EPA

Moderator: Jim Giattina
December 7, 2010
12:00 p.m. CT

Operator: Good afternoon. My name is (Brandy) and I will be your conference operator today. At this time, I would like to welcome everyone to the Region IV Florida Nutrient Ruling Focus on Agriculture conference call.

All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question-and-answer session. If you would like to ask a question during this time, simply press star then the number one on your telephone keypad. If you would like to withdraw your question, press the pound key.

Thank you. Mr. Jim Giattina, you may begin your conference.

James Giattina: Hi. This is Jim Giattina. Thank you, (Brandy). I'm Director of the Water Protection Division for EPA's Southeastern Office here in Atlanta.

And I think we'll have some clarifying comment on how to ask questions. You'll be asking them electronically. And at the end of my remarks, I believe, Tom McGill or (Mary Kuo) will be walking you through the instructions for how to use the chat feature to ask your questions. We're muting all the lines so that folks can hear and there's no background noise, so we'll use the chat feature for the question-and-answer period.

Let me welcome you to the EPA webinar on Florida nutrient criteria implementation for agricultural producers. This webinar is designed to reach out to the public to discuss issues related to the implementation of the Florida

numeric nutrient criteria. In this webinar, we're specifically addressing implementation issues that impact agricultural producers in Florida.

This webinar follows three webinars that were conducted within the past week. The first of these was held on November 30th and focused on the details of EPA's promulgation of the numeric nutrient criteria. The second webinar was held on December 2nd and focused on implementation of the new rule through the Section 303(d) listing program, the TMDL program and development of site-specific alternative criteria. A third webinar was held this morning and focused on implementation of the rule through NPDES permitting for domestic and industrial wastewater and stormwater discharge.

As this afternoon's webinar is targeted for agricultural producers, we will address relevant federal and state programs affected by the rule with an emphasis on Florida administered Nonpoint Source Management Program. This webinar will also address other federal and state programs that affect agriculture including TMDL development and implementation and the NPDES permitting program.

As you may be aware, EPA's final rule for numeric nutrient criteria for lakes and flowing waters provide for an effective date 15 months after the rule as published in the federal register. The federal register publication actually occurred yesterday, December 6. This delayed effective date enables us to address issues and answer questions related to the implementation of the final rule. The rule is the result of an extensive public process and reflects consideration of many of the comments that we received.

One thing we have heard in our meetings with Floridians is their strong and powerful commitment to clean and safe water in the State of Florida and their understanding of how essential that is to both public health and Florida's economic growth. Many of the stakeholders including the DEP agree with the need for numeric standards to meet the goal of clean and safe waters in Florida, but they also emphasize the need for reasonable and cost effective approaches that allow for appropriate planning and implementation.

The rule that was published in the federal register yesterday – is a rule that provides clear numeric targets that need to be achieved in order to ensure attainment of Florida's existing nutrient standard for inland streams, lakes and springs. The rule also provides for flexibility in a number of ways. One of the areas of flexibility built into the rule is the ability to establish site specific alternative criteria where the local data supports numeric criteria different from that in the rule. There have also been many questions with regard to implementation of the rule including questions about how the rule will impact the agricultural community in Florida and we hope to be able to answer some of those questions in more detail this afternoon.

So after some logistical information, Tom McGill, Chief of the Stormwater and Nonpoint Source Section will lead the presentation today. For the question-and-answer session, he'll be joined by me and others to help answer the questions. We have Mark Nuhfer as Chief of the Municipal and Industrial NPDES Section and Annie Godfrey, who is Chief of the Water Quality Standard Section here at EPA.

In addition, I'm pleased to have representatives with the Florida Department of Environmental Protection on the line. Also, participating in the webinar, this includes Eric Livingston, who's the Program Administrator for the NPDES Stormwater Section; Phil Coram, who's Deputy Director of the Water Resources Management Division; and Jerry Brooks, who's the director of the Division of Environmental Assessment and Restoration.

So at the outset, let me thank you all for participating in the webinar. I'll hand it over to (Mary Kuo), who can go over the logistical aspects of the webinar.

(Mary Kuo): For this afternoon's presentation, in order to ensure that all participants can listen in without issue, we will be muting the audio lines for the participants. However, in order to allow for the question and answer portion of this webinar, you'll be able to submit your questions electronically through the chat function located on the menu bar.

If you would like to submit a question, locate the menu bar on the right side of your screens. Expand the chat box window found near the bottom of the

menu bar, type in your question and then select, send chat or questions to (U.S. EPA) organizer only. This will submit your question for our compilation. Please use this option for asking question as opposed to the option to raise your hand, because the muted line prevents us from addressing your raised hands.

As questions are received, they will be compiled. And once the presentation portion is over, the EPA panelist will provide answers to the questions. Specific questions will be read to the entire audience followed by an answer or information on how to obtain an answer. Today's presentation will be available on EPA's Water Nutrient Criteria Web site. The specific link is contained in today's presentation slide.

In addition, it is our expectation to provide the corresponding portion of the audio once it is made available to us to ensure that everyone benefits from a response to their question especially those questions which we are not able to answer within the scheduled webinar or may include additional information, EPA will be working on developing a Q&A document as a result of the questions and discussions that take place following a presentation portion of the webinar. Once that document is developed, you will be notified of its availability. The other webinars are being handled in the same way.

If you're watching the presentation or any time during the webinar you can minimize the menu bar by clicking on the orange box with a white arrow located near the top left corner of the menu bar. To expand the menu bar screen again, simply click on the arrow button again.

Lastly, towards the end of the webinar, a poll will be made available. You may elect to take this poll but you're not obligated to do so. This concludes the logistical portion. I'll now turn it over to Tom.

Tom McGill: Good afternoon, everybody. I'm Tom McGill chief of the EPA Region IV Stormwater and Nonpoint Source Section.

The presentation that you're about to see is comprised of 29 slides. And for those of you that participated in some of the previous webinars, you'll see that some of the same slides were presented earlier with respect to EPA's new rule

as well as the implementation in some of the programs. And as stated earlier, the focus on this presentation is the impacts of this rule on agriculture producers.

All materials supporting the final phase of the rule, which include the final technical support document, economic analysis and response to comments document are available to the public in the docket, and that information is shown there on the slide. And Danielle Salvaterra with EPA's Office of Water is the principal contact if you have any questions concerning the rule.

The presentation I'll go over is comprised of the components that you see before you. First, we'll cover a summary of the final rule for Florida numeric nutrient criteria. Following that, I'll present the applicability of Clean Water Act programs to agriculture and those programs include Total Maximum Daily Loads or TMDLs, National Pollutant Discharge Elimination System or NPDES permits, and Section 319 Grants for Nonpoint Source Controls. In addition, I'll provide a summary of Florida's administered programs including the state's Nonpoint Source Management programs as well as the Basin Management Action Plan or BMAP program that's administered by Florida under the authority of its Watershed Restoration Act.

The EPA finalized standards for the State of Florida in this rule, which include numeric limits on the amount of phosphorus and nitrogen pollution that are allowed in Florida's lakes, rivers, streams and springs. Chlorophyll-a limits were also developed to monitor the effect of nitrogen and phosphorus in lakes. The purpose of these standards is to improve water quality and protect public health, aquatic life and the long-term recreational uses of Florida's waters, which are a critical part of the state's economy. The implementation of these standards will change the criteria used by several Clean Water Act programs including NPDES permitting program, TMDL developments and Section 303(d) listing program regarding the listing of impaired waters.

The final rule includes numeric nutrient criteria for lakes, rivers, streams and springs located outside of South Florida, which include the areas south of Lake Okeechobee, the Caloosahatchee River watershed to the west of Lake Okeechobee and the St. Lucie watershed to the east of Lake Okeechobee. The

rule applies to Florida class one and class three waters. The rule does not apply to Florida class four waters, which are designated agricultural water supplies. Class one waters are waters with designated use of potable water supply. Class three waters are waters with the designated use of recreation and propagation and maintenance of a healthy, well balanced population of fish and wildlife.

The portion of the rule that's applicable to Florida lakes include the definition for lake, which means a slow-moving or standing body of fresh water that occupies an inland basin that is not a stream, spring or wetland. The rule classifies lakes into three groups based on color and alkalinity. It derives criteria from correlations between trophic transition levels of chlorophyll a and levels of total phosphorus and total nitrogen. It includes an option for the state to adjust nitrogen and phosphorus criteria for a particular lake within a certain range if sufficient data show that chlorophyll a criteria is met.

So you can – this table shows the different categories of lakes for which – well, these cover all of the lakes in Florida. And as you can see, the applicable criteria for chlorophyll-a, total nitrogen and total phosphorus are dependent on the lake color and alkalinity levels. For lake color of greater than 40 PCUs – yes. Sorry. I'm getting distracted. Something just popped up on my screen. Forgive me for just a moment please.

OK. I'm back on track. So as you can see from this table, it shows the applicable criteria of chlorophyll a, total nitrogen, total phosphorus based on lake color and alkalinity levels. I'll direct you to the columns, where it shows the applicable total nitrogen and total phosphorus criteria. As I mentioned in the earlier slide, those values within the bracket are acceptable values that can be used as applicable criteria as long as the chlorophyll a criteria is met for each of these categories of lakes. And all of the criteria that you see here are annual geometric means that are not to be surpassed more than once in a three-year period.

The rule for streams includes the definition for streams as a free-flowing, predominantly fresh surface water and defined channel and includes rivers, creeks, branches, canals, fresh water sloughs/slews and other similar water

bodies. The rule classifies streams into five watershed-based regions that account for geological differences throughout the state. It derives criteria from field data in least-disturbed streams that are not impaired for nutrient-related impacts. And these criteria for streams do not apply to flowing waters in South Florida.

In this next slide, you can see the applicable criteria for nitrogen and phosphorus for the various nutrient watershed regions and those correspond to the map on the right. These, again, are concentrations that are annual geometric means that are not to be surpassed more than once in a three-year period. And, again, at the bottom of the map, you can see South Florida where there currently are not - where this rule does not affect the -numeric criteria for those rivers and streams.

The rule also establishes criteria that ensure that downstream protection for lakes are provided. And this is consistent with our regulations that require that criteria that are established for waters must be protective of the downstream uses. The rule does include a flexible tiered approach to apply downstream protection values, otherwise known as DPVs for nitrogen and phosphorus to watersheds to ensure protection of downstream lakes.

And these downstream protection values can be determined using one of three options. One option would be to use [predicted] TN and TP levels at the point of entry into the lake [based on] predictive models such as BATHTUB or other alternatively scientifically-defensible models such as WASP.

Another option for determining downstream protection values would be to use in-stream levels of nitrogen & phosphorus at the point of entry into a lake, where lake criteria are met. A third option would be to use lake criteria levels for nitrogen & phosphorus at the point of entry in the lake, where lake criteria are not met in the lake or if the lake is un-assessed.

The rule also addresses criteria for springs. And the definition of a spring is a site at which groundwater flows through a natural opening in the ground onto the land surface or into a body of surface water. The rule establishes nitrate-nitrite criterion of 0.35 milligrams per liter as an annual geometric mean, not

to be exceeded more than once in a three-year period. And this rule for springs is based on experimental laboratory data and field evaluations that document the response of nuisance algae to nitrate-nitrite concentrations.

As Jim had mentioned earlier, the rule also provides flexibility for establishing site-specific alternative criteria. The rule allows any entity to submit a request for site-specific alternative criteria with supporting rationale to EPA and the rationales should be based on – or can be based on replicating approaches used in the rule with new data or applying to a smaller subset of waters. It can be established using or by conducting biological, chemical and physical assessments or it can be established using another scientifically defensible approach as long as that approach ensures protection of the designated use. After notice and comment of the SSAC, EPA may approve the SSAC for the purposes of the Federal Rule.

This next slide presents a schematic of the Clean Water Act management process for restoring and protecting water. The Clean Water Act - if you look at the top of the screen and then follow it on down, we start with the Clean Water Act goals established in Section 101 of the Act where the nation's waters must – or that the chemical, physical and biological integrity of the nation's waters must be restored and maintained. If you work your way on down that schematic, the first step in that process is States establishing and adopting water quality standards in accordance with state and federal requirements that are protective of the designated uses.

Various Clean Water Act programs are implemented by EPA and states for the purposes of providing protection of these standards. And on a regular basis, monitoring is required to be gathered to determine - monitoring data and information should be gathered and assessed to determine whether implementation of the Clean Water Act programs are protective of the established standards.

If the water quality standards are met, the water continues to be protected and improved through implementation of Clean Water Act programs. If water quality standards are not met and you follow the schematic at the bottom right portion of the screen, those waters not meeting standards are recorded on the

Section 303(d) list and are scheduled for TMDL development. TMDLs are implemented by states using Clean Water Act programs and other mechanisms. An example of how TMDLs are established and we'll go into more details on this later is Florida's – is through Florida's BMAP program.

And following implementation of these TMDLs, future monitoring and assessment and reporting will continue to occur to determine whether through TMDL implementation, whether applicable water quality standards are being met and therefore achieving the goals of the Clean Water Act.

In the next few slides, I'll talk about the Total Maximum Daily Load program. This is commonly represented as a conceptual simple equation. A TMDL is a water pollution control plan that determines the amount of a pollutant a water body can receive and still meet water quality standards. It's composed of a waste load allocation or WLA, which is the portion of the loading capacity for the water body that allocated the waste loads from existing or future point sources. The load allocation or the LA is the portion of a loading capacity allocated to load from existing and future nonpoint sources.

A margin of safety is to account for any lack of knowledge concerning the relationship between load and waste load allocations and water quality. The simple equation that you see in the slide sort of implies an explicit margin of safety, but often what states do is incorporate an implicit margin of safety that's utilized in the development of the waste load allocation or the load allocation. An example would be the use of conservative assumptions and water quality modeling or other techniques to establish the allocation.

There've been a number of nutrient TMDLs that have been established to date in Florida. Two hundred eighty-one of these TMDLs were adopted by Florida and submitted to EPA and subsequently approved. And these TMDLs are comprised of 135 for total phosphorus, 129 for total nitrogen and 17 for nitrates. Two hundred sixty-eight TMDLs have been established by EPA and these include 128 for total phosphorus, 139 for total nitrogen and one for nitrate.

After the effective date of this Federal Rule which is 15 months from yesterday, the date it was published in the Federal Register, nutrient TMDLs that are established must be done so at levels that will meet and maintain all of the applicable criteria. That includes the numeric criteria established by the rule as well as the existing narrative state criteria.

Nutrient TMDLs established before the numeric nutrient criteria become effective 15 months from now will remain in effect until a two part evaluation occurs. First, as part of its ongoing water quality assessment program, the State of Florida will assess whether a water body that is subject to a TMDL remains impaired. If the water body is no longer impaired when applying the new numeric nutrient criteria, the state has the option to withdraw the TMDL. If the water body remains impaired based on the new numeric nutrient criteria, then the water body will be placed on state's 303(d) list of impaired water bodies requiring a TMDL and reprioritized for TMDL development.

EPA expects the State of Florida to develop a review process and timetable for TMDL review considering the state's priorities, resources and most recent assessments. If the existing TMDL is sufficient to meet the new numeric nutrient criteria, then the TMDL will remain in effect and will not be revised. If the existing TMDL is not sufficient to meet the affected numeric nutrient criteria, then the TMDL will be revised.

TMDL targets for existing TMDLs can be considered for potential site-specific applicable criteria. The State of Florida or any other entity may decide that such existing TMDL targets may better reflect the conditions of a water body than the newly promulgated criteria. In those cases, the state or the other entity can apply for the TMDL targets to be established as a site-specific alternative criteria.

In the next few slides, I'm going to discuss requirements for NPDES permitting program as they may relate to agriculture. NPDES permits regulate point sources that discharge pollutants into the waters of the U.S. And consistent with the definition of point source which is part of 502 of the Clean Water Act, a point source means any discernible, confined and discreet conveyance, including but not limited to any pipe, ditch, channel, tunnel,

conduit, well, discrete fissure, container, rolling stock, Concentrated Animal Feeding Operation or CAFO, or vessel or other floating crafts from which pollutants are or may be discharged. And importantly, this term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

Permits must be designed to ensure that water quality standards are attained. The NPDES permitting authority in Florida, as many if not all of you all know, is the Florida Department of Environmental Protection. The EPA is not aware of any agriculture activities in Florida regulated under NPDES permits other than CAFOs that will be impacted by the final rule. For CAFO permits, Florida has the discretion to determine whether CAFO permits will include narrative effluent limits such as best management practices or BMPs, or numeric (effluent limits).

The Clean Water Act provides clear requirements for point sources but does not regulate nonpoint sources. However, Section 319 of the act provides a mechanism for federal funding to states for assisting them with implementing nonpoint source controls. The 1987 Clean Water Act amendments established the Section 319 Grant program. And the statute, importantly, does not authorize federal regulation nor requires state regulation to implement the statute.

The statute required states to conduct nonpoint source assessment and identify the categories and subcategories of nonpoint sources that adversely impact water quality. The statute also required states to establish nonpoint source management programs which may include at the state discretion a mix of non-regulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer and demonstration projects. And the statute also provided eligibility for states that had approved nonpoint source management programs to receive annual grants to implement and manage their nonpoint source management programs.

Section 319 Grant funds cannot exceed 60 percent of the cost incurred by states in implementing nonpoint source programs. Although I don't have specific figures available, matching funds by the State of Florida and other

stakeholders in the state for implementing nonpoint source controls have historically, significantly exceeded 40 percent.

Just for context so you understand essentially the direction that EPA's 319 Grant program is heading, I'm including the additional and the following information. Beginning in 1999, EPA's substantially increased 319 Grant funding levels. The additional funding levels were provided the states to assist and with targeting resources towards specifically restoring impaired waters using a watershed based approach. Base funds are provided to states, the other component of 319 Grant funds have provided the state to implement a full range of activities described in state – EPA approved state nonpoint source management programs.

And just to give you a sense of the funding levels that are available in these grants, in FY 2010 as well as FY 2009 and 2008, EPA awarded Florida $7.56 million in 319 Grant funds.

Although the Clean Water Act does not regulate nonpoint sources, Section 6217 of the Coastal Act – excuse me – the Coastal Zone Act Reauthorization Amendment of 1990 required coastal states with approved coastal zone management programs to adopt measures for controlling nonpoint source pollution. And these requirements included enforceable policies and mechanisms for the categories of nonpoint source that impacted coastal water quality, including agriculture, urban, forestry, and other sources of nonpoint sources.

The entire state of Florida, not just the immediate coastal area, was designated as 6217 management area. That is – and, as a result, the requirements of the Coastal Zone Act Reauthorization Amendments are applicable statewide.

Florida's Watershed Restoration Act of 1999 includes, among other things, enforceable controls for agriculture. And the Florida Department of Agriculture and Consumer Services, which I'll subsequently refer to as FDACS, administers a BMP program for agriculture producers. And if you want more information on the Coastal Zone Act Reauthorization Amendment

6217 program for Florida or other states, I encourage you to visit the Web site at the bottom of the screen.

Florida's management of nonpoint sources addresses several categories of nonpoint source pollution, including agriculture, silviculture, urban, on-site sewage treatment disposal systems, hydro modification, mining, and groundwater management. Their management is implemented cooperatively by FDEP, Florida's Water Management Districts, FDACS, Florida Department of Health, local governments and the public. Their management programs implement the state's goal to minimize nonpoint source pollution from new land use activities and to reduce pollution from existing activities. It includes administration of the BMAP program for TMDL implementation as well.

This next slide focuses on Florida's nonpoint source management for agriculture producers. What EPA understands is that there's 11 million acres of farmland in Florida that are used for agriculture for multiple purposes, including greenhouses and nurseries, field crops, citrus, vegetables, berries and melons, other fruits and nuts, sod, dairy, cattle and calves, equine, poultry and eggs, aquaculture and honey. FDEP and FDACS work in partnership to assist the agriculture sector with reducing impacts on water quality through mechanisms such as developing and disseminating BMP guidance through cost-share funding of restoration projects using 319 grant funds, and through compliance assistance on environmental regulations.

The State works in coordination with several partners as part of this process, including the researchers at the University of Florida and Florida Agriculture and Mechanical University, county extension offices, the USDA, NRCS and various agricultural groups throughout the state.

The Florida Department of Agriculture and Consumer Services and the Florida Department of Environmental Protection issued an open letter to Florida's agricultural industry in May 2010. And this letter encouraged agricultural producers to enroll in the BMP program and implement BMPs consistent with that program. And, in this letter, the state explained that regardless of what numeric nutrient criteria would ultimately be adopted by

EPA, current state law assumes the presumption of compliance with water quality standards to agriculture producers who enroll in and implement the Department of Agriculture and Consumer Services adopted BMPs.

Enrollment in the program involves an onsite assessment to determine appropriate BMPs for an agriculture operation and the submittal of a notice of intent to implement such BMPs. There's extensive information about Florida's rules, BMP manuals, and other documents for various agricultural sectors at the Web site at the bottom of the slide.

A BMAP, or Basin Management Action Plan, represents a comprehensive set of strategies designed to implement TMDL pollutant reductions established by the TMDL. These are broad-based plans and are developed with local stakeholders and are adopted by order of the secretary of FDEP to be enforceable. If a BMAP is developed for a TMDL that identifies necessary pollutant reductions from agriculture. The BMAP would include strategies for agricultural BMPs or other controls.

So for details on BMAPs that have been established or completed or under – or that are currently under development, I encourage you to visit the Web site at the bottom of the screen.

This next slide shows a map, and you can see by the colored areas on the map where BMAPs have either been adopted or where BMAP activities are in process. And, as I said, you can see the details on these BMAPs, including BMAP documents on the Web site that was on the previous slide.

On this slide, I have additional content – I'm sorry. I'm jumping ahead. For more information about the final water quality standards for the state of Florida's lakes and flowing waters, it's available at the Web site at the top of the slide. This is the same Web site that was shown on the second slide of the presentation. And if you have any questions for EPA Region 4 staff, the following folks that are on this slide are the best points of contact, and if – and if you send us a question or don't get to the right person, we will forward it to the appropriate person so you can address – so we can address information or questions that you have.

OK. That concludes the presentation that I have, and we'll now begin the question-and-answer session. And, on this slide, you can see the relevant information if you're currently not connected to this webinar to provide your questions. And I guess I'll now hand it over to Jim Giattina.