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TRAINING WEBINAR ON CWA §303(d) LISTING AND TMDLS

NOVEMBER 9, 2011

EVENT SUMMARY

This project is made possible through a cooperative agreement with the

United States Environmental Protection Agency

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OVERVIEW

On November 9, 2011, the Environmental Law Institute (ELI) convened the *Training Webinar on CWA §303(d) Listing and TMDLs*. This webinar brought together Clean Water Act (CWA) §303(d) listing and TMDL officials from 38 states, three tribes, the District of Columbia, U.S. Environmental Protection Agency (EPA) Headquarters, and all ten EPA regions. The webinar provided a vehicle for federal and non-federal TMDL and listing practitioners to candidly share opinions on a variety of topics facing the CWA §303(d) program.

The webinar was designed as a follow-up to ELI's April 2011 *National Training Workshop on CWA §303(d) Listing and TMDLs*, to ensure accountability on next steps among federal and non-federal programs. As such, the webinar consisted of a session for EPA to report its progress in addressing needs for compendia, technical tools, and guidance expressed by non-federal representatives in April. The webinar also contained a session for states, tribes, and territories to report any new developments in their approaches to TMDLs and listing as well as sessions dedicated to the specific topics of reasonable assurance and the EPA Nutrient Framework Memo.

As with the April 2011 meeting, non-federal webinar attendees were commonly practitioners with significant responsibility in their respective programs but also closely connected to day-to-day operations. Unlike the April 2011 meeting, the webinar format provided an opportunity for multiple TMDL and listing personnel from each jurisdiction to participate.

ELI continues to build on the momentum and enthusiasm generated by this and the prior years' events through an ELI-administered website for CWA §303(d) programs and through a listserv dedicated to state, tribal, and territorial professionals and designed to increase and enhance interactions among programs.

Presentations and background materials for this webinar are posted at the ELI State TMDL Program Resource Center (http://www.eli.org/Program_Areas/state_tmdl_center.cfm).

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TAKEAWAY POINTS

The following key points emerged from the comments of presenters and participants over the course of the webinar:

EPA’s CWA Section 303(d) “visioning” project is an opportunity for non-federal entities to help shape the national program

EPA is embarking on a unique project to define a “vision” for the CWA 303(d) program, listing and TMDLs, over the next decade. With obligations under most state consent decrees now satisfied, the CWA 303(d) program is in a unique position to define where it would like to be ten years from now and to determine how to measure program success accordingly. In particular, the “vision” project includes evaluation of public engagement in listing, TMDL development, and TMDL implementation, as well as identifying methods to more fully engage the public. This ‘visioning’ project will rely on non-federal input to shape program goals.

Reductions in federal grant funding (e.g., under CWA Section 319) should take into account any effects on the balance of TMDL development vs. implementation

Although the proportion of CWA 319 funding used for TMDL development varies by state, many states rely heavily if not entirely on this source of funding to develop TMDLs. Proposed limitations on CWA 319 funding should be evaluated with consideration of their potential effect on the pace and rigor of TMDL development, and on TMDL implementation. In times of shrinking resources, it is particularly important to weigh carefully as part of the CWA 303(d) visioning effort, the role of TMDLs in restoring waters and the tradeoff between TMDL development and focusing on implementation.

States, tribes, and territories need to be strategic and priority-driven to respond to changing and challenging circumstances

States, tribes, and territories with TMDL or listing challenges to program implementation may benefit from carefully prioritizing TMDL and listing activities. For instance, TMDL development and implementation in communities supportive of these actions, and where they may benefit jobs or local economies, may prove more tenable and enhance the program’s public image. The programs also may find these challenges to be an opportunity to increase coordination and collaboration across different non-federal and federal offices dealing with water quality. Innovative collaboration may help to advance program goals despite these challenges.

Further clarification is needed on the intersection of reasonable assurance and adaptive management

EPA is in the process of reexamining reasonable assurance policy and compiling example TMDLs and implementation plans that properly demonstrate reasonable assurance that NPS reductions projected in a mixed-source TMDL would occur. EPA has emphasized that demonstration of reasonable assurance is case-specific and may be based on an adaptive

management approach. Fully incorporating adaptive management into reasonable assurance (and resolving any conceptual conflicts between reasonable assurance and adaptive management) may be aided through definitions for these terms in the TMDL development context and through reasonable assurance pilot projects proposed by EPA.

Concepts of agricultural certainty or voluntary agricultural certification schemes may increase agricultural sector involvement in implementing BMPs

EPA is considering the use of “agricultural certainty”—an approach that gives farmers certain BMPs to implement and assures farmers that they will not be asked to do more in the future once those BMPs are in place—as a tool to increase agricultural involvement in BMP implementation. Voluntary certification schemes for agricultural operations may also provide an effective route to more effectively engaging farmers in water quality restoration and protection.

Clarification is needed on other options for listing impaired or threatened waters for which a TMDL may not be needed

In instances where Category 4b listings are not appropriate but a TMDL may not be the only path to achieving water quality standards, some states are using alternative categories, such as 5r (wherein TMDL development for an impaired water is deferred in exchange for early implementation to achieve improvement and restoration). Clearer delineation from EPA of these listing opportunities, along with more elucidation of model practices for using Category 4b, may help states to better utilize alternative listing options.

EPA is responding to non-federal agencies’ expressed needs for compendia, technical tools, and guidance

In response to needs expressed at the April 2011 *National Training Workshop on CWA §303(d) Listing and TMDLs*, EPA has provided and is planning to provide state, tribal, and territorial water quality professionals with compendia of best practices, technical tools, and guidance. For example, EPA has compiled best practices for mercury, BMPs, and residual designation authority, reported non-federal practitioners’ views to other water quality offices within EPA (e.g., CWA 303(d) Standards, Superfund offices), developed guidance on topics such as multi-jurisdictional TMDLs, and expanded use of the recovery potential tool.

Session Summaries

INTRODUCTION

Adam Schempp, Staff Attorney at the Environmental Law Institute (ELI), opened the training webinar by noting the expansive and diverse set of participants in the webinar: 38 states, three tribes, the District of Columbia, U.S. Environmental Protection Agency (EPA) Headquarters (HQ), and all ten EPA Regions participated.

John Goodin, Chief of EPA's Watershed Branch in the Office of Wetlands, Oceans, and Watersheds (OWOW), provided context for the webinar by noting the overall success of the April 2011 *National Training Workshop on CWA §303(d) Listing and TMDLs* and that the input received from states, tribes, and territories in April shaped the progress that EPA HQ was reporting on this webinar. He stated that he often judges the success of meetings based on what occurs after the meeting, and that he felt that a number of beneficial products and processes have emerged from the ELI meetings in 2008 and 2009. The webinar is a way to ensure accountability of EPA and the states, tribes, and territories in between in-person meetings, Mr. Goodin commented.

EPA UPDATE AND Q&A ON ACTIONS SINCE APRIL WORKSHOP

Mr. Goodin proceeded to provide a brief update of EPA's work on a number of issues highlighted during April's workshop. Mr. Goodin's presentation covered ten documents that ELI distributed to webinar participants prior to the workshop and that are available for download from ELI's [website](#).

"Vision" Project for the CWA 303(d) Program

Mr. Goodin's summary began by discussing a broad, overarching project being undertaken in the EPA's CWA 303(d) program: developing a vision for desired programmatic accomplishments by 2022. Mr. Goodin noted that this project includes assessing the past achievements of the CWA 303(d) program, what the program represents, and how it can communicate with and engage the public on its objectives. Now that many state consent decrees and settlement agreements that directed substantial effort to Total Maximum Daily Load (TMDL) development are being completed, the CWA 303(d) program is in a unique position to reevaluate its priorities and vision for the future. The visioning process will involve evaluation of all aspects of the CWA 303(d) program -- from the general status of the listing program and the process for identifying impaired waters, to development of TMDLs, to facilitating restoration of impaired waters. Ultimately, Mr. Goodin emphasized, the vision project is an opportunity to redefine and re-measure how the CWA 303(d) program evaluates and portrays success. He noted that this project was initiated in a presentation to the Association of Clean Water Agencies (ACWA) in August and that EPA was planning to begin a series of meetings dedicated to defining the program vision in December. Mr. Goodin stressed that EPA seeks the input of all states, tribes, and territories during the development of the CWA 303(d) program vision. He reported that EPA expects to share a draft of the vision by early 2012 and have the final completed by June 2012. Once the vision is

completed, EPA will begin implementing the various facets of the CWA 303(d) program in a manner consistent with it.

Revisiting TMDL success measures

Mr. Goodin continued by noting that EPA is assessing how success is evaluated for the CWA 303(d) program beyond simply measuring the number of TMDLs developed. This reevaluation of program success measures will be a key part of the program visioning effort and is targeted for completion by FY2014.

Nutrients

Mr. Goodin stated that EPA has been active in the area of nutrient management over the last several months. First, he mentioned that EPA has compiled a compendium of best practices for nutrient listings and TMDLs, particularly in the absence of numeric nutrient criteria, that it intends to share in draft form with states, tribes, and territories in December. Next, following up on the request by non-federal participants of the April meeting, EPA CWA 303(d) staff conveyed to the EPA Water Quality Standards Program the participants' desire for development of tech-based limits for nitrogen and phosphorus. In response to outstanding questions from non-federal participants at the April workshop regarding EPA's Nutrient Framework Memo, there will be a Q and A session on this topic later in the webinar.

Mr. Goodin noted that, directly after the April 2011 meeting, EPA conducted a very concentrated and quick effort to develop a data access tool for use by the public to aid their efforts in reducing nutrient pollution in particular watersheds. He also mentioned that EPA is engaged with some states without numeric nutrient criteria in the development of statewide plans for reducing nitrogen and phosphorus loadings.

Downstream impacts/multi-jurisdictional TMDLs

One of the central action items resulting from April's workshop was clarifying best practices for the role of EPA and non-federal partners in developing and implementing multi-jurisdictional TMDLs. EPA has now completed draft guidance, which will be issued in the coming weeks, on multi-jurisdictional TMDL circumstances where EPA assistance is most warranted, and general best practices for addressing multi-jurisdictional TMDLs regardless of EPA's role. Mr. Goodin emphasized that EPA was looking forward to feedback from the states, tribes, and territories on this upcoming draft guidance document.

Further, in response to specific questions at April's workshop regarding readily available approaches for TMDLs that involved air deposition, particularly for mercury, EPA prepared a resource document for webinar participants that summarized available information on policy and technical tools to assist in developing mercury TMDLs and example mercury TMDLs. Mr. Goodin requested that if any webinar participants were aware of other relevant sources, that EPA would appreciate their recommendations to make this resource document comprehensive.

In addition to EPA's work on multi-jurisdictional TMDLs, the listing and TMDL offices at EPA Headquarters have engaged the water quality standards and permits offices on development of "rules of thumb" for nutrient and other pollution impacts on downstream waters. Mr. Goodin

noted that EPA hopes to further develop these best practices in the coming months and to subsequently receive feedback from relevant state, tribal, and territorial stakeholders.

Stormwater

Mr. Goodin shared that, in response to specific requests at the April meeting, EPA has compiled examples of using residual designation authority (RDA) and [provided these examples on ELI's website](#). He also reported that in the [webinar background materials](#), EPA had compiled examples of developing *E. coli* TMDLs using a translator for fecal coliform data and permit targets based on impervious cover TMDLs.

In addition, Mr. Goodin noted that EPA is reviewing over 100 comments on its 2010 Draft Stormwater Memo regarding how to develop TMDLs and write permits involving stormwater. He said that EPA hopes to issue a final version of the memo before the end of the year and that EPA appreciated feedback from the states in this process.

Antidegradation

Mr. Goodin reported that EPA has addressed antidegradation issues in two tracks. The first track has used antidegradation litigation in Florida as a springboard for assessing fundamental issues related to antidegradation, regardless of where it is applied (e.g., listing or other circumstances). Some of these issues include opening discussions with the standards program regarding some of the antidegradation questions raised by participants in April's meeting, including evaluation of secondary and cumulative impacts in antidegradation analyses and whether to include nonpoint sources in Tier II antidegradation assessments.

The second track involves forthcoming program guidance from EPA regarding antidegradation in the 2014 Integrated Reporting and Listing Memo. With around ten state participants (representatives from Alaska, Maine, Maryland, Minnesota, Kansas, North Carolina, Ohio, Oklahoma, New Jersey, Washington), EPA is moving forward with a federal-state antidegradation policy workgroup. This workgroup hopes to use the Florida antidegradation process as insight for developing approaches for addressing antidegradation provisions nationwide. Mr. Goodin stressed that EPA will be sure to keep all states informed on this development.

Recovery Potential

At the April workshop, the use of technical tools that prioritize water quality remediation investments, such as EPA's Recovery Potential tool, received substantial attention from federal and non-federal attendees. At the April meeting, non-federal attendees noted their desire for the Recovery Potential tool to be more accessible. Mr. Goodin said that EPA is "on the cusp" of launching an EPA-hosted website for the tool. He also mentioned that a number of states had taken the information on the existing, non-EPA website and applied it in their jurisdictions, and that he and the EPA Recovery Potential staff were excited to see the high level of interest in the tool.

He added that EPA Headquarters recently collaborated with EPA Region 6 to provide a webinar on Recovery Potential for at least 13 states—many of whom were not in Region 6. Further, EPA is investigating opportunities to merge its Healthy Watersheds Initiative with the Recovery

Potential tool to protect high-quality waters and watersheds. Two states have already expressed interest in pursuing this method of prioritizing watershed protection efforts.

Legacy Pollutants

At the April workshop, non-federal attendees requested that EPA identify existing Category 4b determinations with legacy pollutants, and particularly with PCBs. In response, EPA provided a paper that was prepared for the Water Environment Federation (now available via the [ELI website](#)) detailing several of these 4b cases. Beyond this paper, EPA also has developed a more thorough collection of examples of PCB TMDLs. This list, along with the publication of a memo regarding TMDL development for PCB-impaired waters, should be added to the EPA website in the coming weeks. Mr. Goodin thanked New Mexico, Virginia, and other states for their comments on the PCB TMDL memo.

Mr. Goodin noted that EPA is searching for continued opportunities to identify Category 4b legacy pollutant listings beyond those with PCBs and that EPA hopes to finish this research in the spring of 2012.

He then updated the webinar participants on EPA HQ's progress on improving integration of TMDLs and Superfund cleanup requirements. EPA's listing and TMDL offices have engaged the EPA Headquarters Superfund office on the overarching policy question of better integrating these efforts and the specific question of using TMDLs as targets for achieving Applicable or Relevant and Appropriate Requirements (ARARs). As a first step, Mr. Goodin reported that EPA provided [a document](#) in the workshop background materials on existing policy on the interaction of TMDLs and ARARs.

Climate Change

Following a presentation on climate change's potential effects on water quality at the April workshop, EPA plans to share specific results of incorporating climate change factors in analysis for the revision of the Lake Champlain TMDL. EPA also is conducting pilot projects in other watersheds to more generally assess the influence of climate change on TMDL targets and hopes to share this information in the coming months.

Microbial Source Tracking (MST)

Based on the lengthy discussion of MST at April's workshop, Mr. Goodin indicated that Region 10's MST TMDL development and implementation tool is posted on the region's website.

Treatment of Indian Tribes in the Same Manner as a State

In April, a tribal representative asked how Indian Tribes can assume the listing and TMDL sides of the CWA 303(d) program. Mr. Goodin reported that, with EPA attorneys and several EPA regions with active tribal programs, EPA is investigating this opportunity. He mentioned that EPA hopes to provide a response for tribes as early as January 2012.

General follow-up

Mr. Goodin then updated participants on several "off-menu" EPA developments in the CWA 303(d) program. First, he noted that EPA was nearing completion of a handbook for developing watershed-based TMDLs, and that this document would incorporate feedback on this topic that

EPA received over the past year. He stated that the document should be available in final form in the next month.

Secondly, Mr. Goodin mentioned that EPA is developing a draft memo on the process for revising or withdrawing existing TMDLs. It should be released in the coming weeks. He emphasized that EPA's intention with this memo is to provide information on the instances when it is appropriate for a state to revise or withdraw an existing TMDL, and to discuss circumstances when withdrawal is not necessary. He noted that EPA hopes the document will allow states, tribes, and territories sufficient flexibility for revisions and that EPA looks forward to input on this document from its non-federal partners.

Finally, Mr. Goodin discussed the overarching, retrospective regulatory review process that the Office of Management and Budget (OMB) is conducting throughout the federal government, and its implications on the TMDL and listing program. Under this process, EPA and OMB are comprehensively revisiting reporting requirements for CWA Sections 303(d) and 305(b). Mr. Goodin also highlighted that through the retrospective review process, EPA has the opportunity to evaluate alternatives to the current reporting requirements in statute and regulation, along with evaluating alternative policy practices that could improve reporting without modifying regulations. He concluded by noting that he was happy to have a variety of state partners, ACWA, and the Environmental Council of the States (ECOS) contributing to this review process via recent conference calls.

Adam Schempp and **Bruce Myers** (ELI) then asked for any questions or comments on the various issues discussed by Mr. Goodin.

After receiving no questions or comments, Mr. Goodin provided more detail on the "vision" presentation that EPA provided for the ACWA committees. He highlighted three major areas discussed in this presentation. First, EPA has investigated and portrayed the TMDL and listing program's history and why now is an appropriate time for the vision project. This portion of the project involves detailing the states' success in TMDL development, impaired waters identification, and TMDL implementation. For TMDL implementation, Mr. Goodin noted that as many as 3/4 of the TMDLs developed in the Midwestern U.S., including TMDLs involving nonpoint sources, have initiated some form of implementation. Further, a study conducted by Kent State University revealed that in Ohio and West Virginia, a fifth of the impaired waters with TMDLs developed have demonstrated partial recovery, and 3% of the waters for which a TMDL was developed have fully recovered. Mr. Goodin added that he hoped to see more improvements as more TMDLs are implemented.

The second part of EPA's presentation to ACWA covered emerging program realities and limitations. Mr. Goodin mentioned that input from states, tribes, and territories on these realities has been and will be particularly helpful for the vision project.

Thirdly, Mr. Goodin discussed the need for a general framework, or a mission statement, for the vision. He mentioned that this third component of the vision project presented an opportunity to think broadly about the objectives for the CWA 303(d) program over the next 10 years, and that EPA was soliciting a "wish list" of state, tribal, and territorial goals for the program's next

decade. Sample “wishes” that he described included focusing on restoring water bodies and assessing water bodies.

Moving on to other issues, a state representative commented on how potential reductions in financial support for the state CWA 319 programs would affect non-federal partners’ ability to meet various program measures keyed to development of TMDLs. Mr. Goodin responded by noting that there are efforts underway at EPA to examine CWA 319 and the larger nonpoint source programs. He reported that one of the central components of this discussion at EPA Headquarters is a provision adopted about ten years ago to focus a fair amount of CWA 319 resources on implementing TMDLs instead of TMDL development or other eligible activities. Mr. Goodin noted that it would be helpful for EPA to hear how many states rely on the CWA 319 program as their principal source of funding for developing TMDLs. He asserted that the potential to significantly reduce non-federal funding for TMDL development would be a leading concern in decisions regarding any new restrictions on CWA 319 funding.

The state representative responded by noting that, through ACWA-sponsored CWA 319 calls, they had received the impression that EPA Headquarters is seriously evaluating eliminating CWA 319 funding for TMDL development, or at least substantially reducing the amount of such funding allowed to support TMDL development. This state participant asserted that if CWA 319 funding was removed, his state could not develop TMDLs, and that a number of other states are in a similar situation.

Mr. Goodin responded by noting that the EPA Headquarters CWA 303(d) program is engaged with the Headquarters CWA 319 program on this issue. He said that in some instances EPA Headquarters first consulted state CWA 319 staff that may not have been as engaged with TMDL development. He also noted that dependence on CWA 319 funding for TMDL development varies by state. Mr. Goodin encouraged states to ensure that communication is ongoing between state CWA 319 and TMDL development staff to remedy any misconceptions. He also indicated that the CWA 303(d) program at EPA Headquarters would report back to the Headquarters CWA 319 program on this state representative’s situation.

Another state representative responded by reporting that their EPA regional staff has resisted the use of CWA 319 funding for TMDL development and that EPA Headquarters should be aware of that.

Mr. Goodin noted that decreasing federal and state funding for the entire TMDL Program has increased the difficulty of choices between TMDL development and implementation. He asserted that EPA hopes that this tradeoff will be addressed in the visioning effort, particularly in the context of states, tribes, and territories where TMDLs are the primary path to achieving water quality restoration.

A state representative then asked Mr. Goodin about the response of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program on the importance of integrating TMDLs and water quality standards into solid waste cleanup processes, and whether there was any documentation of this response. Mr. Goodin noted that the CWA 303(d) program provided the CERCLA office with the existing policy guidance on that

topic. With regards to the specific question of ARARs, Mr. Goodin noted that the Superfund office was considering this question in the context of broader questions related to the Water Program. Another EPA Headquarters staff member reported that a draft document on this particular issue was being reviewed by the Office of Water, and Mr. Goodin noted that after internal review is complete, EPA will distribute the document to the states, tribes, and territories.

Another state participant asked for clarification on identifying good opportunities for using Category 4b for legacy pollutant impairments. An EPA Headquarters staff member reported that when the 2009 survey of legacy pollutant 4bs was conducted, EPA HQ thoroughly reviewed all state Integrated Reports to identify waters that had been assigned to Category 4b. This EPA staff member noted that the survey includes a cursory evaluation of the names of water bodies and pollutants assigned to 4b and that they felt the paper was a good starting place for assessing existing Category 4b determinations and identifying the types of strategies that have been used to assign legacy pollutant impairments to 4b. However, the EPA staff member qualified this statement by noting that there are relatively few (~400) waters in 4b across the US, so the existing examples of using 4b may not completely represent all control strategies that could be used to assign legacy pollutant impairments to 4b. This EPA staff member also stated that many of the 4bs included in the survey report were approved before EPA began thoroughly examining 4b determinations, so some may not provide model examples. The EPA staff member noted that Headquarters staff will be examining Category 4b determinations from this survey to evaluate and identify good examples.

One state representative commented that Mr. Goodin's update on EPA activities had included a number of EPA offices and groups and inquired as to whether there was a master list of these different offices and groups, their activities, and the expected completion dates for their activities. Mr. Goodin responded that creating such a list was an excellent idea. He stated that some of this information is available in the chart that he presented during his update on EPA's recent activities, but since new efforts were underway, EPA would compile this information and send it to webinar participants in a draft form.

FACILITATED STATE, TRIBAL, AND TERRITORIAL REPORTING BACK AND Q&A

A representative from the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Quality (NCDWQ), provided a brief presentation on the current landscape for TMDL development and implementation in her state. She noted that general public receptiveness for environmental regulation in North Carolina has lessened, which is a new atmosphere in North Carolina. She said that some cities and towns in North Carolina had passed resolutions objecting to TMDLs that the NCDWQ was attempting to develop. Due to this resistance, the NCDWQ is now focusing almost exclusively on coordinating with nonprofit organizations and the NCDENR shellfish office to develop TMDLs for closed shellfish areas. She noted that TMDLs are still welcome in these areas and that reopening shellfish areas can create and maintain jobs and help the economy.

The North Carolina representative then asked if other states have experienced similar changes in their political climates. A representative of another state reported that there was an overt attempt

to force the governor to relocate the CWA 319 program to his state's department of agriculture. When this attempt failed, the agricultural sector attempted to pressure the state legislature to pass a law to move the program, which came within one vote of passing. Both efforts were meant to weaken the TMDL program. This state participant reported that his state's agricultural sector feels increasingly threatened by the TMDL program and that this unease is driven by concerns that the Chesapeake Bay TMDL process will be mirrored in the Mississippi River basin. This state representative noted they are being asked on a departmental basis to explain how their activities are supporting jobs and the general economy.

A different state representative noted that, similar to the situation in North Carolina, cities and municipalities have established resolutions opposing TMDLs. This state participant also noted that his department receives very heavy political resistance when TMDL implementation may induce substantial expenses, particularly with respect to infrastructure upgrades.

Another state representative responded by adding that he has experienced the same scrutiny recently, including a moratorium on new state regulations for several years. This participant said that essentially the only way to pass a new rule was to have industry agree with the department that the rule would not increase their expenses or result in lost jobs. This attendee also noted that when stakeholders oppose a certain statute or action, they simply introduce legislation to change the statute to their liking.

Bruce Myers of ELI asked if any participants have attempted to articulate the financial, public health, or other benefits of their regulations.

A state representative responded by referencing a strategy they have used to deflect negative attention from their program in meetings with state legislators: putting the onus for regulation on EPA. They remind their state legislators that the TMDL and listing program is delegated to the states, and that the state legislators would likely be even more opposed to the program if EPA was developing TMDLs and conducting monitoring. This state attendee mentioned that this strategy helped her state to reinstate necessary monitoring funding.

Another state participant commented that addressing bacterial water quality problems was a successful strategy for garnering public support for the CWA 303(d) program. This state participant explained that most people agree that bacteria are a threat, making this topic more neutral than others. Further, this state attendee commented that they are doing impervious cover TMDLs in some areas and that MS4s are concerned about the expense of implementing such TMDLs, but so far they have not sought to combat these TMDLs. This webinar participant also asserted that municipalities desire regulatory certainty, which may prevent them from employing opposition.

The North Carolina representative noted that she really appreciated other states sharing their experiences. She asserted that state, tribal, and territorial TMDL and listing programs have to be more nimble and adjust to the changing political realities that they are facing.

Another state followed by reporting that her state was under a moratorium on regulations, unless the program passes a social and economic impact statement.

Staff from the Wisconsin Department of Natural Resources, Division of Water, commented that their program has initiated a Watershed Assessment and Restoration Program (WARP), which is a framework to bring together staff from the state's monitoring, assessment, TMDL, CWA 319, and NPDES offices to encourage communication and collaboration on common priorities. They noted that their work is similar to EPA's ten year vision. Overall, they stated that the goal was to use buy-in from other programs on addressing impaired waters and the Healthy Watershed Initiative to generate support from stakeholders.

One state webinar attendee inquired as to whether a follow-up meeting had been conducted on the topics of public engagement and branding in the CWA 303(d) program, which was suggested on an October 20 ACWA call.

Mr. Goodin responded by noting that EPA Headquarters has had two introductory discussions with ACWA's listing, monitoring, and TMDL groups. He stated that a call on this topic should occur in early December. An ACWA representative subsequently stated that ACWA would be sending out an e-mail shortly after the webinar regarding "wish list" requests for EPA's vision project.

Bruce Myers of ELI asked if any non-federal jurisdiction had issued regulations or guidance that they would like to report. A representative of Minnesota said that, with the help of EPA Region 5 and Headquarters, his state had developed guidance on 4b requests received from third parties. He noted that substantial interest has been expressed in his state on identifying TMDL alternatives. A copy of this guidance document is available in the [workshop background materials](#).

Another state participant commented that, in instances where documentation or remediation activities do not merit assigning a listing to Category 4b, the state uses Category 4e instead. This state is in the process of developing documentation to detail the differences between Categories 4b and 4e and the details that stakeholders should provide for each of these categories. This state also mentioned that another state in her EPA region was using Category 5r for essentially the same purpose.

A different state attendee questioned how 4e differs from 5r and what the main distinguishing factors are among those categories. A state representative responded that, based on her understanding, Categories 5r and 4e served the same purpose. This state attendee noted that these categories could be used, for example, for a coliform impairment due to a broken sewer main that is being addressed and may not merit a TMDL.

Another state responded that when waters are impaired under situations such as these, they place them in Category 5a and then do an environmental comparability project. In that case, if a water quality remediation project is expected to meet water quality standards but does not, the state has an idea of how to proceed with a TMDL.

An EPA Headquarters official mentioned that, throughout the past year, they have conducted discussions with EPA Region 4 on Category 5r and in particular what the difference is between a

water listed under 4b and a water listed under 5r. This Headquarters participant noted that EPA Region 4 was in the process of pursuing a pilot project using the category 5r approach. An EPA Region 4 representative confirmed these statements and said that she would be happy to share the compiled document on 5r when it is ready.

Bruce Myers of ELI asked if any EPA, state, or tribal representatives had feedback on ensuring that tribes are more involved in the CWA 303(d) program. A representative of the Fond du Lac Tribe noted that they have been a full participant for a TMDL with EPA and two states.

A representative of Ohio reported that her state's [flow regime TMDL for the Lower Grand River](#), which involved collaboration with EPA Region 5 and TetraTech, addressed high flows and low flows in a TMDL. She emphasized that in the context of stormwater, a TMDL such as this can provide the basis for ensuring compliance with antidegradation standards.

TOPICAL DISCUSSION #1: REASONABLE ASSURANCE

Menchu Martinez of the EPA Headquarters Watershed Branch provided an update on EPA's recent efforts to advance demonstration of reasonable assurance. She first provided an overview of the background information on reasonable assurance covered at April's workshop. She then discussed EPA's preliminary thinking on efforts to advance reasonable assurance. Ms. Martinez noted that if any participants desired more background information on reasonable assurance, that they could find EPA's April presentation on the topic on the [ELI State TMDL Program website](#).

As a review, Ms. Martinez noted that reasonable assurance pertains to mixed source TMDLs—TMDLs developed for waters that are impaired by both nonpoint and point sources. Basically, reasonable assurance is the concept of assuring that reductions in load allocations from nonpoint pollution sources that are projected in a TMDL will occur over time. She stated that reasonable assurance is necessary to determine that a TMDL's wasteload and load allocations, in combination, are established at levels that will achieve water quality standards. EPA has addressed reasonable assurance in various guidance documents, beginning in 1991 and then revisiting the issue in 2002. These guidance documents relating to reasonable assurance are provided on the [ELI website for the April 2011 meeting](#).

She noted that of the roughly 50,000 TMDLs that have been developed to date, about half were for mixed source waters, where reasonable assurance is particularly important. She stated that there are a range of techniques for demonstrating reasonable assurance in these TMDLs.

Ms. Martinez explained that reasonable assurance is important because to realize environmental gains and improve water quality, all pollution sources should be addressed in TMDL development. She noted that reasonable assurance can help to enhance the legal defensibility of TMDL actions, and that key lawsuits pertaining to reasonable assurance were covered at the April workshop. In particular, one of the main points in the Conservation Law Foundation's challenge to the Lake Champlain TMDL related to insufficient demonstration of reasonable assurance. She also noted that in a separate consent decree case (*Friends of Pinto Creek v. EPA*), a court opinion stated that before new discharges could be permitted, that sufficient evidence was needed to show that load allocations would in fact happen. Similarly, a particular NPDES permit

in Vermont was challenged in court, and taken back, due to a TMDL allocation that did not occur.

Ms. Martinez then presented EPA's preliminary thinking on reasonable assurance and noted that this is an issue that is being advanced through various conversations with states. She emphasized that EPA recognizes that demonstration of reasonable assurance will be case-specific. She also stressed that EPA is not looking to have reasonable assurance demonstrated in all cases as thoroughly as in the Chesapeake Bay TMDL. Ms. Martinez said that demonstration of reasonable assurance will depend on TMDL circumstances: the characteristics of the receiving body, pollutants, and the relative mix of point source and nonpoint source loadings. She noted that all of these factors should be considered in demonstrating that nonpoint source load allocations will occur.

Ms. Martinez then noted that EPA does not expect that allocations will be achieved as soon as a TMDL is developed, but that they will be reached over time, and that reasonable assurance could be demonstrated using an adaptive management approach. She explained that reasonable assurance is a roadmap demonstrating a path to meeting allocations with incremental improvements occurring over time. She emphasized that part of this path involves making adjustments to the implementation actions to meet the allocations along the way.

On the intersection of adaptive management and reasonable assurance, Ms. Martinez stated that EPA is preliminarily thinking that to make adaptive management work, a detailed assessment of load allocations and wasteload allocations is required. She noted that this assessment could be achieved through a variety of methods, including parsing nonpoint source pollution by sector or detailed analyses of exactly what load allocations are achievable. Reasonable assurance, she stated, also requires evaluating point and nonpoint source load allocations to make sure they are collectively meaningful for achievement of water quality standards over time. She then noted that the sum of all allocations—wasteload allocations and load allocations—should implement the relevant water quality standard(s). She stated that adaptive management also could be supported by a schedule of milestones, which would be followed by monitoring to track achievement of goals in this roadmap. If insufficient progress towards water quality standards is achieved, then follow-up actions can be introduced to ensure remediation.

Ms. Martinez noted that, stemming from requests at the April meeting, EPA is currently compiling TMDLs with good reasonable assurance or TMDLs that have been effectively implemented based on a strong implementation plan. She then stated that EPA is hoping that their selection of model TMDLs for demonstrating reasonable assurance would lead to establishment of a sample checklist to bolster the likelihood of implementation of particular load allocations. Ms. Martinez said that EPA would begin compiling a checklist as soon as selection of model TMDLs was completed. She especially thanked non-federal webinar participants who have forwarded top examples of reasonable assurance to their EPA regions. She noted that states, tribes, and territories should feel free to provide other model TMDLs to EPA.

Ms. Martinez then shifted to discuss EPA's compilation of a resource list highlighting key manuals for best management practices (BMPs) for nonpoint source pollution. She reiterated that at April's workshop, a number of non-federal workshop participants requested that EPA compile

sources that identify suites of BMPs for particular pollution sources or land uses. A resource list of these manuals was distributed with the [webinar background materials](#). She requested that non-federal participants let EPA know what information would be helpful in closing this identified information gap, particularly with regards to using BMP implementation in the context of reasonable assurance demonstration. She also requested that states, tribes, or territories notify EPA of any other helpful BMP resources.

Ms. Martinez stressed that EPA would like to provide more information on suites of BMPs, but that they need more information from non-federal TMDL and listing officials on what would be helpful. She subsequently highlighted two related EPA actions. First, EPA is planning to initiate pilot projects in specific regions and states to answer how provision of more BMP resources can lead to successful examples of BMP application. These pilot projects intend to focus on particular geographic areas to show specific techniques for selecting and applying BMPs in order to help meet load allocations set in the TMDL. Secondly, Ms. Martinez announced that EPA is hoping to host a series of webinars that publicize information on BMP tools, particularly BMP optimization tools.

Finally, Ms. Martinez closed her presentation by noting that the Watershed Branch has embarked on a study to develop a better feel for the incremental level of effort necessary to enhance reasonable assurance, and the environmental benefits that would accrue from bettering demonstration of reasonable assurance.

A representative of the Kansas Department of Health and the Environment, Bureau of Water, subsequently presented on the intersection of reasonable assurance and adaptive management. He opened by thanking Ms. Martinez for her work on defining and clarifying what EPA Headquarters expects for reasonable assurance. He noted that states have a lot of anxiety about the development of requirements for reasonable assurance. He noted that, under the language of the 1991 memo introducing reasonable assurance, if load allocations for nonpoint source pollution are not achieved, repercussions are required for point source wasteload allocations. He emphasized that, regardless of EPA's direction on reasonable assurance, the concept will have to incorporate the 1991 memo and the practical limits on assuring that pollution reductions will occur.

He noted that wasteload allocations and load allocations in TMDLs are often referred to as additive through the phrase that TMDLs are the "math and path" to water quality remediation. He stated that this concept was untrue and that hydrographs are nonlinear and often chaotic. He asserted that he cannot assure that all BMPs are functioning as expected. Although TMDLs are tied to water quality standards, he stated that short-term water quality improvement is increasingly desirable.

The Kansas representative then asserted that the federal and non-federal partners in the CWA 303(d) program need to come to an agreement as to the meaning of adaptive management, commenting that he is not sure that either the federal or non-federal officials truly understand what this popular term signifies.

He asserted that he thought that states can commit to action on most TMDL issues viewed as high priority, and that this should be proof of the political will to achieve reductions and the backstop above which states can improve. However, he stated that these actions include on-the-ground achievement, but that this might not be reflected on paper in TMDLs.

He went on to note that, while EPA is espousing flexibility in demonstrating reasonable assurance through case-specific approaches, this opposes what he thinks EPA wants: nationwide consistency. He suggested that a TMDL reviewer in EPA Region 4 might approve a TMDL that would not be approved in EPA Region 10, and that this discrepancy was due to a number of factors, such as geography, hydrography, particular issues of concern, or regulators' personalities. Since one size does not fit all for reasonable assurance, he questioned how EPA could assign the appropriate level of rigor for demonstrating this level of assurance.

He asserted that reasonable assurance and pace were almost mutually exclusive objectives.

Progressing to TMDL implementation, the Kansas representative noted that wasteload allocations are implemented through NPDES, which takes years to design and change facility operations. He then said that achieving load allocations for nonpoint sources can take decades, depending on the availability of resources to implement on-the-ground restoration projects. He emphasized that staff turnover in state and EPA CWA 303(d) programs, changes in stakeholders, and other aspects of social change prompt these questions on reasonable assurance: what are we attempting to assure, by when, and by whom?

He concluded by analogizing reasonable assurance to issues with modeling. As he relayed, in the modeling world, "we control everything." However, when regulators move from modeling to on-the-ground implementation, discrepancies arise. He noted that he felt EPA and the states, tribes, and territories should have a thorough discussion of what EPA desires in the context of the 1991 memo. He then suggested that adaptive management be emphasized over reasonable assurance and be defined.

Ms. Martinez responded by stating that she was glad that the two presenters agreed that over time, water quality improvement should be demonstrated.

One state participant noted that the Kansas representative's presentation was "well said." A different state participant stated that he echoed their sentiments regarding reasonable assurance and noted that they felt reasonable assurance policy was being driven by lawsuits that do not set precedent.

Another state webinar attendee asked, in the context of reasonable assurance, how ongoing programs to implement nonpoint source pollution reductions at the local or state level that began before the TMDL could be included in a TMDL implementation plan and credited for meeting an adaptive management approach. As an example, this state mentioned a statewide phosphorus reduction program for fertilizer that predated development of certain TMDLs. An EPA Headquarters participant responded by stating that if load allocations had been parsed correctly in the TMDL, that credit would have been given to the existing nonpoint reduction programs by including the nonpoint source reductions achieved through them in the existing nonpoint

source loading numbers. Then, from that baseline, the TMDL can identify what, if any, additional nonpoint source loading reductions can be achieved from those programs.

Another state participant noted that the personalities of stakeholders and communities are very influential in the overall effectiveness of a TMDL and the achievement of reasonable assurance. This participant noted that support for TMDLs and the financial capacity for implementing nonpoint source reduction activities varies significantly between towns, and that this is not reflected in a TMDL document.

TOPICAL DISCUSSION #2: NUTRIENT FRAMEWORK MEMO

Joe Piotrowski, Senior Advisor at EPA Headquarters and Co-Chair of the Hypoxia Task Force Coordinating Committee, led an update and Q&A session on the Nutrient Framework Memo that EPA released in March 2011. He noted that EPA has placed substantial emphasis on aligning objectives for nutrient reduction strategies in priority watersheds under the Nutrient Framework Memo with objectives for the state nutrient reduction strategies to be developed by the Gulf of Mexico Hypoxia Task Force states.

He described the Gulf Hypoxia Task Force, which has been in place for 15 years and consists of the U.S. Department of Agriculture, the National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, the U.S. Geological Survey, and the twelve Mississippi mainstem states. He noted that a goal of the task force is to develop an Action Plan that includes state nutrient reduction strategies. According to Mr. Piotrowski, the Gulf Hypoxia Task Force has pursued development of individual state strategies for reducing nutrient loads to match case-specific circumstances in each state.

The role of federal agencies in development of Gulf Hypoxia Action Plan state nutrient reduction strategies is to coordinate and provide technical assistance through development of technical tools and support for individual components of state frameworks. Mr. Piotrowski mentioned that a webinar on November 30 would introduce information on accessing nutrient data through the agencies' data systems and the U.S. Geological Survey's SPARROW model, which allows users to calculate nutrient load reductions under different scenarios.

Mr. Piotrowski then stated that since the spring, the Gulf Hypoxia Task Force has been focused on linking the eight elements of a nutrient management framework in the Nutrient Framework Memo with the Mississippi River states' nutrient reduction strategies. Mr. Piotrowski noted that the Gulf Hypoxia Task Force was focusing on the first seven elements of the nutrient management framework with participating Gulf Hypoxia Task Force states as part of their Hypoxia Action Plan state nutrient reduction strategies. The Task Force asked the EPA regions to begin engaging the states in a separate discussion on their plans to achieve element #8 of the Nutrient Framework Memo, developing numeric nutrient water quality standards Mr. Piotrowski said that "if you're going to do this thing right, from our perspective, you need all eight points." He noted that EPA and the other federal members of the Gulf Hypoxia Task Force have been working with all 12 states to complete Hypoxia Action Plan state nutrient strategies by 2013.

Mr. Piotrowski also noted that the Gulf of Mexico Alliance—a coalition of five states that border the Gulf in the south-central United States—already were developing Hypoxia Action Plan state nutrient strategies before the nutrient management framework was released last April, and that one state has submitted their state nutrient strategy to EPA Region 4.

He mentioned that EPA has released a request for proposals (RFP) to support development of Hypoxia Action Plan state nutrient strategies for states that drain to the Gulf. He commented that EPA has also ascertained some contractor support for development of these frameworks.

Mr. Piotrowski then discussed an issue raised by non-federal participants in the April workshop: the potential for using the eight steps of the Nutrient Framework Memo as a toolbox instead of requiring all steps. He stated that the eight steps in this memo were in no way mandatory, and that it was completely left to a state's discretion to adopt these steps. He emphasized that no contingencies were placed on provisions of CWA 106 or 319 grants to require implementation of the eight steps. However, he did note that EPA sees the nutrient framework as a critical voluntary effort because of the pressure that EPA has received regarding state adoption of numeric nutrient criteria. He noted that some have termed the Nutrient Framework Memo a "shield," and though it is not perfect and cannot prevent all lawsuits, he stated that EPA designed the framework to demonstrate a relatively legally defensible approach to show that there are actions to address nutrient pollution until a state has developed numeric nutrient water quality standards. He stated that the steps should not be viewed as a replacement for numeric nutrient criteria but it is a way for a state to show progress in controlling nutrients in the meantime.

Mr. Piotrowski then noted that, outside of the Gulf Hypoxia Task Force, EPA was reaching out to state water quality agency partners in the Mississippi River states where agricultural or natural resource agencies were on the Hypoxia Task Force instead of the water quality agencies.

A state representative asked Mr. Piotrowski to expound on the concept of "agricultural certainty" and how it relates to the general CWA 303(d) program.

Mr. Piotrowski noted that, conceptually, agricultural certainty was identified as a potential implementation strategy based on EPA and the Chesapeake Bay states' extensive outreach during development of the Bay TMDL. He said that a wide variety of farmers in the Bay expressed a preference to avoid implementing one set of BMPs only to later have a regulator inform them that their BMPs are inadequate. Bay farmers opined that they would like an upfront guarantee that EPA or state regulators would not be instituting modified requirements after BMPs were implemented. Mr. Piotrowski commented that the Bay states have heavy agricultural industries, and that sometimes there are questions which BMP is the best.

He then explained that EPA sees this concept—agricultural certainty—as a vehicle to increase farmer participation in BMP implementation. After 20 to 25 years of watershed approach outreach in the Bay without a TMDL, he noted that 38 percent of farmers are involved in BMP implementation. He said that EPA and the states are hoping to expand farmer participation in BMP implementation beyond 38 percent with the concept of agricultural certainty. Mr. Piotrowski emphasized that EPA would not be implementing the agricultural certainty program and that this approach is a program that a state would have to choose. He noted that EPA is

discussing possibilities for beginning agricultural certainty programs with the Bay states and that the EPA Administrator is discussing options for agricultural certainty with Midwest states. He then suggested that agricultural certainty could be linked to TMDLs if the states use their agricultural certainty program BMPs to implement TMDLs that should be undertaken on farms.

A state participant asked Mr. Piotrowski what general next steps were being taken by EPA on nutrient management outside of the Gulf of Mexico Hypoxia Task Force and how EPA regions will work with states on next steps. Mr. Piotrowski responded by noting that the eight-step framework is designed as a strategy for states needing more time to develop numeric nutrient criteria, not those that already have it. He said that a central objective of the framework is to demonstrate that states are still making progress on nutrient management without development of numeric nutrient criteria. Mr. Piotrowski added that EPA is conducting substantial work on nutrient management in the Chesapeake Bay and in Florida, and that the agency's focus is now shifting to the Mississippi River basin.

Another state participant noted that Mr. Piotrowski had referred to the eight-step framework as a strategy and asked him to clarify whether the framework did not apply to the Chesapeake Bay states because they developed a strategy or because they had numeric nutrient criteria. Mr. Piotrowski explained that the Chesapeake Bay states did not have numeric nutrient criteria, but that they had numeric nutrient-related criteria. He expounded on this by saying that the Bay TMDL used a suite of numeric nutrient indicators gathered at 40 different sites in the Bay. Mr. Piotrowski clarified that his use of the word "strategy" was in the context of state nutrient reduction strategies being pursued by the Gulf of Mexico Hypoxia Task Force.

A third state participant followed up on the discussion of agricultural certainty by asking Mr. Piotrowski if EPA has examined farmer certification programs. This state participant noted that a farmer certification program, the Livestock Environmental Quality Assurance (LEQA) program run by Ag Resource Strategies, LLC, was being piloted in Minnesota and that this program would be interested in expansion. He stated that the LEQA program has been "cautiously well received" by the agricultural community and compared it to an audit: describing environmental standards for a farm and what BMPs should be used to achieve these standards for a farm to be certified as being sustainable. This certification process can be conducted for all farms, regardless of the proximity of a farm to impaired waters, and it is strictly voluntary. He added that this approach could gain traction if it were developed further, but the Minnesota Pollution Control Agency has been slightly cautious about expanding the LEQA program since it is unsure of the long-term implications. (More details on the LEQA program are available with the webinar background materials on the [ELI website](#).)

Mr. Piotrowski responded by saying that much of the LEQA approach is similar to an agricultural certainty approach. Mr. Piotrowski noted that farmers have privacy concerns about sharing the location of their farm and that the biggest barrier to agricultural certainty is the amount of data that farmers are willing to provide.

An EPA Headquarters representative asked if the LEQA program was only operated for non-CAFOs and if farmers were only willing to be certified under the assumption that EPA or the state would not impose additional regulations. The Minnesota representative responded by

saying that LEQA was attractive to the agricultural community because it elucidates goals that they can reach and understand. He stated that the implication of the program is that if an agricultural operation is certified as a sustainable farm, the state and EPA would leave the farmers alone. He noted that the LEQA program has been tried on around 100 farms, that it provides farmers with a feeling of assurance, and that farmers feel it insulates them from being second-guessed. He stated that load allocations and reductions have not worked and that farmers are skeptical of BMPs when they are not even convinced they are causing water quality problems; the LEQA program could help to ameliorate some of these concerns.

The EPA Headquarters official asked if agricultural operators felt assurance because the LEQA program dictates specific practices that they should follow. The Minnesota representative explained that university extension experts visit farms, conduct audits, explain BMPs, and develop strategies for achieving sustainable status for each of a farm's fields. Since these strategies are developed at a field level, improvements are very tangible, which he believes has led to the program's acceptance and success.

WRAP-UP

Bruce Myers of ELI provided some closing observations on the webinar. He informed webinar participants that ELI maintains a listserv for TMDL and listing practitioners, and that this listserv is an appropriate vehicle for asking questions and sharing successful water quality management approaches. TMDL and listing staff can subscribe to the listserv by contacting Sandra Nichols (nichols@eli.org) or Philip Womble (womble@eli.org). Mr. Myers also reminded webinar participants that a final workshop report from the April 2011 meeting, along with background materials and presentations from that meeting and the webinar, are available on [ELI's State TMDL Program Resource Center](#).

Mr. Myers also commented that ELI expects to hold another, smaller meeting for TMDL and listing staff in Shepherdstown, West Virginia during the week of April 9, 2012. This meeting will not be a full 50-state, tribes, and territories meeting and will be similar to the ELI TMDL workshop on nonpoint source pollution in May of 2009. Mr. Myers also shared that ELI is planning to conduct another full meeting in Shepherdstown in 2013 and that these larger meetings are expected to occur every other year, depending on funding availability. He noted that ELI is certainly interested in hearing any non-federal or federal perspectives on topics that should be covered at these workshops or any questions regarding the meetings.

Mr. Myers explained that ELI could capture the techniques that TMDL and listing officials have used to successfully respond to challenges to program implementation. He noted that this topic is related to program branding and somewhat related to the direction and fate of the CWA 319 program. He said that he found it intriguing that during this webinar, resource prioritization seemed to be of more interest than TMDL pace vs. rigor, which was a dominant topic at past workshops. Finally, Mr. Myers thanked the participants for attending the webinar.

Mr. Goodin provided closing comments for the webinar. He said that it is important for EPA and the non-federal participants to evaluate the utility of the webinar format as a method of interaction. He noted that he is a "big fan" of face-to-face interaction, but dwindling resources

for in-person meetings are forcing consideration of what topics to share and how to share them on the phone.

He emphasized that the participants in the webinar were essentially “doing extra credit” for their jobs, and that they are helping to shape a national program. He stressed EPA’s appreciation for non-federal participation in the webinar. Mr. Goodin said that EPA truly takes the feedback it receives from these meetings seriously and that he hopes that EPA’s progress since April and the documents that are scheduled for release in the coming months demonstrate their attention to this input.

Mr. Goodin closed by noting that the EPA vision project is a great opportunity to contemplate the broader direction of the TMDL and listing program. He stated that many of the issues discussed during the webinar, in particular those regarding tradeoffs, could be encapsulated in the broader narrative of the vision project. Mr. Goodin stated that although this was a challenging time for water quality management, he is very pleased with the progress and continuing contributions of the non-federal program partners.

Appendix: Webinar Agenda

Purpose: It was agreed at the April 2011 Workshop that a mid-year check-in meeting could help to measure progress, ensure accountability, and continue to shape next steps. EPA will provide an update on developments since the April workshop and what is on the horizon, particularly with regard to issues discussed and objectives established at that workshop. The states, tribes, and territories will report on progress made -- and any obstacles encountered -- since then.

1:00 - 1:15: Introduction

1:15 - 2:15: EPA presentation and Q&A

EPA will provide an update on actions resulting from the April workshop:

- a) Public Engagement
- b) Nutrients
- c) Downstream Impacts / Multi-jurisdictional TMDLs
- d) Stormwater
- e) Antidegradation
- f) Recovery Potential
- g) Legacy Pollutants
- h) Climate Change
- i) Microbial Source Tracking
- j) Treatment as a State
- k) General Follow-Up

2:15 - 3:15: Facilitated state, tribal, and territorial reporting back and Q&A

What updates would states, tribes, and territories like to provide on:

- a. the current landscape (recent challenges and successes) for implementing the listing and TMDL program;
- b. coordination with other offices or programs to advance TMDL implementation (with USDA, the 319 program, or others);
- c. communicating with the public or branding;
- d. contents and application of antidegradation policies; or
- e. other topics?

3:15 - 3:30: Break

3:30 - 4:00: Topic 1: Reasonable Assurance

EPA will provide an update on reasonable assurance since the April workshop, and Tom Stiles (KS) will discuss the reasonable assurance/adaptive management intersection, followed by moderated discussion.

4:00 - 4:30: Topic 2: Nutrient Framework Memo

Q&A with Joe Piotrowski, Senior Advisor, EPA HQ and Co-Chair of Hypoxia Task Force Coordinating Committee

4:30 - 5:00: Wrap-up

Discussion of objectives/direction for EPA, states, tribes, and territories, followed by concluding remarks