

**MEETING OF THE NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION**

**Raleigh, North Carolina
September 8, 2011
Minutes**

The North Carolina Environmental Management Commission met in the Ground Floor Hearing Room of the Archdale Building, 512 North Salisbury Street, Raleigh, North Carolina. Chairman, Stephen T. Smith presided. The following persons attended for all or part of the meeting:

COMMISSION MEMBERS:

Christopher J. Ayers	William L. Hall	Dr. David H. Moreau	Clyde "Butch" Smith, Jr.
Donnie Brewer	Steve P. Keen	Dr. Charles H. Peterson	Stephen Smith
Marion E. Deerhake	Dr. Ernest W. Larkin	Mayor Darryl D. Moss	Steve W. Tedder
Tom Ellis	Kevin Martin	J. Dickson Phillips III	

DIVISION OF WATER QUALITY:

Bradley Bennett	Alan Clark	Elizabeth Kountis	Jay Sauber
Janice Bownes	Nora Deamer	Matt Matthews	Coleen Sullins
Ted Bush	Bethany Georgoulas	Sandra Moore	Lois Thomas
Kevin Bowden	Deborah Gore	Diane Reid	Julie Ventaloro
Connie Brower	John Huisman	Jon Risgaard	Chuck Wakild
Amy Chapman	Steve Kaasa	Jason Robinson	

DIVISION OF AIR QUALITY:

Sheila Holman	Glen Sappie
Joelle Burleson	Angela Terry
Michael Petratjic	

DIVISION OF WASTE MANAGEMENT:

Ruth Strauss
Debra Watts
Betty Gatano
Linda Smith

DIVISION OF WATER RESOURCES:

Tom Reeder
Toya Ogallo
Sarah Young

ATTORNEY GENERAL'S OFFICE:

Jennie Hauser
Brenda Menard
Don Evans
Kathryn Jones

I. Preliminary Matters

Chairman Smith: Chairman Smith called the September 8, 2011 meeting to order at 9:10 a.m. He then read the Ethics General Statute § 138A-15, which mandates that the Chairman inquire as to whether any member knows of any known conflict of interest or appearance of conflict with respect to matters before the Commission. Commission members were asked if they knew of any conflict of interest or appearance of a conflict to please so state at this time.

Chairman Smith reminded the Commissioners that the meeting was being recorded live and that it would pick up all conversations. He also stated in order for things to be picked up that they want to be heard, they needed to use the microphone which many forget. We have two additions to the agenda. The first is that I will call on Assistant Secretary Robin Smith for an introduction.

Robin Smith: I did want to make a quick introduction. We finally have after many months a new policy analyst in the Secretary's Office. Many of you worked with Steve Wall when he was in that position and Steve had done a lot of work with the EMC's Renewal Energy Committee. We now have as of two weeks ago a replacement for Steve and her name is Trina Ozer. She is coming to us from an environmental consulting firm. She has a Master's of Public Administration from the School of Government at UNC, and I am extremely excited to have her help. She has only been here two weeks and she is in the total emersion phase of figuring out what all of our programs do. Yesterday was her first introduction to Air Quality which I told her in advance is like learning a foreign language. I think that was confirmed by her Air Quality Committee meeting experience yesterday. So we look forward to working with you all and take a look at the projects that are ongoing to see what Trina may be working on with the Commission. One of her major projects starting out is already the study that the General Assembly directed us to do on shale gas exploration and development. She will be helping me coordinate that department study and that's going to be a big project for the next nine months or so. But we look forward to having her available to work with you all as well on some special projects. Thank you very much.

Chairman Smith: Thank you and welcome Ms. Trina Ozer. We all look forward to meeting you.

The second addition to the agenda is not an action item but it is a little bit of an oddity because I'm going to ask you for some help in scheduling. Yesterday at the Air Quality Committee there was a draft rule on the agenda, "Deferral of Carbon Dioxide Emissions from Combustion of Biomass from Prevention of Significant Deterioration and Title V Requirements". It was listed as a draft rule for Air Quality Committee to consider, which the Air Quality Committee did. Yesterday for the first time there was also a request from DAQ for a 30 day waiver and that this matter come before the EMC for today as an action item, and after consulting with Mr. Crawley I was not comfortable that would comply with at least the spirit of the open meeting law; if not the letter of the meeting law, since it was not calendared for today as an action item. So we have not added it to today's schedule as an action item. However, DAQ is asking that we consider deciding this sooner than our November meeting and that we do it by telephone conference call. We can accommodate that, I believe, if we can be reasonably assured of a quorum. So the question I have for you since pretty much everybody is wired, if you would take a quick look at

your calendars and see if you would be available a week from tomorrow at 10:00 a.m. for a brief EMC meeting that you could come to in person or that you could dial into. That would be noticed either today or tomorrow and would put us in full compliance with the Open Meetings Law. So if you would by show of hands show many at this point think that you would be able to call in at 10:00 next Friday, a week from tomorrow.

(Thirteen responded yes and Chairman Smith stated that would give us a quorum.) We will send out notices to each of you with the call in instructions. Is there anything else on that Ms. Holman?

Sheila Holman: No sir. Thank you very much.

Chairman Smith: Next we move to our action items.

11-30 Request Approval of the Final New River Basinwide Water Quality Plan

Summary (Melanie Williams): I am here to request final approval of the New River Basinwide Water Quality Plan which was approved by the Water Quality Committee during the July meeting. This presentation will cover a broad overview of the basin, locations of past and current impaired waters and an update of water quality as well as issues, actions and needs found within the basin.

The New River is part of the oldest river system in North America. The North Carolina portion of the basin is located in the northwest corner of the state which then flows into Virginia and then West Virginia. It is also one of the smaller river basins in North Carolina with relatively small towns and mostly agricultural communities. Portions of the South Fork New River watershed hold the classification of a National Wild & Scenic Rivers. Some impairments in the basin are biological. Specifically, they are impaired for benthos with the exception of Naked Creek and Crab which are impaired for fish community. The Peak Creek, Little Peak Creek and Ore Knob Branch drainage area have been on the impaired waters list since 2004 due to the abandoned Ore Knob Mine. There were four new impairments during this cycle. The East Fork of the South Fork New River was impaired due to a chemical spill and will likely be removed during the next cycle. The two South Fork New River segments and Naked Creek impairments are likely due to urban impacts. The Crab Creek's impairment was due to a combination of urban, agricultural and residential impacts.

The New and the Cape Fear River basins benthic community, which are bottom dwelling aquatic organisms, were both sampled in 2008 when the Cape Fear River was under a severe drought. Therefore, resources were shifted to the New River for additional sampling. There were 45% of stations which were newly sampled during this cycle. The majority of samples were rated excellent or good. Most stations which were monitored during the previous cycle as well as this cycle did not change in rating. Seven segments are impaired for benthos and four of those impairments were added during this cycle. Fifty percent of the fish community stations were also sampled for the first time. The majority of all samples was rated good and had no change from the previous cycle. Only two segments in the basin are impaired for fish community, Naked Creek and Crab Creek. Crab Creek was newly added this cycle. There are indications that restoration activities by local organizations within the basin have helped to improve the health of the biological community. There are six ambient

monitoring stations within the basin which monitor physical, chemical and bacteria parameters. None of the stations are exceeding the state standards to the point of impairment, however there are a few parameters of concern. Turbidity has been increasing from 1998 to 2009 in a slight but steady pace. The reason for those is mostly unknown at this point but it is likely due to new development and agricultural practices without proper BMPs. The pH is also being steadily increasing from 6.7 in 1998 to 7.6 in 2009. In the lower western points of the regions of the state the opposite has been seen and pH levels are actually decreasing. The possible reasons for this increase could include a combination of drought, instream mining operations and rock blasting during road construction. Fecal coliform bacteria on an average was greater between 2003 and 2007 then the previous cycle, mostly in the North Fork New River watershed. This was most likely due to an increase in rainfall during this cycle.

In efforts to protect the State's standards, the plan indicates three main issues causing impacts throughout the basin. The first is sedimentation. The basin is dealing with increased sediment in streams from two main sources. One is increased construction and impervious surfaces in the headwaters and the second is several small agricultural farms throughout the entire basin. Another issue is rising pH levels as previously mentioned. The third issue is the amount of failing septic systems, the use of straight pipes and livestock with access to recreational waters. All of which are a source of the rising fecal coli form bacteria levels.

Actions that have been taken during this cycle that have affected water quality on a basinwide scale mostly deal with reducing the sedimentation. Local governments have worked with several farmers to reduce severely damaged and eroded stream banks by fencing out livestock. These groups have also worked to educate farmers of the proper use of agricultural BMPs. The Winston-Salem Regional Office is working diligently to ensure compliance on construction sites. DWQ is working with local watershed groups to identify major sources of sedimentation and to find funding for restoration efforts. Fencing out livestock also assists in reducing fecal levels within the streams. There are basinwide needs that have been suggested to address these issues. Local studies are suggested to determine the sources of turbidity and what actions need to be taken to correct those sources. Riparian and Trout Water Buffer Education is suggested not only for reducing sedimentation but also to reduce other urban and agricultural impacts. A coordinated effort is needed to conduct a study to determine the cause of increasing pH levels. The last suggestion is to further identify straight pipes and failing septic systems for elimination and to continue efforts to fence livestock out of streams.

A few actions have been taken towards improving water quality during this cycle. Towards the end of 2010, DWQ worked with stakeholders in the basin to develop a Monitoring Coalition that will provide useful data where data is currently limited within the basin. An MOA was signed in July of this year. The reclassification of the North Fork New River watershed to outstanding resource waters and high quality waters was recently approved by the EMC, and will provide much needed protection to some of the most pristine waters in North Carolina. Progress has also been made at the Ore Knob Mine site. A 319 Watershed Management Plan was completed in 2009. The State has worked closely with EPA to have the mine placed on the National Priority List which will provide federal funding and assistance. EPA is now managing clean up and restoration activities. At this time I would like to request final approval of the basin plan.

Steve Tedder: On your impaired slide you mentioned there are two or three newly added segments. I think you said with sampling in 2008. Has there been any follow-up on those sites as far as more recent data to see if they are still impaired or will that wait for the next cycle?

Melanie Williams: That will wait until the next cycle. Those were the most recent monitoring.

Steve Tedder: You mentioned that for sedimentation that construction and small ag operations were probable culprits. I just have to note that there's not been a lot of construction activity in that part of the state, probably since about 2008. That's the reason that I asked if there had been any follow-up within a couple of years.

Melanie Williams: There has been continued construction in the area and some of the urban area. Not a significant amount but there has been some.

Dr. Peterson: On behalf of the Water Quality Committee I would like to make a motion that we approve the requested action. **Dr. Larkin** seconded.

Chairman Smith: I have a couple of quick questions on the pH balance attempting to pinpoint the sources of the pH balance. What does that entail? How do you go about doing that?

Melanie Williams: We have been thinking about coming up with some sort of plan but nothing has been done at this point.

Chairman Smith: It's a tough problem. Is the Ore Knob Mine an active mine?

Melanie Williams: No, it is not. It was actually closed in the 1970s.

Chairman Smith: What sort of mine was it?

Melanie Williams: Copper and zinc, I believe.

Chairman Smith: Any other questions? No further questions and the motion carried.

11-31 Request to Proceed to Public Hearing with the Proposed Classification of Neuse River and Associated Quarry in Johnston County to Class WS-IV (PA) and WS-IV CA

Chairman Smith: We have a slight change on that. As you all no doubt remember the amended 150B 19.1e says, "Each agency shall (and agency is defined so that for this purpose, the Environmental Management Commission is an agency.) Each agency shall quantify the cost and benefits to all parties of a proposed rule to the greatest extent possible. Prior to submission of the proposed rule for publication the agency shall review the details of any fiscal note prepared in connection with the proposed rule with the rulemaking body and the rulemaking body must approve the fiscal note before submission." So one of the things that will come before us in this action item will be the question of approval of the fiscal note that has now been completed and been reviewed by the Office of State Budget and Management. Is that correct?

Elizabeth Kountis: It has not gone to OSBM yet. It has gone through our comments here, though.

Chairman Smith: Thank you. Let us hear from you then so you can straighten out what I may have just scrambled.

Summary (Elizabeth Kountis): I am here to ask the Commission for approval of the fiscal note for this proposed reclassification and permission to send the proposal out to public hearing. The request received from Johnston County is for two portions of the Neuse River and an abandoned quarry within Johnston County. The quarry is to receive water from a proposed Neuse River intake, and is to be reclassified from Class C to WS-IV CA. One portion of the Neuse River is to be reclassified from WS-IV Protected Area to WS-IV Critical Area and a second portion of the Neuse River is to be reclassified from WS-V to WS-IV Protected Area. The quarry's proposed boundary of this Critical Area consists of the top of the quarry. There is a portion of the watershed draining to the intake, which exists between the intake's proposed CA and the proposed PA that is already classified as Protected Area for an existing downstream WS-IV intake on the Neuse River. This reclassification is needed to construct the intake and utilize the water in the quarry as a public water supply. This new water supply source is intended to meet water demands anticipated through 2050, and therefore, this proposal serves the public interest per Executive Order #70 and SL 2011-398.

Comments on the proposed water supply from the Division of Water Resources' Public Water Supply Section (formerly with the Division of Environmental Health) were sought as required by rule. They support the proposal. The Division of Water Resources' In Stream Flow Unit (formerly the In Stream Flow Branch) was also consulted, although not required by rule, and, based on the project's Environmental Assessment, concurs with the reclassification. The project's Environmental Assessment did receive a Finding of No Significant Impact, or FNSI. According to 2011 Division of Water Quality studies, the subject waters do indeed meet water supply standards, except for high chloride levels found in the quarry. These levels have likely been caused by high rates of evaporation and long residence times of water in the quarry. Dilution and shorter residence times of water in the quarry that will occur after river water is pumped into the quarry should result in reduced chloride levels.

If the subject areas are reclassified, wastewater discharge and new development requirements will need to be implemented. Furthermore, in the Critical Areas only, additional treatment will be required for new industrial process wastewater discharges, and no new landfills or land application sites will be allowed.

There are currently no proposed land application sites or landfills in the proposed CAs, and no existing or proposed wastewater discharges in the proposed water supply areas. Furthermore, there are not any known planned developments in these areas. The areas to be reclassified are generally undeveloped with limited crop lands.

In addition, if the proposed areas are reclassified, Johnston County would be the only local government that would have to alter its water supply watershed protection ordinance to reflect the reclassification's requirements, because it is the only local government with jurisdiction in the proposed areas. Furthermore, because Johnston County submitted the reclassification request, it does not need to submit a resolution to the Division of Water Quality. As a reminder, a resolution indicates if a potentially impacted local government will administer water supply rules

within its jurisdiction once a water supply reclassification becomes effective. The fiscal analysis drafted for this proposal revealed a one-time cost of about \$600 to the state and \$500 to Johnston County. These amounts are well below the new threshold for substantial economic impact of \$500,000; however, a Fiscal Note was prepared and has been reviewed with the Department's Economist. The Office of State Budget and Management, which has final approval of the Fiscal Note, has indicated that they will be requiring Fiscal Notes for all rulemaking, regardless of economic impact, and that, per SL 2011-398, the EMC, as the rule-making body, must approve the Fiscal Note before approving the rulemaking to proceed to public notice and hearing.

At this time, we are requesting that the EMC approve the fiscal note for this proposal and approve sending the proposal out to public hearing. The proposed reclassification's effective date is estimated to be July 1, 2012. I would be happy to answer any questions that you may have.

Chairman Smith: asked for questions.

Dr. Peterson: I have a question unresponsive but the Water Quality Committee unanimously endorsed bringing this to the full Commission for their approval. I make a motion that the EMC approve the request and proceed to public hearing with this reclassification. **Mr. Ellis** seconded.

Chairman Smith: asked for discussion.

Steve Tedder: Does that include the fiscal note?

Dr. Peterson: It does indeed. That should have been the first part of my motion, approve the fiscal note and approve the request to move to public hearing. **Mr. Ellis** seconded.

Chairman Smith: asked for further discussion and a vote. The vote was unanimous and the motion carried.

Dr. Peterson reminds me that I neglected to call for approval of the minutes from the July 4, 2011 Commission meeting. With that I ask if there are any amendments to the July 14, 2011 minutes. May I have a motion?

Mayor Moss: I make a motion to approve the minutes. **Dr. Peterson** seconded.

Chairman Smith: thank everyone and asked for a vote. The vote was unanimous and the motion carried.

11-32 Request Approval of the Reclassification of the French Broad River (Henderson County) to Class Water Supply-IV Critical Area

Summary (Jamie McNeese): In November 2010 and January 2011 the Water Quality Committee and the Commission approved the reclassification to proceed to rulemaking for this proposed WS-IV critical area. The reclassification of the French Broad River segment in Henderson County was in the French Broad River Basin. This request was submitted by the City of Hendersonville and the reason for the reclassification was to provide the city with an emergency source of drinking water. If these waters are reclassified Henderson County, along with the local government with

jurisdiction in the WS watershed, will be required to modify its water supply watershed protection ordinances within 270 days of the reclassification effective date. Henderson County has already agreed to do so. A public comment period without a hearing was requested because of the two existing water supplies with 1.9 miles upstream. There are no existing or proposed dischargers and no proposed development in the small plain 2-1/2 acre critical area. No comments were received during our comment period. The report of proceedings which was sent to each EMC member prior to today's meeting completes further details on the proposed reclassification. DWQ staff recommends the proposed reclassification of the French Broad River as described in the agenda item and the report of proceedings be approved. If reclassified the proposed effective date is December 1, 2011.

Chairman Smith: asked for questions.

Steve Tedder: You're requesting to proceed without a public hearing?

Jamie McNeas: We're requesting that you adopt it. It has already gone without the public hearing. It's already gone through the comment period.

Steve Tedder: But there has not been a public hearing?

Jamie McNeas: No public hearing was held.

Steve Tedder: I guess Boylston Creek and others creep into mind when I think of reclassifications, especially without a public hearing. Just as a thought.

Chairman Smith: Other comments or questions?

Dr. Peterson: The Water Quality Committee did examine this issue and the Water Quality Committee was unanimous in support of reclassification pending the outcome of the comment period. I make a motion that we indeed approve the reclassification of the French Broad River in this particular area to provide a critical area for emergency water supply. **Dr. Larkin** seconded.

Chairman Smith: asked for further discussion and a vote. The vote was unanimous and the motion carried.

11-33 Request for Declaratory Ruling on the Application of the Water Supply Watershed Protection Rules to a Proposed Development in the High Quality Water Watershed of Mill Creek in the Town of Southern Pines

Petitioners Esther W. Frye and the Moore County Wildlife and Conservation Club, Inc. submitted a request for a declaratory ruling, pursuant to N.C.G.S. § 150B-4 and 15A NCAC 2I .0602, *et seq.*, on August 25, 2011, and asked the Commission to issue a declaratory ruling on the applicability of certain Commission rules and to determine that the Town of Southern Pines must subtract the entire proposed project area of the Tyler's Ridge development from the Town's 5/70 allocation. By Order of the Chairman dated August 26, 2011, the Town of Southern Pines was allowed to intervene in the proceeding pursuant to 15A NCAC 2I .0602(d) and 150B-23(d).

Marsh Smith, Esq., appeared and presented oral argument on behalf of Petitioners. Assistant Attorney General Brenda E. Menard appeared and presented oral argument on behalf of the Division of Water Quality. Craig Bromby, Esq., Hunton & Williams LLP, appeared and presented oral argument on behalf of the Intervenor.

After receipt of extensive briefing materials and hearing from Petitioners, Intervenor, and the Division, the Commission, by proper motion and majority vote, "clarified" that, based on the correspondence submitted by the Parties, there was no inconsistency in the Division staff's position regarding the interpretation of the rules identified in the request and granted the request for declaratory ruling.

The Commission then proceeded to the merits of the request for declaratory ruling on the applicability to the proposed Tyler's Ridge development of EMC rules 15A NCAC 2B .0202(16); 15A NCAC 2B .0215 (3)(b)(i)(A); 15A NCAC 2B .0215 (3)(b)(i)(D)(I); 15A NCAC 2B .0215 (3)(b)(i)(E); and 15A NCAC 2B .0311(m).

As a preliminary matter in ruling on the merits of the Petition, the Commission considered Intervenor's Motion to Strike the affidavit of Donald G. Frye. The Commission, by proper motion and majority vote, denied the Motion to Strike.

Based upon review of the record documents and oral presentations regarding the facts and applicable regulations, the Commission, upon proper motion and majority vote, determined that the proposed application of 15A NCAC 2B .0215 and 15A NCAC 2B.0311 is correct under the facts presented by the Parties in this proceeding, and Intervenor may choose to allocate acreage from its 5/70 allocation for only the commercial project within the proposed Tyler's Ridge development.

The Commission directed its legal counsel to work with the Chairman to draft the Declaratory Ruling document based upon the written submissions and oral arguments of the parties.

Chairman Smith: One additional brief note is that I neglected to publicly acknowledge Ms. Hauser's invaluable counsel and guidance as we worked our way through those various issues. I don't know that we would have made it, at least not as cleanly as I think we did without her help.

We move to the Information Items. This is partly an ongoing education process for the Commission, partly in response to a request by a couple of you to have additional information on the 303(d) process. What I've asked is that DWQ start with the very basics and assume that we don't know anything about the 303(d) process even though we may, and then work their way up from there. For those of you who understand the 303(d) process and what it is, some of this will be elementary. But that's at my request. So be patient and bear with us. I expect that we will also hear an additional presentation down the road no later than March but maybe before then. But for now we're going to begin with Jay and then move through two additional people. Let me ask you to hold your questions until the presentation is over. The reason is that we may have individually various issues that we want to explore. I'd like for us to get through the overall presentation before we start drilling down on particular subsections that we may have individual interest in.

II. Information Items

11-08 Clean Water Act Section 303(d) Overview

Summary (Jay Sauber): My name is Jay Sauber and I am Chief of the Environmental Sciences Section. It is not very often we get an opportunity to talk to you about an educational informational item with as much importance as Section 303(d) of the Clean Water Act. In fact it's not very often that we get to talk to you about the Clean Water Act at all. It's an incredible piece of legislation from the 1970s, similar to a number of legislative and congressional acts during that time period. It was a very lofty and idealistic development in the nation and it is still such today. But even though the Clean Water Act has been around nearly 40 years it has been a dynamic Act.

Through the efforts of the US Environmental Protection Agency and the Code of Federal Regulations, various congressional appropriations decisions and a copious amount of litigation Section 303(d) of that Act has changed dramatically in the way it has been implemented over time and has changed dramatically in the way that the Division of Water Quality has utilized the information in Section 303(d). In order to set the stage for this 303(d) presentation we thought it might be very helpful to begin with a perspective on some of the scientific data collection practices that form the start of the 303(d) methodology listing and TMDL process.

I will be going through a number of the components that the Division of Water Quality uses to amass the data and information necessary to make those 303(d) listing decisions and the subsequent TMDL processes. After my presentation Kathy Stecker will join me here at the podium and will be discussing specifics about the 303(d) process and the TMDLs associated with that. Then following Kathy's portion of this presentation we'll hear from Director Sullins with some remarks.

The monitoring that the state does and the monitoring that is done by others within the state has principally occurred through Section 305(b) of the Clean Water Act which essentially requires the state to monitor all the waters of the state and report on the conditions of those waters. The 303(d) section as Kathy will talk to you about momentarily, particularly focuses on those waters which are considered impaired. The data collections which we have in North Carolina, that are performed by the state, focus on a vast number of different water quality variables. We often call those water quality parameters. We collect both compliance information, the parameters that are defined in the water quality standards and we also collect diagnostic parameters as well. An example of a numerical water quality standard would be something like dissolved oxygen or pH. But we also collect information to help us diagnose the ecological issues that are going on in the state. Examples of those kinds of parameters might be something like total phosphorous or secchi depth, a measure of water clarity. In addition to those chemical/physical types of measurements we also collect information that helps us interpret and evaluate whether or not our narrative water quality standards are being met. Along those lines we do a lot of biological monitoring work that speaks to the definition of aquatic life support, and assessments on fish and shellfish consumption as well.

I'm going to try and avoid using a lot of scientific speak, acronyms, and jargon. We are going to try and give you an overview of the kind of information and data that the Environmental Sciences Section and our regional offices collect as part of the front end loading of information that goes into the 303(d) decision making process. We have a number of different approaches on that. Each of those is like a different tool in a tool box that helps us make some holistic

assessments on the ecology as well as detailed assessments on attainment of water quality standards. That data principally comes from the Division of Water Quality. We collect the vast amount of the data that makes up consideration for the 303(d) process. We do indeed, however, include evaluations of all available data and information as part of that process, but the vast amount of it comes from the Environmental Sciences Section and our regional offices. We have in the audience with us today our leaders and supervisors from the Environmental Sciences Section that are responsible for a number of the programs that I'm going to go through. So if you have questions later we'd really appreciate you jotting those down now so that we don't lose them along the way. We hope you sit back and get comfortable. We do have about an hour long presentation between Kathy and me, and Director Sullins. Please jot down your questions. If it's not appropriate to bring those up later in the discussion or the focus isn't quite comfortable please send them directly to us and we'll make sure you get the information and additional background you need to address your questions. We're not going to go through all of our programs. If we were to do that in a workshop-like setting it would take us about 3-1/2 hours. We have done that before and we will spare you some mercy in that regard. We will try to get through this portion of the presentation in about 15 minutes.

Our ambient lakes monitoring program like the rest of our programs feeds into the 303(d) process and covers approximately 160 significant lakes in the state. These lakes are sampled approximately five times during a particular summer. Each year we sample approximately 25-30 lakes and we rotate around the state with our basinwide assessment process. Thus we sample these 160 lakes about every five years. Of course, Jordan Lake and Falls Lake, and High Rock Lake, which you've heard so much about in your previous discussions, are very special lakes because we have a great deal of monitoring coverage on those, and we're out there on Jordan and Falls monthly, and High Rock Lake we've done a number of special studies on. Our ambient lakes are mostly composed of the state's reservoirs. We have very few natural lakes. Most of our reservoirs in the state are monitored in the mountains and the piedmont. The coastal plain is where you will find our natural lakes such as Lake Phelps, Lake Waccamaw and others. Our principal efforts over the past few decades on our lake monitoring have been to focus and target our issues on biological productivity. We call that tropic state analyses and we use four particular parameters that help us rank our lakes across the state based on their biological productivity. Clearly you've had issues with Jordan Lake and Falls Lake and High Rock on your agendas. That is because they are some of the most biologically productive lakes in the state.

In addition to our lakes program we have a statewide ambient monitoring program. We have monthly sampling at these locations across the state. These stations are typically located at bridge crossings or other publicly accessible areas, so we don't have to worry about private property access. We also monitor our estuaries by boats. Our ambient monitoring program also has a sister program which is our monitoring coalition program. Carrie Rhulman, here in the audience with us today, coordinates that program. Between the two of those ambient programs we have approximately 600 locations around the state that are sampled monthly. Covering the 17 river basins is broken down by about 323 stations for our DWQ monitoring activities and about 270 locations for our coalition program. Our coalition program began in 1994 and it is a voluntary program. The state's NPDES dischargers with self monitoring requirements in their NPDES permits can form a Memorandum of Agreement with DWQ to monitor within a particular basin in a holistic manner. Rather than monitoring simply upstream and downstream of their wastewater treatment discharge location they work with DWQ biologists and staff to design a basinwide monitoring program that gives us higher quality and better organized data

that is then streamed in to DWQ electronically. If you will, we leverage our resources, we have two staff positions to coordinate the monitoring Coalition program, but we get the benefit of approximately 270 stations statewide through that cooperation. The water quality monitoring stations are sampled approximately monthly by our coalitions. Our coalitions are composed of the Lower Neuse River Basin program, the Tar Pamlico Program, three Cape Fear River Programs- the Upper, Middle, and Lower Cape Fear River programs. and the Yadkin River Basin program. And, as you heard earlier this morning, we also have a new coalition program in the New River Basin.

In addition to the physical/chemical work we also have programs that directly measure the evaluation of aquatic life support. We refer to these programs as our biological monitoring programs. We evaluate streams and rivers using the biological communities that live there. With a little poetic justice, I would tell you that we interview the residents that live in our rivers and streams. We find out whether or not the residents that live there are pollution tolerant or pollution intolerant. We do that principally through the analysis of benthic macroinvertebrates, fish tissue contaminants, stream fish community assessment, and assessments of the algae or phytoplankton communities that are living in our streams, lakes and rivers. The benthic macroinvertebrate community analysis that we do is a mature science. It has been used in the United States for approximately sixty years. We focus on the identification of the individuals that are located in that water body and we have various standard operating procedures, rules and quality assurance documents that ensures that we do our work in a high quality manner. Benthic macroinvertebrates are found in all aquatic habitats. We have many historic records of the ecology of these organisms and it is indeed a direct measure of the waters ability to sustain the aquatic life. Benthic macroinvertebrates also give us some indications about the particular stressors that may be having an effect on a particular aquatic community - whether it is low dissolved oxygen, organic waste or metals. We take the information from the community structure analysis of these benthic macroinvertebrate organisms and we develop different indices to help us rank those communities according to their biological health. If that community is excellent, good or good-fair then we consider those waters not impaired. If that community is fair or poor we consider those not meeting the aquatic life requirements of the water quality standards and we call those impaired.

Similarly we have a program for fish tissue contaminant assessment. It also addresses the nature of our narrative water quality standards along the general lines of water should be fishable. Fishable also includes consumable. Special studies target fish tissue for such things as heavy metals, pesticides, PCBs, mercury. As with our other water quality data collection programs, we have strong quality assurance documents and quality assurance project plans that ensure that our data is being collected by approved, appropriate methods, and that we understand the variability of that data. We also need to understand the potential consequences of any uncertainties that we have in the collection of our biological information. As with benthic macroinvertebrates we also do stream fish community assessment. We look at the individuals that are located in that stream and through an analysis of an index of biotic integrity we also rate the ecological health of that stream with fish.

It is possible for DWQ to have streams and rivers where our fish assessments do not necessarily agree with our benthic macroinvertebrate assessments. We try to work out those differences with our biologists in order to come up with a decision of whether or not the aquatic life, in general, is meeting designated uses.

In terms of our algae (phytoplankton) and aquatic plant assessment, that is mostly done through episode monitoring. Episode monitoring generally happens when we get reports of fish kills, algae blooms or nuisance aquatic plant growth. We may get odor complaints from a raw water drinking source or perhaps citizens will notice that the overall appearance of their water body isn't quite what they're used to and they may see an algae bloom floating on the surface. We have experts in both fresh and estuarine waters that can identify algae, tell us what the ecology of that algal system is and whether or not we can expect potentially toxic problems or other nuisance problems.

In summary, from the DWQ water quality monitoring data collection efforts, that is streamed into the 303(d) process:

- We collect at about 600 ambient locations monthly.
- We have about 25-30 lakes that we evaluate each year or about 600 sites per year.
- We do monthly monitoring at Jordan and Falls Lake.
- We do about 150 macroinvertebrate locations every year.
- We do about 25 fish tissue locations each year,
- We do about 75 fish community analyses locations each year and about 600 samples for algal analysis in a typical year.

All of this data and information is summarized every five years for each river basin. This information is summarized in what we call the Environmental Sciences Section Basinwide Assessment Document. This document is a precursor, if you will, to the basinwide planning documents that you are so familiar with.

In addition to that, every two years the most recent five years of all of that data is amassed into an assessment for the front end information for the 303(d) process. Thus for each 303(d) assessment process we produce somewhere between 500,000 – 1,000,000 observations. With that I am going to transition to Kathy and let Kathy take you through the 303(d) process, and ask that any questions you have please bring them up later or just send them to me after the Commission meeting today. Thank you.

Kathy Stecker: Now that you've heard about all the data that we collect I'm going to talk about some of the ways that we use the data. Here's where the 303(d) list and the TMDLs appear in the Clean Water Act. They've been requirements since 1972 as Jay mentioned. They're state responsibilities. They're not EPA responsibilities that can be delegated to the state. Both the list and the requirements for TMDLs are part of Section 303(d). That's the list of waters that don't meet water quality standards and TMDLs for all the water and pollutants on that list. I just wanted to mention some of the regulatory implications up front here. From federal regulations if a water body is 303(d) listed then that means anybody with an NPDES permit can't add more of the impairing pollutant to that water body. Further, with any approved TMDLs any NPDES waste water or stormwater permits after that have to be consistent with those TMDLs.

Now I'm going to talk about the 303(d) process with some of the other elements of the Clean Water Act. On this list of the 303(d) in context are (1) adopt, review standards, (2) monitor and collect data, (3) assess data against standards on 303(d) list and other reports, (4) plan and act to protect and restore with 303(d) TMDLs, other plans and actions, (5) measure progress and assess effectiveness. You are familiar with how the state adopts instream water quality standards. You just heard about all the data we collect. We're assessing the data against the standards, so comparing the data with our water quality standards and we can do a lot with those assessments. But one of the things that we do is develop the 303(d) list of waters that don't meet standards.

We can use our assessment results in number 4 to develop total maximum daily loads or other plans and actions to protect and restore water quality. All along we are measuring and tracking our progress, assessing the effectiveness and it's a continuous cycle from standards to monitoring, assessment, acting, tracking and then back to reviewing and revising (if necessary) the water quality standards. Because the 303(d) programs are so linked to standards I wanted to provide this quick overview of the elements of water quality standards. They're composed of three parts: the uses to be made of a water body, and then the criteria to protect those uses (which can be narrative or numeric), and an anti-degradation policy. I will not talk about the anti-degradation here today.

So, in our assessment methodology for the 303(d) list, we base that on the state adopted standards and we apply the numeric and narrative criteria in the standards. Some uses that we do assess are aquatic life, recreation, fish and shellfish consumption and water supply. Then I'm also giving you some examples of numeric and narrative criteria under aquatic life that you might be familiar with: the numeric for dissolved oxygen and chlorophyll, for example, and what you've just heard about the macroinvertebrate and fish communities for narrative. The 303(d) list is due April 1st of every even-numbered year. There's that statewide assessment on five years of data and that is 2006 – 2010 for the 2012 list. This is the same assessment used for the basin plans in conjunction with the reports Jay discussed. As he mentioned it's between 500,000 and 1,000,000 observations that are considered in these assessments. It's pretty much a continuous process. With each two year cycle we get new federal clarifying guidance from EPA on how to develop these lists. There's a lot of internal and external review that goes into the assessment methodology as well as the 303(d) list itself. Some of the early list draft reviewers include the Division of Soil and Water Conservation and Division of Environmental Health. There's also a public review and comment period for the assessment methodology and the 303(d) list. We have to compile the comments and responses to those comments and submit that with our 303(d) list and assessment methodology to EPA. We do make revisions all along the way based on these reviews and the comments we receive. Some of the required elements are public comment and the requirement to evaluate all existing and readily available data. In 2010, twenty-seven commenters submitted comments to us on the 303(d) list. Typical comments that we receive are suggestions for additional listings and suggestions for not including certain waters on the list. We get requests for clarifications of the assessment methodology and we get information where people think they know what pollutant source might be contributing to the impairment. Then we get requests to further study some of the impairments. The division and our partners collect a lot of data but we also accept other outside data if it meets our strict quality requirements for using it for decision making. We also have to provide good reasons for not listing certain waters or de-listing them once they're on the list. I will give you a few examples of what could be considered good cause: if we collect more recent data that does not show impairment, or if we have developed a TMDL and it has been approved, or if there is some other requirement that is expected to result in water quality standards attainment, we can remove those from the list. We can document natural conditions under our water quality standards and remove those waters from the list as well. In addition to the EPA approval, EPA also conducts their own independent assessment of our data. They can add waters to the list if they believe they should be on the list and we have not put them there. If they disapprove our list then they have to make it for us. So where are we now with the 2012 list? We've completed the data collection for the 2012 list. We have pretty much completed the assessment for that list. Pretty soon we'll distribute the draft list for internal review and in January the public comment period will begin.

We'll revise the list as needed and submit it to EPA by April 1, 2012. Throughout all of this two- year process EPA has been and will continue to be involved. That's EPA Region 4 in Atlanta. We try to work with them up front to minimize delays in getting approval of the list.

Now I am going to move from the 303(d) list to the other key part of Section 303(d), total maximum daily loads or TMDLs. I want to introduce this part by saying that as of today over 45,000 TMDLs have been developed nationally. The number of TMDLs developed and approved is one measure by which EPA's performance is judged. The number of TMDLs developed or established by EPA is tracked regionally and nationally as well as by state. Some of EPA's funding is tied to meeting a certain TMDL pace. The states are accountable through their 106 grant work plans. That's a large annual grant that we get from EPA. So since 1995 North Carolina has had about 250 TMDLs approved. EPA expects us to develop at least 80 per year. We cannot do that with our existing resources so each year we negotiate a commitment for the coming year with EPA, and lately it has run around 25. The definition of a total maximum daily load is the maximum amount of a particular pollutant that a water body can receive and still meet water quality standards. So you might think of the TMDL as determining the size of a pie, the maximum amount that a water body can receive and meet standards. So I've listed some of the requirement elements and I want to emphasize that it is required for us to identify the allowable loading from non-point sources as well as point sources. Non-point source reductions are specified in every TMDL where there are non-point source contributions. However, the Clean Water Act cannot compel compliance with those loads that are allocated to non-point sources. For implementation of the non-point source components of TMDLs, federal grant money is available and there are other funding priorities available. Those may also be addressed through other means like rulemaking. TMDLs must contain a margin of safety and there is a required public review and comment process similar to that which I described for the 303(d) list. So what happens if states don't develop TMDLs or develop them too slowly? There've been third party lawsuits in 35 states because the pace of TMDL development has been too slow. These have resulted in consent decrees and unrealistic schedules that have been mandated by federal judges. Under these conditions the state and EPA must develop many TMDLs quickly. To date, North Carolina has not been sued for this reason. When EPA develops TMDLs for states, the states must implement them. I have included in your materials some examples of water quality impairments that have been addressed by TMDLs in North Carolina. As with the 303(d) list EPA must approve each TMDL. If they disapprove the TMDL they must develop that TMDL for the state. An implementation plan is not required but we use them a lot to help explain how the TMDL will be implemented through any applicable permit, how it will inform any rulemaking that will be undertaken and also to guide any funding decisions for the non-point source component. Wherever possible we like for TMDLs to be collaborative. We do have situations where local partnerships approach us and want to work with us to develop TMDLs. The local involvement can ensure that the non-point source parts are implemented. Some of you might remember hearing about this particular example when we talked about the Lumber River Basin Plan. The partners in this case, Lockwood's Folly River, recruited and trained volunteers to help pinpoint the sources of bacteria. An implementation of Best Management Practices to control the non-point sources began in 2009. There are other examples from around the state of similar collaborations with local government, with Soil and Water Conservation districts and other groups. Many involved the award of Section 319 Grant Funds for non-point sources for the development and implementation of those TMDLs. Organizations like Ecosystems Enhancement Program also use this information and approved TMDLs can help prioritize

various organization's projects. I'm going to close by giving a little bit of a history here, a summary of the sequence of events in North Carolina. Section 303(d), as I said, was in the original Clean Water Act in 1972. The oldest North Carolina 303(d) list that I could find is from 1990. The first TMDL for North Carolina was approved in 1995 which was the Tar-Pamlico nutrient TMDL. In 1997 the Clean Water Responsibility Act Session Law 1997 458 made sweeping changes to statutes that implement water quality protections including some additions to the duties of the EMC including this one: that the EMC shall implement Section 303(d) and 303(e) of the Clean Water Act. Now I'm going to turn it over to Director Sullins.

Coleen Sullins: Good afternoon everyone. I just wanted to make a few brief remarks, because I know this particular issue the 303(d) listing impairing waters and TMDLs are of a great deal of interest to a fair number of people. So there were a few things that I specifically wanted to cover and I'll come back to the Clean Water Responsibility Act in just a moment. But I did want to emphasize a few things that may not have been as clear in some of the presentations how staff intends this effort. It really is a very staff intensive effort to develop the 303(d) list. It involves a tremendous amount of information as you have seen and it's also very interactive with EPA. EPA comes out with guidance on the development of the 303(d) list every other year and our guidance for the 2012 list, which is due April 1, 2012, came to us July 11, 2011. I would say that the state doesn't wait until we get written guidance from EPA. We have regular ongoing phone calls with them, multiple phone calls on a monthly basis to discuss the issues in terms of moving forward. Those discussions can get quite interesting over that time so there's a fair amount of technical debate that we have back and forth over the development of that. I also want to stress the 303(d) list is actually an implementation of your standards. So the rules that you develop of standards and as you know we are in the midst of trying to revise our water quality standards specifically for metals. Part of the reason for that is as a result of EPA's determination of the implementation of our standards as being acute level standards whereas, in fact they are chronic level standards, and we're trying to address that issue because it has resulted in listing of waters that we do not believe should be listed based on the application as an acute standard. So that's one of the reasons why we are attempting, through the Triennial Review Process, to address the metal standards that have not been addressed in many years. So what we are actually doing is implementing your rules in making the 303(d) determinations. There's a lot of information in the basinwide planning documents that come to you on almost every Commission meeting, we have at least one basinwide planning document including the New River today. Has the assessment methodology been incorporated in that? We have not focused on presenting the assessment methodology and that may be something that you would like us to come back and discuss in further detail at a future meeting. We felt like we needed to start with just certain elements of the program before we dove in too deep and got feedback from you all as to what you would like to hear from us. I want to say this about the TMDL process: I believe there's a perception out there that TMDLs are unfair to the point sources and the point sources have to address the non-point source load, and that's not true. TMDLs do have to be implemented to NPDES permits, but it is just the point source load component of it that has to be implemented. Under the North Carolina Statutes that were put into place during the 1997 revisions to the General Statutes, there're statements that require that all sources jointly share the responsibility for reducing the load in a fair, equitable, reasonable and proportionate manner. In other words, if you contribute 50% of the problem you have to address 50% of the problem regardless of whether you are a point source or non-point source. The North Carolina Statutes specifically do

require that non-point sources carry their fair share in terms of reductions, and you all have done that in significant management strategies that have been put into place: Jordan Lake, Falls Lake to name a few recent ones. But you have been doing that, the Neuse River is another example where you've put into place management strategies specifically to require all sources to reduce their loads. So TMDLs as Kathy indicated are just that. They divvy up the load. The federal government only requires TMDLs to be implemented through NPDES permits because the Clean Water Act does not specifically regulate non-point sources. That may be part of what's driving that issue. I would say that while TMDLs do create a requirement for the NPDES permitted community, they also create flexibility for us in terms of how we can implement things. Whereas when we have an impaired water body as Kathy indicated we are not allowed to add any additional pollutant that is causing the impairment. So NPDES dischargers cannot expand or new ones come in if they're going to have that pollutant in their discharge. There are pros and cons to TMDLs and we can probably discuss that for a long time. The bottom line here is that assessment is key to these decisions and the assessment is being done under the EMC's rules specifically. It is the implementation of the rules. There are obviously a variety of issues that we could continue, bring forward to you under the Clean Water Responsibility Act. I looked back just briefly to see what else was addressed other than this particular issue about the 303(d) and 303(e) requirements. Moratoriums on CAFOs, the CAFO Citing Act requirements, ag zoning issues, odor emissions, if you recall the EMC had to develop odor regulations, nitrogen and phosphorous requirement for dischargers and NSWs. Basin planning was recognized. This particular section of the act put into place for the first time an acknowledgement of the 303(d) and 303(e) process into the act. Prior to 1997 staff had been implementing these components of the Clean Water Act and we continued with the implementation, not recognizing that the EMC may desire a specific nod to this particular statute as to how that implementation was going forth. We have been addressing these issues due to the basin planning process and if that's a process that you want to sub-divide out further to have further conversations about the implementation; we certainly are interested in coming back. I'm not going to try and answer your technical questions. I'm going to let the technical staff assist in answering any of the questions. Thank you.

Chairman Smith: Thanks to Mr. Sauber, Ms. Stecker and Ms. Sullins. Do you have questions?

Les Hall: There was a discussion of concentration of mercury contamination. How pervasive is that across the waters of North Carolina in the fishery?

Kathy Stecker: It's quite pervasive. Initially we only looked in the southeastern part of the state but as we looked across the state even to the west into the mountains, we're finding high levels of mercury in the predator fish.

Les Hall: Ok. How many miles of 303(d) streams do we have in North Carolina? The follow-up to that is are they increasing or decreasing?

Chairman Smith: You probably ought to answer that in two parts, one other than mercury.

Kathy Stecker: Yes, thank you. I can't answer it directly. I don't have it here but I can get you that information. The information I brought was of the waters that we assessed, the percentages

that have been determined to be impaired. For streams and rivers we divide them up into assessment units so 4.4% of the assessment units that are in streams and rivers are impaired. There are 19% of freshwater lakes, 16% of the Atlantic Coast and 42% of the estuaries.

Les Hall: Is that percentage going up or downward?

Kathy Stecker: It's really hard to track because we monitor in different places so it's shifting and we have ways that we can estimate overall if it's going up or down. But there are changes in assessment methodologies and additions of new monitoring stations so it's really hard to say.

Chairman Smith: Other questions?

Dickson Phillips: I was going to ask a similar question as Mr. Hall about trends and etc. So your final statement should lead us to understand that it's really not clear one way or the other as to whether we have higher rates in impairment or not over time.

Kathy Stecker: That's what I would say, yes.

Dickson Phillips: Ok.

Steve Tedder: Let me just follow up a little bit on Mr. Hall's comment and I think that was well placed. There are changes to the methodology on a fairly regular basis, probably about every two years or every time it has to be presented to EPA. That does make it difficult if not impossible to use this as what should be a very good tool to see if our practices, our rules, our standards are being successful or not within the state. So obviously the changes in the methodology are extremely important. It may meet the intent of EPA for that two year period how well it really meets the intent for water quality in North Carolina. I'm not real sure because you can't compare over years. I know it's been attempted but it just can't be done. My biggest concern and I noticed when the slide was up there, the reviewers and everybody, about everybody was on the list except the Commission. I go back to this particular part of the statutes which to me clearly puts it under the purview of the Commission to have significant input into the 303(d) process. I'm not sure that happens. I would almost say that it does not happen and that's my primary concern for even asking for the presentation. Maybe at our future meeting getting more details and an understanding of the methodology, which that's what drives the point. Once you have the methodology and some concurrence there turning the numbers and coming out with a list would be fairly straightforward. The most of the concerns that I've heard over the last years is more concerns about the methods themselves, input to the methods and I think it's something that this Commission could address. It's done in different ways in different states. I've looked at four or five states' 303(d) methodology. They're all different and they're all approved by EPA. There is some flexibility there. Some such as Florida have even gone to the extent of putting their methods in the rules so that it does not necessarily change every two years, and they can get more bang for their buck for the effort, because there is a tremendous amount of monitoring done in this state. Probably, as much, if not more and probably anywhere in the country except maybe the Chesapeake.

The wealth of information is there. How it is interpreted to reflect the standards of this

Commission are the crux of the matter and how much involvement the Commission has in that process crux of the matter, and that's the reason I brought the issue up.

Chairman Smith: I think both your suggestion and Ms. Sullins that we have additional information on methodology is a good one. I will follow up with you, Ms. Sullins, on scheduling a follow-up presentation to go into some detail on that.

Donnie Brewer: Is there a way to have a subset, like a baseline subset, so that you are comparing and over time you could get an idea of a trend? It may not be conclusive.

Kathy Stecker: Yes. I'm really glad you asked that because I neglected to say that the 303(d) list may not be the ideal way to track changes in water quality. So through our strategic planning and other means we are doing exactly what you said. We're also doing that through our random monitoring trying to get a snapshot of overall statistically how the water quality is.

Donnie Brewer: Maybe you could share some of that information next time too.

Ms. Deerhake: I'm sure I don't fully understand the TMDL process but it seems to me over the years that what we need to be measuring in terms of the performance of the TMDL process is the number of waters that are restored and can have the TMDL removed. It's not just a problem in North Carolina but it's around the country. The program is in place but the rate of restoration, complete restoration is not being tracked or measured. Maybe it is being but the outcome is just not necessarily being achieved as successfully as we would hope on the TMDL. In terms of delisting due to restoration is there any measure such as that in North Carolina?

Kathy Stecker: Yes we do track that. We have a database that we track.

Ms. Deerhake: Are we delisting? Is EPA delisting?

Kathy Stecker: Yes. Sometimes without going through the TMDL process, if it's an easy to address problem that's discovered locally, we do see restoration without going through that process.

Ms. Deerhake: That would be an informative measure for us to know about how well the programs are working.

Chairman Smith: That's a good point. Thank you.

Steve Tedder: A good point as far as following on the delisting. I think that is very important for some of the waters. It would be very important too as the process to do that. What's equally as important is what puts it on the list. I know in North Carolina ten percent; at least for the chemical lab is a magic number. Well it's not magic; it's a number that was agreed upon between the state and EPA. Other states use other percentages. What puts it on? If you don't put it on there you don't have to take it off. So that's the reason I think the front end is the important part of the process and also confidence levels. The reports that Jay mentioned earlier, if you go through those assessment reports, it gives you very detailed information on the

parametric coverage and the confidence levels as to whether how many times has it really exceeded the standards based on the number of samples. That's an important, to me scientific factor to work into the 303(d) process to make that methodology more sound. I'm not going to get into a lot of the gory details but your point is well taken. I totally agree but down at the front end it's just about as equally as important.

Les Hall: Just a clarification. As I understood your presentation you said if you put a TMDL on a stream you could control the NPDES contributions from the point sources. But there's no control over the non-point sources.

Kathy Stecker: Just to be really clear, the TMDL is a federal Clean Water Act tool. So through the same Clean Water Act we can't compel reductions in non-point sources, but as a state we have other ways that we can get at the non-point source portion.

Les Hall: Give me some examples of how you do that.

Kathy Stecker: One example would be to provide funding to local areas where runoff, say from agriculture or other sources are contributing but not covered under an NPDES permit. You all have done it through rulemaking and as Coleen mentioned some of the large management strategies. It's a way that a lot of organizations use to focus either funding or siting to give priority to those places, and that has happened. We get on the order of 2.3 million dollars a year to distribute to help local communities control non-point sources pollution.

Ms Deerhake: A future thought. We have some trading going on in North Carolina. That trading might be one way of helping to address this division between point source and non-point source. If there's an economic incentive to the agricultural community to install BMPs that could offset some of the point source discharges that are impacting the same waters on a larger scale. That might be a mechanism that we could continue to work on.

Chairman Smith: Thank you all. It was a helpful presentation. I appreciate the effort that went into it. That brings us to the end of our information items and actions. We will now move into the committee reports by the committee chairs.

III. Status Reports by EMC Committee Chairmen

A. Air Quality Committee Marion Deerhake, Chairman

We had three concepts yesterday: legislatively driven revisions to the open burning rules; the EPA Cross State Pollution rule which will impact our NOx and SOX emissions in particular. In that case we will be looking at how we need to address the allocation of NOx and SOX emissions that EPA provides on a national scale per state. That will address mostly the electric generating units, the non-electric generating units which are currently under the pre-existing NOx State Implementation Plan budget. EPA is working with the states to identify some way to maintain that program. The third concept was clarifications to the volatile organic compounds rule as to solvent emissions from operations and coating. We had a draft rule that we acted on. The chairman referred to at the beginning of this meeting dealing with the deferral of carbon dioxide emissions from the combustion of biomass, the preventive significant deterioration and

Title V requirements. As he said that will be brought to us in a conference call for the temporary rule. The permanent rule will just follow our regular calendar to vote on that.

Chairman Smith: You Commission members will be receiving even later today or tomorrow the information on that conference call meeting including the proposed rule package and summary description so that you have the materials a week in advance for us to have that call. In addition you will be receiving the conference call call-in information.

B. Water Quality Committee Dr. Charles H. Peterson, Chairman

We did meet yesterday. We had a record short timeframe of thirty five minutes. We approved a major variance from the Neuse River riparian protection rules for additions to a single family residence in Apex. We heard an information update on the progress and so forth on the draft consolidated buffer rule and draft consolidated buffer mitigation rule. We also, using our delegation that was granted by the Commission, approved this year's Coastal Habitat Plan Annual Report and also the Biennial Implementation Plan. That was it.

IV. Concluding Remarks

Dickson Phillips: I wanted to make this comment when we were talking about the Southern Pines matter but it really wasn't relevant material. I did want to express and somewhat relevant to what we just heard the general sort of anecdotal sympathy with the affiants on that matter who were concerned about the impact the development on the creek. I believe that our stormwater rules are a good strong set of rules and we put a lot of time into them. It has been my sense and worked with them over these years and observed the actual workings anecdotally that while they no doubt are very protective, they are not completely protective of our waters and that development is having and continues to have adverse impacts on our streams and rivers, notwithstanding our rules which I think is an argument for us. It does not question the validity or effectiveness of those rules but quite to the contrary.

Mayor Moss: Just two quick things. A couple of weeks ago, actually two weeks ago, I was invited to a briefing that was at the White House. Number one, I am always amazed at myself when I get myself in these situations that are way above my head. I am sitting in a meeting with Mayor Bloomberg from New York, Mayor of Chicago and Mayor of Los Angeles. The EPA Associate Administrator, Arvin Ganesan, who is with the Office of Congressional and Intergovernmental Relations. That's his job and this guy asked me. I figured out after they had done the background check that I really got nervous after that. He asked me, "I understand that you serve on the North Carolina Environmental Management Commission." I said I do. He said what do you all do? I said you're kidding. Actually, I talked about the great work that we do here and I talked about the great work that the department does. So I just wanted to let you guys know that I am bragging on you when I get these opportunities. That's a great seg way. I made this announcement at the Air Quality Committee meeting that I realized on my way home that this is a real example of the work that we do as an organization, both the EMC and the staff. Earlier this week six North Carolina communities were named "Playful City USA". It's a national award by an organization called "Kaboom". If you google Kaboom you can go out and see what I'm talking about. Albermarle, Durham, Greenville, Hickory, Mt. Holly and my city, Creedmoor, North Carolina were named Playful Cities. The mission of Playful Cities is to create

as many opportunities for play as we possibly can to get our children off the couch and out of the house and play. I take great pride in that. I think that it is a great testament when we provide clean air, clean water and clean dirt for our kids to play in. That's a testament to the work that we're doing here.

Sheila Holman: First of all thank you all for accommodating the request to take up the temporary rule before your November meeting. I do appreciate that. I want to quickly update you on a couple of actions by EPA in recent weeks since your last meeting on the national ambient air quality standards. I will begin first with the carbon monoxide standards and just say that in August EPA determined that the current standards are adequately protective of public health so those standards will not be changing. North Carolina does meet those standards and we have three areas that are under maintenance plans for the carbon monoxide standards. Those are the Triangle, of the Triad and Charlotte. Next I will talk briefly about the decision made by the White House last Friday and that is President Obama did ask Administrator Jackson to withdraw the ozone national ambient air quality standards, the proposed standards that were put out in 2009. He basically concluded that with the max update that the EPA is undergoing for the 2013 standard that it was not appropriate at this time to ask states and communities to begin implementing a new standard that would likely be changed in 2013. So at this time EPA is determining how to move forward with the 2008 standard. Those were published or finalized in March of 2008. Hopefully by our next meeting I'll be able to share with you the schedule that we'll be looking at, so that the standards both primary and secondary standards that are in effect now will be the 75 ppb standard. In North Carolina we have basically one area that is violating that standard that would be the Charlotte area. Hopefully I can provide more information at the November meeting as to the path forward in implementing the 2008 ozone standard. I did want to make you aware that the division has put out for public comment a draft permit for Carolina Cement located in Wilmington. We will be having three public hearings in the Wilmington area on September 27 and September 29. The public comment period will be open until October 31. After that I'll be considering how to move forward with that permit application. The options that are available are to deny the permit, approve the permit with modifications or approve the permit as written. Finally, I wanted to make you all aware that the department worked with Chairman Smith on the Section 11 requirement of the Clean Smokestack Act which directs the Environmental Management Commission to study the desirability of requiring and the feasibility of obtaining reductions and emissions of NO_x and SO₂ beyond those required under the Clean Smokestack Act. Basically we concluded that with all of the federal actions that are underway including the final promulgation of the cross state air pollution rule that we don't believe that further action is necessary at this time, and we will consider the issue again at the next reporting time which will be September 1, 2013. Big news that impacts our division staff. We will be moving to the DENR building at the Green Square Complex which will occur on or about October 21. So we will be fairly busy with moving from about October 18 until roughly around October 26. Thank you.

Coleen Sullins: I did want to focus quickly back on a few issues from our previous discussion and let you know that we recognize the issue of trends and how to measure and how to report back. We actually have collected some data and are looking at some data not across the board, but specific parameters to do that kind of evaluation as part of our strategic planning process. I shouldn't make this a one time event. It's been an ongoing event but we underwent a pretty

significant evaluation of the division and looked at how we're doing things. Are we doing them strategically and how do we go about providing information that would be of interest and of use. So we would be more than happy to come back and present that to the Commission. I think we presented the concept to the Commission a couple of years ago but we will be more than happy to come back and talk about some of the specifics of that. I also wanted to give you a heads up if you haven't been seeing the news reports. The dissolved oxygen down at Roanoke is now at zero. We are having reports of fishkills coming in from across the coastal areas as a result significantly from the hurricane and the impacts of the storm. You are likely to continue to hear a fair amount of that information in the press and what is the division doing about it. Unfortunately one of the powers that the Commission has not delegated to the Division of Water Quality is to redirect hurricanes. If you can figure out how to do that we would be happy to implement. I appreciate the time to talk about a very important issue for us.

Chairman Smith: No concluding remarks from me except to say that Civil Penalty Remissions Committee Group I will meet in this space starting in five minutes. Group II will meet upstairs on the 14th floor.

Hearing no further comments the meeting was adjourned at 3:00 pm.

NOTE: Attachments are on file in the Division of Water Quality with the Official Minutes.

Lois C. Thomas, Recording Clerk

By Commission Members
By Directors
By Counsel
By Chairman

Adjournment AG09-08-11