule covering citrus (Rules 5M-2, 5M-5, 5M-7, and 5E-1.023), container nurseries (Rule 5M-6), beef cattle operations (Rule 5M-11), sod farms (Rule 5M-9), vegetable and row crops (Rule 5M-8), and forestry operations (Rule 5I-6), with other agricultural BMPs currently under development. Agricultural BMPs have also been adopted for the Everglades Agricultural Area (Rule 40E-63), the C-139 Basin (Rule 40E-63), and the Lake Okeechobee watershed (Rules 5M-11 and 40E-61) and are key components of Everglades and Lake Okeechobee restoration. Over the past 15 years, mandatory agricultural BMPs in the Everglades Agricultural Area have consistently reduced phosphorus loadings by greater than the 25 percent regulatory minimum. 2011 South Florida Environmental Report, Chapter 4, available at http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2011_sfer/v1/chaapters/v1_ch4.pdf.

Besides promulgating numerous agricultural BMP rules, the Florida Department of Agriculture and Consumer Services ("FDACS") provides assistance to agriculture operations in reducing their pollutant loads to the State's waters. With FDACS' efforts over the last decade, more than 8 million acres of agriculture are now implementing approved agricultural BMPs. FDACS' BMP rules require growers to maintain records demonstrating compliance with the BMPs (including amount of fertilizer applied, etc.) and allow FDACS staff to conduct inspections.

For concentrated animal feeding operations ("CAFOs"), Florida was among the first states in the nation to implement rules regulating CAFO wastes through the Lake Okeechobee Dairy Rule adopted in the 1980s. Fla. Admin. Code R. 62-670.500. Furthermore, all known CAFOs in Florida that require NPDES permits are either permitted or pending permits, with all CAFO dairies already permitted. In addition, Florida requires individual permits for CAFOs, rather than general permits.

All permitted CAFOs in Florida, a hurricane state, have production areas designed to contain the 25-year, 24-hour rainfall event for a site-specific design storage period. Since 1998, based on data from PCS/ICIS, only four permitted CAFOs have discharged to surface water, with the last discharge occurring in 2007. Additionally, Nutrient Management Plans ("NMPs") were implemented by CAFOs even before they were required by the 2008 EPA rules. In Florida NMPs are prepared by either a licensed Professional Engineer or a provider certified by NRCS. Upon permit issuance, components of NMPs are included as permit conditions.

Beyond BMP implementation, the State has undertaken comprehensive watershed restoration efforts to capture and treat nutrient levels not fully addressed by BMP implementation, including construction and operation of off-line treatment facilities in

watersheds including the Everglades, Lake Okeechobee, and the St. Lucie River. In the Everglades alone, more than 45,000 acres of treatment wetlands are currently operational, with another 13,000 acres of treatment wetlands scheduled to be completed in the near future. 2011 South Florida Environmental Report, Chapter 5, available at http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2011_sfer/v1/chapters/v1_ch5.pdf. These are the largest complex of treatment wetlands in the world, costing in excess of \$1 billion dollars to construct and operate.

Other innovative agricultural initiatives include the first in the nation program to engage the agricultural community in a payment for environmental services framework where land owners enter into a contract for nutrient reduction services for payment. *See* Lake Okeechobee Protection Plan Update, March 2011, Section 6.3.1.1, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/lopp_update_2011.pdf. In 2010, FDEP developed a pilot Water Quality Credit Trading Program in the Lower St. Johns River Basin that allows agricultural operations to partner with point sources to more economically meet nutrient reductions required under the BMAP for the river. Fla. Admin. Code Ch. 62-306.

5. Stormwater and Septic Systems

A. Stormwater

Florida was the first State in the Nation to implement comprehensive stormwater treatment regulations in 1981 for all new urban development and redevelopment and is still only one of eleven States with a fully State-financed post-construction permitting program for new

development and redevelopment.¹⁰ See FDEP Urban Stormwater Program website, <http://www.dep.state.fl.us/water/nonpoint/urban1.htm>. For new stormwater discharges to impaired waters, Florida law requires that no increase in pollutant loading will occur for the pollutants causing or contributing to the impairment. § 373.414(1)(b)(3), Fla. Stat. Despite rapid population growth over the last 30 years, Florida's post-construction stormwater program has been a significant contributor to controlling and reducing nutrient loads during this period.

For the past decade, FDEP has been conducting research on innovative BMPs such as stormwater harvesting and low impact design to obtain data on the effectiveness of BMPs in reducing nutrients. See websites at: <http://www.dep.state.fl.us/water/nonpoint/pubs.htm> #Urban Stormwater BMP Research Reports and <http://stormwater.ucf.edu/>. Currently, additional studies and monitoring are being undertaken to enhance the nutrient removal effectiveness of existing stormwater BMPs. FDEP is also developing a rule to establish minimum levels of stormwater treatment for nitrogen and phosphorus that FDEP envisions will result in the most comprehensive urban stormwater treatment program in the country.¹¹

In addition to its state stormwater permitting program for new stormwater discharges, Florida has provided state cost share funding to local governments to retrofit existing drainage systems with BMPs to reduce the stormwater pollutant loads discharged from areas built before Florida's stormwater treatment regulations existed. In support of this retrofit effort, for over 20 years Florida has been using a majority of its Section 319 funds for urban stormwater retrofitting projects. For example, Table 1 summarizes stormwater retrofitting in two significant watersheds, the Indian River Lagoon and Tampa Bay. Since 1999, the State has provided over

¹⁰ Florida was also one of the first States to limit the use of phosphates in detergents. See § 403.061(23), Fla. Stat.; Chapter 72-53, Laws of Florida.

¹¹ FDEP's activities to date in support of this rulemaking effort are documented at <http://www.dep.state.fl.us/water/wetlands/erp/rules/stormwater/index.htm>.

\$50 million in grant money to provide funding for local projects that reduce pollutant loading from urban stormwater discharges.

Table 1

WATERSHED	PROJECTS	ACRES RETROFITTED	TOTAL COST	TN LOAD REDUCTION	TP LOAD REDUCTION
Indian River Lagoon	>40	47,144	\$51,870,829	37,9217	68,691
Tampa Bay	>20	24,930	\$26,209,779	67,230	43,866

A source of local matching funds is key to stormwater retrofitting and to tapping into state and regional Water Management District funding. The State of Florida currently has more stormwater utilities (154) with a dedicated local revenue stream specifically targeted for stormwater treatment and management than any other State.

In 2003, FDEP and the Florida Department of Transportation, partnered with the University of Central Florida to establish the Stormwater Management Academy as a center of excellence on urban stormwater treatment and management. See <http://www.stormwater.ucf.edu>. The academy has completed or is conducting research on a variety of urban stormwater BMP issues, including the health and water quality risks associated with stormwater reuse. Moreover, FDEP is funding research to determine fertilization and irrigation needs to establish and maintain turf grasses, the impact of wet detention pond depth on the effectiveness of stormwater treatment, and the development of BMPs to increase nitrogen removal in stormwater.

FDEP and FDACS have been working with the fertilizer industry to develop Florida-specific formulations of slow-release and low-phosphorus fertilizers. FDACS adopted its Urban Turf Rule (Rule 5E-1.003), which specifies which types of fertilizers can be used on urban turf in Florida and the amount of nutrients in the various types of urban turf fertilizers. Additionally, the 2007 Florida Legislature established the Consumer Fertilizer Task Force to develop statewide

recommendations on the use of fertilizer on urban turf and on training and certification requirements for people engaged in the commercial application of fertilizer. The outcome of that task force was a model ordinance for the use of fertilizer. Local government adoption of the model ordinance is statutorily mandated within impaired watersheds, as well as the implementation of a mandatory commercial applicators training and program. *See* § 403.9337, Fla. Stat.

After January 1, 2014, to be licensed to commercially apply fertilizer to urban landscapes, this same Act also requires a certificate from FDEP demonstrating satisfactory training in urban landscape BMPs. § 403.9338, Fla. Stat. An estimated 100,000 people will receive this training by the statutory deadline. As of September 20, 2010, 11,013 people already have received the certification. *See* FDEP's 2010 Annual Report: Nonpoint Source Management Program, pp. 12 - 14, available at <http://www.dep.state.fl.us/water/nonpoint/docs/319h/2010AnnualReport319h.pdf>.

Finally, Florida has the largest public land acquisition program of its kind in the United States. This program, combined with Florida's comprehensive wetland protection program, ensures that environmentally sensitive areas are not only protected, but that they perform their natural function as nutrient sinks. The state's first environmental land acquisition program goes back as far as 1972 (the Environmentally Endangered Lands Act) and was expanded in 1981 with the Save Our Coasts and Save Our Rivers Programs. In 1989, recognizing the importance of accelerating land acquisition, given the state's rapid population growth, the Preservation 2000 program was enacted. This decade-long program provided \$300 million, annually, for land acquisition. In 1999, Preservation 2000 was extended for another decade by the enactment of the Florida Forever Program, which continued the \$300 million annual commitment. *See generally*

Florida's Landmark Programs for Conservation and Recreation Land Acquisition, available at http://www.dep.state.fl.us/lands/files/Florida_LandAcquisition.pdf. In combination with other State programs, over 5.3 million acres of sensitive lands have been acquired for protection. Florida Natural Areas Inventory Summary of Florida Conservation Lands, available at http://www.fnai.org/PDF/Maacles_201102_FCL_plus_LTF.pdf.

B. Septic Systems

Florida has established standards for septic systems and as part of adopted restoration plans (i.e., BMAPs), septic tanks are routinely removed and residents are hooked up to centralized sewer. Throughout Florida, a number of successful programs have been implemented to ensure that septic systems are well-maintained and, when necessary, taken offline. As part of adopted BMAPs for the Lower St. Johns Rivers, Lake Jesup, and Bayou Chico, septic tanks are routinely removed and residents are hooked up to centralized sewer. More than 230,000 lb/yr TN has been reduced in the St. Johns River alone.

EPA has assisted Florida in its septic tank efforts, including an award of \$3.6 million grant to the Florida Keys Aqueduct Authority for the Florida Keys Decentralized Wastewater Demonstration Project. This project, which addresses the upgrade of approximately 400 onsite sewage treatment and disposal systems in the lower Keys, will allow owners the option of giving ownership of their system to the Florida Keys Aqueduct Authority, who will then provide upgrade, maintenance, and repair services. Under State law, these septic systems must be upgraded to nutrient reduction systems by July 2016. § 381.0065(4)(l), Fla. Stat.

Florida's State Revolving Fund has provided over \$3 billion in funding to projects designed to improve Florida's waters and make drinking water safe. Of this amount, almost \$1 billion has been spent on sewer projects, which includes taking septic tanks offline in sensitive

areas throughout Florida such as Key Largo, Marathon Key, Monroe County, Sopchoppy, Grand Ridge, Clewiston, Panama City Beach, Lee, Key Biscayne, and Marco Island.

In 2008, EPA and the National Oceanic and Atmospheric Administration (“NOAA”) jointly determined that the State of Florida had satisfied all conditions for approval of the Florida coastal non-point pollution control program. Florida Coastal Non-point Program, NOAA/EPA Decisions on Conditions of Approval, available at: http://coastalmanagement.noaa.gov/non-point/docs/6217fl_fnl.pdf. Within its approval, with regard to new and operating onsite disposals systems, EPA and NOAA stated that Florida “has satisfied” the requirements of Coastal Zone Act Reauthorization Amendments (“CZARA”) by “incorporating a well funded and targeted approach statewide.” *Id.* The approval notes the use of the Carmody Data Systems program, the state’s “robust” Onsite Sewage Treatment and Disposal System (“OSTDS”) licensing, certification, and standards of inspection program, point-of-sale outreach, and a “very professional” public outreach campaign. *Id.* EPA and NOAA further commented that Florida is “providing guidance and technical assistance to the local health department offices to help them systematically implement broad [OSTDS] inspection programs on a county-to-county basis and to educate the public about inspections and maintenance.” *Id.* To maintain its CZARA approval, Florida has committed to continue to work with county health departments to increase inspections through 2018 and to devote approximately \$1 million a year from the Florida Department of Health (“FDOH”) and \$200,000 a year from section 319 funds administered by FDEP.

6. *Accountability and Verification Measures*; and

7. *Annual Public Reporting of Implementation Activities and Biannual Reporting of Load Reductions and Environmental Impacts Associated with Each Management Activity in Targeted Watersheds*

The description of how the State of Florida achieves these two elements is articulated below and described in unison due to the significant overlap of information. Monitoring of environmental response and verification that management activities are carried out are important components of restoration efforts implemented in the State of Florida, generally in annual reports.

A. Public Reporting

The annual South Florida Environmental Report details the progress of restoring the Everglades, Lake Okeechobee, and the Southern Coastal Waters including the Caloosahatchee and St. Lucie estuaries. *See* 2011 South Florida Environmental Report, Volume I, available at http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2011_sfer/v1/vol1_table_of_contents.html. All five of the regional water management districts report on their various activities on their individual websites. *See generally* <http://www.dep.state.fl.us/secretary/watman/>. In addition, for watersheds with adopted BMAPs, annual progress reports are prepared that detail the specific activities implemented and loads reduced. The National Estuary Programs also issue routine reports describing the measures implemented to protect and restore those high priority waterbodies. FDEP produces a variety of reports on wastewater and wastewater-related issues. *See* <http://www.dep.state.fl.us/water/wastewater/pubs.htm>. FDACS issues annually a Report on the Implementation of Agricultural Best Management Practices. *See* <http://floridaagwaterpolicy.com/ImplementationAssurance.html>. Finally, FDOH produces a variety of reports on installation and repair of septic systems and research to enhance the State's septic systems. *See* <http://www.myfloridaeh.com/ostds/research/Index.html>.

B. Water Quality Monitoring and Assessment

Florida has an extensive water quality monitoring and assessment program, particularly with respect to nutrients. Currently, over 30 percent of all the nutrient water quality data and over 55 percent of the chlorophyll a data in EPA's national water quality database, STORET, came from Florida -- more than double from the next highest State, Oklahoma. STORET water quality database, <http://www.epa.gov/storet>. In fact, 25 percent of the nation's ambient water quality monitoring stations (more than 41,000 stations) are located within Florida. The next highest state is Alaska with 15,187 stations.

FDEP's voluminous water quality data are used for the assessment of waterbodies for nutrient impacts annually under a comprehensive and sophisticated rotating basin approach. FDEP conducts hundreds of assessments of waterbody health for nutrients per year pursuant to the Impaired Waters Rule. *See* FDEP's Adopted Verified Lists of Impaired Waters, available at <http://www.dep.state.fl.us/water/watersheds/assessment/303drule.htm>. As part of FDEP's rotating basin approach for assessing waters and setting TMDLs, FDEP updates its 303(d) list annually. Additionally, every 2 years, as part of its "Integrated Report" (combining the reporting elements of the 305(b) Report and the 303(d) assessment), the State assesses and reports on statewide nutrient conditions based on data from the status monitoring network and reports on nutrient trends at 77 trend monitoring stations. FDEP's status monitoring network uses a probabilistic design to allow for the unbiased assessment of the status of Florida's waters.

Florida's vast water quality data are readily accessible to the public through FDEP's website at <http://ca.dep.state.fl.us/mapdirect/?focus=waterdatacentral>. FDEP updates this database quarterly.

Since 1996, FDEP has conducted an Integrated Water Resource Monitoring Network

("IWRM") Program. See <http://www.dep.state.fl.us/water/monitoring/index.htm>. This program is a multi-level or "tiered" monitoring program designed to answer questions about Florida's water quality at differing scales. Tier I monitoring is comprised of two monitoring efforts, status monitoring and trend monitoring, which are both designed to answer regional to statewide questions.

The purpose of the Status Monitoring Network is to characterize environmental conditions of Florida's fresh water resources and to determine how these conditions change over time. The Status Monitoring Network, which randomly selects stations via a probabilistic design recommended by EPA, is designed to address questions at three different scales: 1) the state as a whole; 2) specific geopolitical regions of the state; and 3) watersheds associated with Florida's major rivers and lakes. Status Network data are used to statistically describe statewide, regional, and basin-specific water quality conditions present during the period of sampling.

The basic design units of the trend monitoring network are the state of Florida's 52 United States Geologic Survey ("USGS") eight-digit surface water drainage basins. The purposes of the Trend Network are to correlate Tier I, II, and III IWRM results with seasonal climatic change, to make best estimates of temporal variance of sampled analytes within the USGS drainage basins, and to determine how these analytes are changing over time. The Trend Network consists of 77 fixed location sites in streams and rivers that are sampled on a monthly basis. The sites are generally located at the lower end of a USGS drainage basin and are placed at or close to a flow gauging station. These sites enable FDEP to obtain chemistry, discharge, and loading data at the point that integrates the land use activities of the watershed.

Tier II monitoring includes strategic monitoring for basin assessments and monitoring required for TMDL development. This monitoring is more localized in nature than that

occurring under Tier I monitoring, yet may encompass a broader area than that employed in Tier III. Tier II monitoring is primarily conducted as part of FDEP watershed management approach. In 2000, FDEP adopted a five-year watershed management cycle that divides Florida into five groups of surface water basins in which different activities take place each year; the cycle is repeated continuously to prioritize watersheds for implementation of restoration efforts, to evaluate the success of clean-up efforts, to refine water quality protection strategies, and to account for the changes brought about by Florida's rapid growth and development. Activities associated with FDEP's assessment process include preliminary basin assessments; identification of nutrient or other pollutant-impaired waters; targeted water quality monitoring and data analysis; TMDL development and adoption; basin planning with local stakeholders to establish the actions necessary to reduce pollution; and implementation through regulatory actions, funding, pollution prevention strategies, and other measures. Over the past three years, FDEP has conducted more than 26,000 assessments of waterbody health through this process, more than any other agency in the country.

Tier III includes all monitoring tied to regulatory permits issued by FDEP and is associated with evaluating the effectiveness of point source discharge reductions, best management practices or TMDLs. The program addresses both surface and ground waters of the state.

8. Develop Work Plan and Schedule for Numeric Criteria Development

Florida has a long-standing, EPA-approved, narrative nutrient criterion found at Florida Administrative Code Rule 62-302.530(47)(b) that has been the guidepost for Florida's nutrient

reduction efforts.¹² In the Everglades, FDEP has translated the narrative criteria into a numeric phosphorus criterion, which has been approved by EPA and upheld in state and federal courts. Fla. Admin. Code R. 62-302.540(4)(a). FDEP also has statewide, EPA-approved turbidity, transparency and biological integrity criteria¹³ in Rules 62-302.530(69), (67) and (10) that work in unison with the existing narrative nutrient standard.

Moreover, FDEP has adopted numeric nutrient response thresholds (chlorophyll-a and Trophic State Index) for determining whether individual waters are impaired for nutrients. Fla. Admin. Code R. 62-304.351, .352, .353, and .450. EPA has approved these nutrient response values as changes to Florida's nutrient water quality standards that are consistent with the Clean Water Act. *See* EPA's July 6, 2005, 303(c) Determination on Florida's Chapter 62-303; *see also*, EPA's February 19, 2008, 303(c) Determination on Florida's Amendments to Chapter 62-303. EPA's approval of these changes to state water quality standards have been upheld in federal court. *Florida Public Interest Research Group v. EPA*, Case No. 4:02cv408-WCS, Order Granting Summary Judgment, DE 185 (N.D. Fla. Feb. 15, 2007) (unpublished opinion). As such, Florida is one of three states in the nation with EPA-approved nutrient response criteria for all of its waters (with the exception of wetlands).

FDEP recognizes the benefits of promulgating scientifically sound nutrient criteria and

¹² First adopted in 1974, Florida's narrative nutrient criterion provides, "In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora and fauna." Fla. Admin. Code Rule 62-302.530(47)(b).

¹³ Turbidity and transparency are surrogates for water clarity and are an indicator (along with other parameters, such as chlorophyll-a) for measuring biological response, i.e., algal mass, in surface water. EPA has encouraged States to adopt turbidity, transparency and other water clarity criteria as part of the suite of criteria for addressing nutrient pollution. *See, e.g.*, EPA Memorandum: Development and Adoption of Nutrient Criteria into Water Quality Standards, p. 8, found at http://water.epa.gov/scitech/swguidance/standards/upload/2009_01_21_criteria_nutrient_nutrient_swqsmemo.pdf.

has expended great resources to this end. FDEP had been following a mutually agreed upon (EPA and FDEP) criteria development plan until EPA's 2009 settlement with the various organizations represented by EarthJustice. On numerous occasions, EPA has acknowledged FDEP's extraordinary efforts in this regard and has publically stated that EPA's rulemaking efforts would have been impossible without Florida's extensive water quality data. *See* 75 Fed. Reg. at 75771, 75773; 75 Fed. Reg. 4174, 4183 (January 26, 2010); *see also* EPA's September 28, 2007 Letter Approving FDEP's 2007 Nutrient Criteria Development Plan, available at <http://www.dep.state.fl.us/water/wqssp/nutrients/docs/epa-092807.pdf>.

As the understanding of nutrients in aquatic ecosystems continues to evolve, FDEP desires to continue our commitment to developing defensible nutrient criteria. As such, FDEP plans to recommence its rulemaking efforts and will target the waterbodies covered by EPA's December 6, 2010 rule in addition to a number of estuaries which will represent a very broad coverage of State waterbodies. FDEP has projected the following timetable for completing the rulemaking, but this timeframe is contingent on EPA's response to this Petition:

Notice of Rule Development:	May, 2011
1 st Public Workshop on Rule Concepts:	June, 2011
2 nd Public Workshop on Draft Rules:	July, 2011
3 rd Public Workshop on Final Draft Rules:	September, 2011
1 st ERC Meeting (briefing):	November, 2011
2 nd ERC Meeting (adoption):	January, 2012
Legislative Ratification:	2012 Legislative Session

FDEP expects that legal challenges from interested parties could be filed which would delay the effective date of the rule. In the near future, FDEP will update its March 2009

development plan and submit the updated plan to EPA.

Once FDEP completes its rulemaking, EPA obviously maintains its authority to review any proposed criteria resulting from the State process. 33 U.S.C. § 1313(c). Consequently, if EPA were to withdraw its necessity determination, it would not relinquish total authority to Florida. This significant step would once again allow Florida to regain its primary responsibility for standard setting, as Congress unambiguously envisioned within the Clean Water Act.

EPA Should Withdraw Its Necessity Determination and, Consequently, Repeal 40 C.F.R. §131.43 and Refrain from Proposing Other Numeric Criteria in Florida

EPA's purported willingness to give flexibility to States, like Florida, that have in place the framework for achieving nutrient reductions, is not consistent with EPA's 2009 necessity determination for Florida. Measured against EPA's March 16, 2011 memo, the State of Florida has in place a framework for achieving nitrogen and phosphorus reductions and control that is among the best in the nation. It is therefore reasonable to conclude that EPA's 2009 necessity determination should not have singled out Florida. To rectify this discrepancy, EPA must withdraw its necessity determination and has good reason to do so.

Because the necessity determination is essential for EPA's promulgation of numeric nutrient criteria in Florida's lakes and flowing waters, withdrawal of the determination will require EPA to repeal 40 C.F.R. § 131.43. Withdrawal will also relieve EPA from proposing and promulgating numeric nutrient criteria for Florida's estuaries, coastal waters and south Florida canals.

It is well-recognized that federal agencies may change their mind and alter their previous agency actions. *Mactal v. Chao*, 286 F.3d 822, 825-26 (5th Cir. 2002). As explained by the United States Supreme Court, an agency "faced with new developments or in light of reconsideration of the relevant facts and its mandate, may alter its past interpretation and

overturn past administrative rulings and practice.” *American Trucking Ass’n v. Atchison, Topeka, and Santa Fe Railway Co.*, 387 U.S. 397, 416 (1967); *see also Motor Vehicle Mfrs. Ass’n of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 41-42 (1983); *Dun & Bradstreet Corp. Found. v. United States Postal Service*, 946 F.2d 189, 193 (2d Cir. 1991) (“It is widely accepted that an agency may, on its own initiative, reconsider its interim or even its final decisions, regardless of whether the applicable statute and agency regulations expressly provide for such review.”). EPA has asserted that § 303(c)(4)(B) necessity determinations are discretionary action not subject to judicial review. *See* EPA’s Motion to Dismiss Cross-Claim and EPA’s Motion for Judgment on the Pleadings on Counts I, III and IV of FCG’s and FWEAUC’s First Amended Complaint, Case No. 08-00324, DE 151 and 214 (N.D. Fla.); and EPA’s Motion to Dismiss, Case No. 09-00428, DE 13 (N.D. Fla. Dec. 22, 2009). Accepting EPA’s assertion, the Agency has broad discretion to withdraw that same action. Even if EPA’s withdrawal action is reviewable, the reasons for the change in agency action need be no better or worse than the justifications for the original agency course. *F.C.C. v. Fox Television Station, Inc.*, 129 S. Ct. 1800, 1810-11 (2009).

EPA is not irrevocably bound by the previous administration’s January 2009 necessity determination. *See National Cable & Telecommunications Ass’n v. Brand X Internet Services*, 545 U.S. 967, 981 (2005) (Reflecting that a change in administration can prompt reevaluation of the previous administration’s actions). To the contrary, withdrawal of the necessity determination is warranted based solely on the demonstrated strength of Florida’s nutrient reduction program. However, the change in EPA’s administration, the recent issuance of the EPA memo, and FDEP’s commitment to expeditiously promulgate nutrient criteria are additional changed circumstances that warrant rescinding of EPA’s necessity determination. Withdrawal

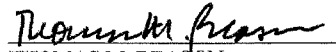
will also enable FDEP to proceed with its proposed rule adoption schedule without the added complication of overlapping federal rulemaking authority.

Conclusion

Florida's comprehensive nutrient reduction program is among the upper echelon of programs in the nation. FDEP is also committed to further its comprehensive program by pursuing nutrient criteria under state law. For these reasons and the other grounds articulated in this Petition, FDEP requests that EPA withdraw its January 2009 necessity determination and take the steps necessary to relieve the Agency from the obligation to propose, promulgate, or implement numeric nutrient criteria in Florida. Granting this request will serve as a clear, positive affirmation of EPA's expectation of States consistent with the March 16, 2011, memorandum. In order to implement the nutrient criteria schedule contained in this petition, FDEP requires a response from EPA on this petition within 30 days of filing.

RESPECTFULLY SUBMITTED this 22^d day of April, 2011.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 16 2011

OFFICE OF
WATER**MEMORANDUM**

SUBJECT: Working in Partnership with States to Address Phosphorus and Nitrogen
Pollution through Use of a Framework for State Nutrient Reductions

FROM: Nancy K. Stoner
Acting Assistant Administrator

TO: Regional Administrators, Regions 1-10

This memorandum reaffirms EPA's commitment to partnering with states and collaborating with stakeholders to make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to our nation's waters. The memorandum synthesizes key principles that are guiding and that have guided Agency technical assistance and collaboration with states and urges the Regions to place new emphasis on working with states to achieve near-term reductions in nutrient loadings.

Over the last 50 years, as you know, the amount of nitrogen and phosphorus pollution entering our waters has escalated dramatically. The degradation of drinking and environmental water quality associated with excess levels of nitrogen and phosphorus in our nation's water has been studied and documented extensively, including in a recent joint report by a Task Group of senior state and EPA water quality and drinking water officials and managers.¹ As the Task Group report outlines, with U.S. population growth, nitrogen and phosphorus pollution from urban stormwater runoff, municipal wastewater discharges, air deposition, and agricultural livestock activities and row crop runoff is expected to grow as well. Nitrogen and phosphorus pollution has the potential to become one of the costliest and the most challenging environmental problems we face. A few examples of this trend include the following:

- 1) 50 percent of U.S. streams have medium to high levels of nitrogen and phosphorus.
- 2) 78 percent of assessed coastal waters exhibit eutrophication.
- 3) Nitrate drinking water violations have doubled in eight years.

¹ *An Urgent Call to Action: Report of the State-EPA Nutrients Innovations Task Group*, August 2009.

- 4) A 2010 USGS report on nutrients in ground and surface water reported that nitrates exceeded background concentrations in 64% of shallow monitoring wells in agriculture and urban areas, and exceeded EPA's Maximum Contaminant Levels for nitrates in 7% or 2,388 of sampled domestic wells.²
- 5) Algal blooms are steadily on the rise; related toxins have potentially serious health and ecological effects.

States, EPA and stakeholders, working in partnership, must make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to our nation's waters. While EPA has a number of regulatory tools at its disposal, our resources can best be employed by catalyzing and supporting action by states that want to protect their waters from nitrogen and phosphorus pollution. Where states are willing to step forward, we can most effectively encourage progress through on-the-ground technical assistance and dialogue with state officials and stakeholders, coupled with cooperative efforts with agencies like USDA with expertise and financial resources to spur improvement in best practices by agriculture and other important sectors.

States need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary. Nonetheless, our prior work with states points toward a framework of key elements that state programs should incorporate to maximize progress. Thus, the Office of Water is providing the attached "Recommended Elements of a State Nutrients Framework" as a tool to guide ongoing collaboration between EPA Regions and states in their joint effort to make progress on reducing nitrogen and phosphorus pollution. I am asking that each Region use this framework as the basis for discussions with interested and willing states. The goal of these discussions should be to tailor the framework to particular state circumstances, taking into account existing tools and innovative approaches, available resources, and the need to engage all sectors and parties in order to achieve effective and sustained progress.

While the Framework recognizes the need to provide flexibility in key areas, EPA believes that certain minimum building blocks are necessary for effective programs to manage nitrogen and phosphorus pollution. Of most importance is prioritizing watersheds on a state-wide basis, setting load-reduction goals for these watersheds based on available water quality information, and then reducing loadings through a combination of strengthened permits for point-sources and reduction measures for nonpoint sources and other point sources of stormwater not designated for regulation. Our experience in almost 40 years of Clean Water Act implementation demonstrates that motivated states, using tools available under federal and state law and relying on good science and local expertise, can mobilize local governments and stakeholders to achieve significant results.

It has long been EPA's position that numeric nutrient criteria targeted at different categories of water bodies and informed by scientific understanding of the relationship between nutrient loadings and water quality impairment are ultimately necessary for effective state

² *Nutrients in the Nation's Streams and Groundwater: National Findings and Implications*, US Geological Survey, 2010.

programs. Our support for numeric standards has been expressed on several occasions, including a June 1998 National Strategy for Development of Regional Nutrient Criteria, a November 2001 national action plan for the development and establishment of numeric nutrient criteria, and a May 2007 memo from the Assistant Administrator for Water calling for accelerated progress towards the development of numeric nutrient water quality standards. As explained in that memo, numeric standards will facilitate more effective program implementation and are more efficient than site-specific application of narrative water quality standards. We believe that a substantial body of scientific data, augmented by state-specific water quality information, can be brought to bear to develop such criteria in a technically sound and cost-effective manner.

EPA's focus for nonpoint runoff of nitrogen and phosphorus pollution is on promoting proven land stewardship practices that improve water quality. EPA recognizes that the best approaches will entail States, federal agencies, conservation districts, private landowners and other stakeholders working collaboratively to develop watershed-scale plans that target the most effective practices to the acres that need it most. In addition, our efforts promote innovative approaches to accelerate implementation of agricultural practices, including through targeted stewardship incentives, certainty agreements for producers that adopt a suite of practices, and nutrient credit trading markets. We encourage federal and state agencies to work with NGOs and private sector partners to leverage resources and target those resources where they will yield the greatest outcomes. We should actively apply approaches that are succeeding in watersheds across the country.

USDA and State Departments of Agriculture are vital partners in this effort. If we are to make real progress, it is imperative that EPA and USDA continue to work together but also strengthen and broaden partnerships at both the national and state level. The key elements to success in BMP implementation continue to be sound watershed and on-farm conservation planning, sound technical assistance, appropriate and targeted financial assistance and effective monitoring. Important opportunities for collaboration include EPA monitoring support for USDA's Mississippi River Basin Initiative as well as broader efforts to use EPA section 319 funds (and other funds, as available) in coordination with USDA programs to engage creatively in work with communities and watersheds to achieve improvements in water quality.

Accordingly the attached framework envisions that as states develop numeric nutrient criteria and related schedules, they will also develop watershed scale plans for targeting adoption of the most effective agricultural practices and other appropriate loading reduction measures in areas where they are most needed. The timetable reflected in a State's criteria development schedule can be a flexible one provided the state is making meaningful near-term reductions in nutrient loadings to state waters while numeric criteria are being developed.

The attached framework is offered as a planning tool, intended to initiate conversation with states, tribes, other partners and stakeholders on how best to proceed to achieve near- and long-term reductions in nitrogen and phosphorus pollution in our nation's waters. We hope that the framework will encourage development and implementation of effective state strategies for managing nitrogen and phosphorus pollution. EPA will support states that follow the framework but, at the same time, will retain all its authorities under the Clean Water Act.

With your hard work, in partnership with the states, USDA and other partners and stakeholders, I am confident we can make meaningful and measurable near-term reductions in nitrogen and phosphorus pollution. As part of an ongoing collaborative process, I look forward to receiving feedback from each Region, interested states and tribes, and stakeholders.

Attachment

Cc: Directors, State Water Programs
Directors, Great Water Body Programs
Directors, Authorized Tribal Water Quality Standards Programs
Interstate Water Pollution Control Administrators

Recommended Elements of a State Framework for Managing Nitrogen and Phosphorus Pollution

1. Prioritize watersheds on a statewide basis for nitrogen and phosphorus loading reductions

- A. Use best available information to estimate Nitrogen (N) & Phosphorus (P) loadings delivered to rivers, streams, lakes, reservoirs, etc. in all major watersheds across the state on a Hydrologic Unit Code (HUC) 8 watershed scale or smaller watershed (or a comparable basis.)
- B. Identify major watersheds that individually or collectively account for a substantial portion of loads (e.g. 80 percent) delivered from urban and/or agriculture sources to waters in a state or directly delivered to multi-jurisdictional waters.
- C. Within each major watershed that has been identified as accounting for the substantial portion of the load, identify targeted/priority sub-watersheds on a HUC 12 or similar scale to implement targeted N & P load reduction activities. Prioritization of sub-watersheds should reflect an evaluation of receiving water problems, public and private drinking water supply impacts, N & P loadings, opportunity to address high-risk N & P problems, or other related factors.

2. Set watershed load reduction goals based upon best available information

Establish numeric goals for loading reductions for each targeted/priority sub-watershed (HUC 12 or similar scale) that will collectively reduce the majority of N & P loads from the HUC 8 major watersheds. Goals should be based upon best available physical, chemical, biological, and treatment/control information from local, state, and federal monitoring, guidance, and assistance activities including implementation of agriculture conservation practices, source water assessment evaluations, watershed planning activities, water quality assessment activities, Total Maximum Daily Loads (TMDL) implementation, and National Pollutant Discharge Elimination System (NPDES) permitting reviews.

3. Ensure effectiveness of point source permits in targeted/priority sub-watersheds for:

- A. Municipal and Industrial Wastewater Treatment Facilities that contribute to significant measurable N & P loadings;
- B. All Concentrated Animal Feeding Operations (CAFOs) that discharge or propose to discharge; and/or
- C. Urban Stormwater sources that discharge into N & P-impaired waters or are otherwise identified as a significant source.

4. Agricultural Areas

In partnership with Federal and State Agricultural partners, NGOs, private sector partners, landowners, and other stakeholders, develop watershed-scale plans that target the most effective practices where they are needed most. Look for opportunities to include innovative approaches, such as targeted stewardship incentives, certainty agreements, and N & P markets, to accelerate adoption of agricultural conservation practices. Also, incorporate lessons learned from other successful agricultural initiatives in other parts of the country.

5. Storm water and Septic systems

Identify how the State will use state, county and local government tools to assure N and P reductions from developed communities not covered by the Municipal Separate Storm Sewer Systems (MS4) program, including an evaluation of minimum criteria for septic systems, use of low impact development/ green infrastructure approaches, and/or limits on phosphorus in detergents and lawn fertilizers.

6. Accountability and verification measures

- A. Identify where and how each of the tools identified in sections 3, 4 and 5 will be used within targeted/priority sub-watersheds to assure reductions will occur.
- B. Verify that load reduction practices are in place.
- C. To assess/demonstrate progress in implementing and maintaining management activities and achieving load reductions goals: establish a baseline of existing N & P loads and current Best Management Practices (BMP) implementation in each targeted/priority sub-watershed, conduct ongoing sampling and analysis to provide regular seasonal measurements of N & P loads leaving the watershed, and provide a description and confirmation of the degree of additional BMP implementation and maintenance activities.

7. Annual public reporting of implementation activities and biannual reporting of load reductions and environmental impacts associated with each management activity in targeted watersheds

- A. Establish a process to annually report for each targeted/priority sub-watershed: status, challenges, and progress toward meeting N & P loading reduction goals, as well as specific activities the state has implemented to reduce N & P loads such as: reducing identified practices that result in excess N & P runoff and documenting and verifying implementation and maintenance of source-specific best management practices.
- B. Share annual report publically on the state's website with request for comments and feedback for an adaptive management approach to improve implementation, strengthen collaborative local, county, state, and federal partnerships, and identify additional opportunities for accelerating cost-effective N & P load reductions.

8. Develop work plan and schedule for numeric criteria development

Establish a work plan and phased schedule for N and P criteria development for classes of waters (e.g., lakes and reservoirs, or rivers and streams). The work plan and schedule should contain interim milestones including but not limited to data collection, data analysis, criteria proposal, and criteria adoption consistent with the Clean Water Act. A reasonable timetable would include developing numeric N and P criteria for at least one class of waters within the state (e.g., lakes and reservoirs, or rivers and streams) within 3-5 years (reflecting water quality and permit review cycles), and completion of criteria development in accordance with a robust, state-specific workplan and phased schedule.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 13 2011

OFFICE OF
WATER

Herschel T. Vinyard Jr., Secretary
Florida Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Dear Secretary Vinyard:

Thank you for your letter and petition of April 22, 2011, to Administrator Jackson requesting that the U.S. Environmental Protection Agency (EPA) (1) withdraw its January 2009 determination that numeric nutrient criteria are necessary in Florida, (2) repeal Federal rulemaking completed in November 2010 to establish such criteria for inland lakes and streams, and (3) refrain from proposing or promulgating any further numeric nutrient criteria. This letter constitutes EPA's initial response to FDEP's petition; we are not issuing a final response to the petition at this time.

Your petition outlines plans and a rulemaking schedule by which the Florida Department of Environmental Protection (FDEP) will adopt nutrient criteria. The projected rulemaking schedule calls for a Notice of Rule Development in May 2011, a rule development and public outreach process through the summer and early fall of 2011, and adoption of a final rule in January 2012, to be followed by a legislative ratification process under Florida law.

EPA supports FDEP's continued focus on reducing nitrogen and phosphorus pollution and commends the State's commitment to recommence its rulemaking efforts for both inland and estuarine waters. EPA agrees with FDEP that the Clean Water Act (CWA) envisions that states have the primary role in establishing and implementing water quality standards for their waters. The State was authorized by the CWA to adopt numeric nutrient water quality criteria before EPA's January 2009 determination, and has remained so authorized. FDEP affirmed its support for the promulgation of numeric nutrient criteria for the State in its initial commitment to develop numeric nutrient criteria in 2002, and reaffirmed this position in a subsequent commitment to develop numeric nutrient criteria in 2007. In the determination, EPA affirmed its preference for State-adopted numeric nutrient criteria over EPA promulgation. FDEP also continues to have authority for the implementation of the range of activities and tools highlighted in the petition to assure more effective nutrient loadings reductions.

EPA looks forward to working with FDEP as it proceeds with its rulemaking effort. If FDEP adopts and EPA approves protective nutrient criteria that are sufficient to address the concerns underlying our determination and rule, and if such criteria enter into legal force and effect in Florida, EPA will promptly initiate rulemaking to repeal the corresponding federally

promulgated numeric nutrient criteria. If FDEP adopts and EPA approves criteria for any waters for which EPA has not yet proposed or promulgated federal criteria, and if these criteria are legally effective under Florida law, EPA will not propose or promulgate (as appropriate) corresponding federal criteria.

As you know, we included a 15-month extension of the effective date for the criteria in our November 2010 rule to provide time for Florida to prepare for implementation and to allow State officials to consider further actions that would achieve the purposes of the rule. If the March 2012 effective date is approaching and Florida has adopted a protective and approvable final rule but further steps are needed for that rule to take effect, such as ratification by the Legislature, we will propose, through rulemaking, an additional extension of the effective date to enable Florida to complete such steps. In addition, if Florida continues to move ahead on schedule toward adoption of approvable standards for coastal and estuarine waters, EPA will seek an extension to the deadlines in the consent decree for EPA's proposed rule for coastal and estuarine waters, now scheduled for November of this year, so that Florida can continue to focus on completing its own rulemaking. Again, EPA looks forward to working with FDEP during the State's rulemaking process, and will make available our policy and technical staff to provide assistance on a priority basis.

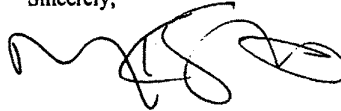
Although we are not taking action on your petition at this time and will continue to consider it as we move forward, we continue to believe that numeric nutrient criteria are necessary to meet the requirements of the CWA in the State of Florida, whether those criteria are promulgated by FDEP or by EPA. The extensive data and technical analysis supporting the need for numeric nutrient criteria are included in the January 2009 determination, the preambles to our proposed and final rules, and the administrative record for the final rule. As a basis for reconsidering our January 2009 determination, your petition referenced EPA's March 16, 2011, memorandum entitled "Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions" (Framework Memo). While an important statement of Agency policy, the Framework Memo does not constitute a set of decision-making criteria to be applied by the Agency when evaluating whether to determine, pursuant to CWA section 303(c) (4) (B), that new or revised water quality standards, such as numeric nutrient criteria, are necessary in a particular state in order to meet the requirements of the CWA.

Thank you again for your letter and petition. For the reasons discussed above, EPA is not granting or denying your petition at this time. Rather, EPA is providing its initial response and will hold your petition in abeyance pending the results of FDEP's intended rulemaking at which

222

time EPA will provide a final response to your petition. If you would like to discuss your concerns further, please feel free to contact me at (202) 564-5700 or Bob Sussman, the Administrator's Senior Policy Counsel, at (202) 564-7397.

Sincerely,

A handwritten signature in black ink, appearing to be "NKS", with a large, stylized flourish at the end.

Nancy K. Stoner
Acting Assistant Administrator

cc: Gwendolyn Keyes Fleming
Regional Administrator, Region 4