

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

**Raleigh, North Carolina
September 9, 2010
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:

Yvonne C. Bailey	Marion E. Deerhake	Dr. David H. Moreau	Dr. Charles H. Peterson
Donnie Brewer	Tom Ellis	Mayor Darryl D. Moss	Dickson Phillips III
Thomas F. Cecich	William L. Hall	Dr. David B. Peden	Stephen Smith
Stan L. Crowe	Dr. Ernest W. Larkin	Thomas H. Percival	Forrest R. Westall, Sr.
John S. Curry	Kevin Martin		

DIVISION OF WATER QUALITY:

Bradley Bennett	Mike Templeton	Tom Reeder	Jon Risgaard
Ted Bush	Bethany Georgoulas	Coleen Sullins	Diane Reid
Kevin Bowden	Connie Brower	Lois Thomas	Jeff Manning
Frances Candelaria	Gary Kreiser	Julie Ventaloro	
Alan Clark	Matt Matthews	Adriene Weaver	
Matthew Faerber	Sandra Moore	Chuck Wakild	
John Huisman	Rob Krebs	Elizabeth Kountis	

SECRETARY OF STATE OFFICE:

Deputy Secretary Michael R. Peeler

DIVISION OF AIR QUALITY:

Sheila Holman
Joelle Burleson

ATTORNEY GENERAL'S OFFICE:

Frank Crawley
Jane Oliver

Chairman Smith: called the September 9, 2010 meeting to order at 9:00 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.

I. Preliminary Matters

Forrest Westall: As I stated in the Water Quality Committee meeting on yesterday when we get to the Jordan approvals we need to separate Chatham County out. I think it would be best if I recuse myself from this item.

Chairman Smith: Let's move to consideration of the July 15, 2010 minutes.

Dr. Peterson: I move to approve the minutes from the July 15, 2010 EMC meeting. **Mayor Moss** seconded. The motion passed.

Chairman Smith: Next we have some proposed By-laws amendments which have been sent to you previously by email. They are pretty simple. Mr. Crawley doing his job realized that when we added the Renewable Energy Committee back three and a half years ago we did not add it to the list of standing committees in the by-laws. My recollection is that we did not do that because we weren't sure it was going to be a standing committee. But it has certainly turned into that. The second amendment is to enable notice of amendments to be sent by email as well as by U.S. mail. Any questions or discussion about the proposed amendments?

Kevin Martin: I move that we approve the by-laws as recommended. **Dr. Larkin** seconded. The motion passed.

II. Action Items

Chairman Smith: We will call our first action item which is AG10-37.

10-37 Request to Approve or Disapprove Local Jordan Buffer Programs, and to Delegate Subsequent Approval of Revised Programs to the Director

Summary (Jason Robinson): We presented this yesterday at the Water Quality Committee meeting. I am here today to ask for the Commission to consider our recommendations for approval or disapproval of the Local Buffer Jordan Programs. I'd like to point out that I passed out a revised table that differs a little bit from what was put in your package earlier. This reflects ordinances that were submitted after the material was originally submitted to the EMC. Jordan rules became effective August 2009 which includes the Jordan buffer rule. The Jordan buffer rules are unique from other buffer rules in their implementations split between local governments and the Division of Water Quality. The Division of Water Quality will implement state and federal projects, multi jurisdiction activities, activities that could be conducted under the authority of local governments and forestry and agricultural activities. DWQ will also implement activities conducted in locations where there are no local programs including Phase II water supply watershed or voluntary programs. For this latter part it turns out there are two local governments in which implementation will be split. That is Alamance County and Ossipee in which DWQ will be implementing jurisdiction wide. The timeline for the buffer rules, item 15 of the buffer protection rule requires the Division of Water Quality to develop a model ordinance for the EMC's review within two months of the effective date. The Commission reviewed this model in September 2009 and approved it. The rule then required local governments to submit

local buffer programs that contained the requirements of the Jordan buffer rules within six months after the approval of this model ordinance and the rule tasks DWQ with reviewing this and providing recommendations to the EMC on the local programs within one year approval of the model ordinance.

First this little background as the review proceeds, have we reviewed these ordinances? Staff, the planning section and the wetlands and stormwater, were tasked with the extensive time reviewing these ordinances and making sure that all requirements for the Jordan buffer rules are contained herein, making sure they are at least as stringent with the Jordan buffer rule. At least two staff members reviewed each ordinance. Some local governments just essentially adopted the model ordinance that we provided to them. Some local governments used their existing ordinance and revised them to insert the Jordan requirements. After initial review staff sent letters to the local governments notifying them of the areas that needed revisions or requirements that were left out of the ordinances. Most local governments came back and revised their ordinances and resubmitted them in the time requested. A few local governments submitted revisions after we submitted the materials to the Commission. That is reflected in the tables we passed out this morning. I'd also like to mention that Mr. Martin of the Commission reviewed these ordinances and offered a lot of helpful feedback and questions that assisted us in a thorough review of the ordinances. There were a few minor errors that we found in the rule or model ordinance that transferred over into the local government ordinances, formatting errors and a couple of references for wrong items. We asked local governments to fix this. There was one significant error that we found, the omission of man-made ponds from the Table of Uses. Since it was omitted it means it was prohibited, however that was not the Division's intent. We plan to go back, and rewrite this back into the rule and we have to rewrite the buffer rule and it is also going to be fixed in the consolidated buffer rule. But in the meantime the division will consider on a case by case basis areas where these activities take place and recommend approval for this particular activity.

One final thing to note is that some local government ordinances go above and beyond state requirements in a more stringent Jordan buffer rules. This is not required but the Jordan buffer rules did allow for this. We are going to mention this in the approval letters that we send out to local governments if approved that their ordinances are more stringent than what's required.

Several recommendations come before the Commission today to ask you to consider DWQ staff's recommendations for approval or disapproval of the local buffer ordinances as shown in the revised table. As you can see there are twenty-nine and we are recommending twenty-nine approvals and three disapprovals, the three disapprovals being Alamance County, Morrisville and Orange County. Those three we are recommending disapproval for are not as stringent as Jordan buffer rules in one or more areas as explained in the table.

If approved local governments are required to begin implementing in two months and if disapproved local governments have two months to go back and revise their programs and resubmit, and then the Division will have another two months to review and bring recommendations to the EMC for approval. I also want to ask for delegation to the Director of DWQ for authority to approve future revised programs, not the three programs recommended for disapproval, but for future programs and programs beyond that.

Chairman Smith: Let's first of all do questions, and secondly, before we reach the point of a motion, I will make sure that I exclude Chatham County's consideration from our initial consideration. One point that came up in the Water Quality Committee yesterday that Mr.

Robinson eluded to was when we approve a local ordinance, if that local ordinance goes beyond the requirements of the Jordan Lake rules, we are not approving those portions of the local ordinance that extend beyond the Jordan Lake rules. Some local governments have adopted the model ordinance which is fine, and some local governments have incorporated the provisions into other portions of their local ordinances, and we are not undertaking to approve or disapprove various pieces of local government ordinances beyond the Jordan Lake rules. Mr. Crawley confirmed that for us yesterday. **Dr. Peterson** can you give us a report on the water quality yesterday?

Dr. Peterson: I can indeed given the major issues we had discussion on this in the context of the following: If in creating a package of rules a local government includes aspects in that go beyond or frankly aren't even part of what is required by our minimum standards in this issue, Our concern was that if for some reason the local government then failed to enforce its own rules do we have an obligation at a state level to make sure that there's enforcement? But, the question arose do we need to enforce beyond what the state minimum requirements are that we've placed on local government, and the answer appears to be no. So that took some discussion and it was just a point of philosophical interest as well as legal interest, but of practical concern to the members of our committee.

Motion (Dr. Peterson): So having heard that we then unanimously agreed with the Department's recommendation and in that context I will make three motions. The first motion I will make is that we approve the local Jordan Buffer Programs of all the units of local government recommended here with the exception of Chatham County which I'll make as a separate motion.

Chairman Smith: asked for clarification.

Dr. Peterson: I'm excluding the three whose criteria has not been met plus Chatham County.

Forrest Westall: seconded.

Chairman Smith: There was no further discussion and the motion passed.

Dr. Peterson: The second motion is for Chatham County that we approve Chatham County's local Jordan Buffer Program ordinances. **Dr. Moreau** seconded.

Tom Cecich: Why are we doing this separately?

Chairman Smith: Because Mr. Westall has a conflict on Chatham County. His company is doing some work in Chatham County. There was no further discussion and the motion passed.

Dr. Peterson: The third motion which also got unanimous support from the Water Quality Committee was to approve staff's recommendation that we delegate subsequent EMC approvals to changes in these local Jordan buffer programs and ordinances. This motion does not mean, however that we won't see again the Orange County, Alamance County and Morrisville County programs. We expect as a Water Quality Committee and as a Commission to act upon those but subsequently the motion is that any changes and further approvals be delegated to the Director.

Kevin Martin: I would second that with a request that I made that prior to approval that the Director disseminate that to the Commission as information.

Dr. Peterson: I forgot that we all did agree that there are some of us who have great interest and have been devoting time to look at these closely. We wouldn't want to prevent that so that's the context of the request that information on those ordinances be passed to us in advance so that we can have our input if it was so desired.

Chairman Smith: asked for discussion. There was no discussion and the motion passed.

Kevin Martin: I wanted to make a comment and thank the municipalities and staff, particularly Sue, Amy, Julie and Jason for being patient and tolerant with me in working through this. If you saw how many emails we exchanged back and forth in the last two weeks they worked some overtime and it was my fault. But it was greatly appreciated. The municipalities were very responsive, too, and I wanted to thank them for that.

Chairman Smith: Before we move to the next agenda item **Dr. Peterson** has reminded me that I overlooked three preliminary matters before we got into our action items.

First of all, one agenda change, our fourth agenda item #10-40, chlorophyll-a rules, is off the agenda. It came off the Water Quality Committee agenda on yesterday so it is not timely for us to consider the proposed chlorophyll-a rules yet. The reason it came off the Water Quality Committee meeting agenda was to enable time for some additional drafting partly, and principally to put the chlorophyll-a rules and the consolidated buffer rules on the same timetable so they are on parallel tracks. The thinking was here we are on one hand potentially creating a new set of buffer rules and on the other hand working to consolidate our buffer rules, and before we make a decision whether the chlorophyll-a rules include a new set of buffer rules or reference the consolidate buffer rules, we need to have them both in front of us as they are going forward. Both of those consolidated buffer rules and chlorophyll-a rules will come back to Water Quality in November to the extent they'll proceed on parallel tracks.

The second preliminary is that I want to recognize and thank **Mr. Brewer**. He has just completed six years of service on the North Carolina Sedimentation Control Commission including a term as chair. He was not eligible for reappointment. He's done exceptionally good work in that role and it needs to be acknowledged for those of you who are not aware of it.

Thirdly I am told that today is Rich Gannon's birthday.

10-38 Request Approval of the Final Draft of the Catawba River Basinwide Water Quality Plan

Summary (Melanie Williams): The few things that I will be going over today include water quality status, parameter trends, status of the chain of lakes, basinwide water quality issues, recommendations and goals, and a request for final approval. The maps you see before you are just to give you an idea of where the basin is. The upper portions of the basin are in the mountainous regions and transition into the piedmont regions and the lower portions of the basins. The Catawba River flows shown by the dark blue line that you see on the larger map and includes a series of seven lakes and reservoirs. Municipal areas are indicated in yellow on the

larger map. As you can see the majority of Charlotte and the surrounding cities are located in the lower portion of the basin. The map in the lower left hand corner shows population from 2000 and gives you an idea of where the majority of the population is located. This map shows the impaired waters according to the 2010 draft integrated report and represented in the red lines. Between the 2004 plan and the 2010 plan over twenty-three miles of stream have been removed from the impaired waters list and during the same time period 226 miles of stream were added to the impaired waters list.

This slide compares the biological ratings between the last planning cycle and the current cycle. As you can see from the pie chart the majority of all biological stations had no change in reading but of those that did change more stations improved rather than declined.

The Benthic macroinvertebrate graph shows out of the 47 stations sampled the majority improved in rating. Of the 47 fish community stations monitored the majority had no change in rating. DWQ monitors chemical and physical parameters once a month at 32 stations located within the basin as seen in the green water drops on this map. I will review a couple of trends with those parameters. The first is copper. Methodology changes during the last cycle or during this cycle have resulted in the addition of copper in the use support evaluation for the impaired waters list. As a result of this the Catawba Basin received 47 miles for each stream segments of new impairments indicated here in red. However a downward trend over the long run can be seen in the graph with yearly averages. Sources of copper in this particular area are likely by products of vehicle and truck brake pads.

Turbidity is one of the leading parameters of impairment in the Catawba Basin. The majority of the 128 miles impaired turbidity are in and around developing urban areas or areas with large amounts of impervious surface. Other sources include agricultural practices and construction. The map shows waters currently impaired for turbidity and red lines and the dots indicate the levels of percent exceedances. The orange dot shows stations between 10 and 20% of samples exceeded the standard and red dots shows stations 20% or greater exceeded. Fecal coliform bacteria levels in the basin are rising. The map shows the elevated levels of fecal coliform bacteria spread across the basin and are not just located in a specific area. During the upcoming cycle DWQ will be working with Soil and Water Conservation districts to target Best Management Practice sites to reduce livestock access to streams and will work with local governments to find other specific sources of the elevated fecal coliform levels.

The pH levels or pH values monitored during this cycle were notably lower than those measured in past cycles. It was found that this issue was not localized to just the Catawba Basin or even the western portion of the state but has been observed throughout the southeast mountain regions within the U.S. The graph shows yearly average pH levels within the basin and between 1997 and 2008. Even though the averages have not gone below the low pH standard of 6.0, individual stations have which are indicated on the map by orange and red dots. Fifty-six miles and over 2,000 acres were added to the impaired waters list for low pH since last cycle. Possible sources of this drop may be only one factor or a combination of stream flows, atmospheric deposition impacts from development or decreased buffering capacity. DWQ has recently formed a partnership with Tennessee, the National Park Service and the U.S. Forest Service to begin discussions of low pH levels emerging in the mountain regions of the southeast and what actions may need to be taken.

Moving into a review of the chain of lakes, this map gives you a quick idea of the order of the lakes. The rivers are a series of impoundments which were constructed and owned by Duke

Energy. Impaired lakes during this cycle include Lake Rhodhiss for high pH, Mountain Island Lake for low pH, and a portion of Lake Wylie for low pH and copper. Recommendations for the chain of lakes includes increased awareness of existing Catawba River buffer rules, conduct additional samplings starting with Lake Wylie and Lake Rhodhiss, and implementation of action plans which will be discussed shortly. Lake Rhodhiss is impaired for high pH as a result of algal activity due to increase in nutrient levels. It is not currently impaired for chlorophyll-a. However it will be subject to the proposed threshold rules due to elevated levels measured during this cycle. Modeling conducted in 2000 showed that 21% of nitrogen and 48% of phosphorous levels were originating from point sources and estimated to increase by 2020. An optimization study was completed for three wastewater treatment plants discharging to the watershed in 2009.

Also in 2009 a Watershed Management Plan was developed by the Western Piedmont Council of Government through 319 funds. This plan mostly focuses on nutrient and sediment reductions for nonpoint sources. An action plan was developed in the basin plan to address reductions for both point and nonpoint sources. For point sources three wastewater treatment plans will complete pilot studies with goals to reduce phosphorous levels at the end of pipe to 2 mg per liter. The same facilities with the addition of City of Lenoir wastewater treatment plant will receive new permit requirements to monitor affluent weekly for nutrients during the permit renewal this year. The facilities will also be required to conduct instream monitoring monthly during the upcoming cycle to provide data to indicate levels of success with the exception of the Valdez facility which discharges directly into the lake. For nonpoint sources DWQ will work with the Western Piedmont Council of Government to implement the watershed management plan in most affected areas. The facilities pilot studies will be completed in 2012. The lake's routine five year monitoring will also take place in 2012. These monitoring results will be evaluated to determine if nutrient and pH levels have been reduced sufficiently and whether the TMDL will continue to be developed.

Mountain Island Lake was added to the impaired waters list for the first time in 2010 due to low pH levels. Recommendations include a special study to determine the severity of the impairment. DWQ is currently working with Charlotte-Mecklenburg and Duke Energy to compare data to ensure accurate representation of the lake's water quality. Looking directly below Mountain Island Lake is Lake Wylie. The upper mainstem of the lake is impaired for low pH and the South Fork stem is impaired for copper. Nitrogen and phosphorous TMDL was developed in 1996 to address elevated chlorophyll-a levels. At this time the lake is no longer impaired for chlorophyll-a, however with the increasing amount of growth and development in the watershed, DWQ will be reevaluating the TMDL to determine if additional nutrient reductions or controls will be needed in the near future.

During the permit cycle Mount Holly and Belmont wastewater treatment plants will receive nutrient limits within their permits as per the TMDL. An action plan will be developed to better support the TMDL and will include an updated monitoring plan review of the management area to determine if the Long Creek watershed should be included, updating the source allocations to include nonpoint sources and all individual point sources that are not specified in the original TMDL as long as the review of the nutrient monitoring requirements is within NPDES permits. Some of the other basinwide issues that have been seen during this cycle include stormwater volume and velocity causing stream bank failure in urban areas, impacts of onsite wastewater treatment, buffers on the main stream, and coal ash ponds. These and other issues are discussed in further detail in the basin overview chapter beginning with the plan.

Some of the water quality improvements and restoration work done are listed on this slide. Over a thousand acres were preserved and protected in the basin through Conservation Easement Fund. Currently there are over 40 Ecosystem Enhancement Program projects in some stage of completion within the basin. Soil and water conservation districts installed 547 agricultural best management practices through the agricultural cost share funds equaling about two million dollars during the cycle. The BMPs include stream protection measures and measures reduced sediment nutrients. One result of this work is the removal of Iris Creek from the impaired waters list. There have a number of local initiative products during this cycle which are critical for this basin and are discussed in detail throughout the plan.

Here are some of the recommendations and goals with the upcoming cycle that are discussed within the plan: (1) Implementation of lake and other watershed action plans which we have just discussed, (2) coordinating local efforts to develop and implement watershed management plans, (3) assisting with the low pH source analysis and implementation, (4) assist in finding sources and prioritizing fecal coliform bacteria reduction efforts, (5) help coordinate lake buffer outreach and awareness efforts, (6) coordinate efforts to conduct watershed stressor studies at a local level, and (7) DWQ will also be conducting stressor studies as resources become available. The majority of recommendations within the plan are watershed or stream specific and can be found in the suffix and chapters. At this time I would like to request final approval of the Catawba River Basin Plan.

Chairman Smith: asked for questions or comments.

John Curry: Given the location of the Catawba River with much of it in urban or developing urban areas, how does the degree of impairment in the Catawba compare with the degree of impairment of other river basins in the state?

Melanie Williams: That's a tough question but in any urban area that you find you are going to have lots of impairments around large populations. However the mountainous regions of the basin are relatively good water quality and the rest of the impairments have plans for being restored.

John Curry: I guess I was wondering about other river basins in the state in the degree of impairment. I understand that if you start at Morganton or Marion when you are getting out of the mountains headed east it is where most of the urban area is that the Catawba flows through. But I was wondering more about other river basins in the state and should we conclude the Catawba has most of the impairment or not?

Melanie Williams: I haven't done that particular analysis yet. I would definitely say it doesn't have the most impairments of all the other river basins. You have different issues across the state. Going toward the coast you have more nutrient issues and towards the west you have more sedimentation issues. The Catawba actually shares a little bit of both of those. So I wouldn't say it is the worst and I wouldn't say it's the best.

John Curry: Thank you.

Kevin Martin: Just a suggestion. You mentioned on the education outreach, the awareness of the Catawba buffers which just apply to the main stem in the lake. I would request that you also add emphasizing the Phase II requirements for the 30 ft. no build setbacks on intermittents and perennials because that affects a lot more stream linear footage than just the Catawba rules, and it is not a buffer but it is a restriction. I have found being from that part of the state that a lot of folks are still unaware even though it just applies in certain municipalities that there are some restrictions to basically going in and affecting those areas without some kind of approval.

Dickson Phillips: I was going to ask whether you could say another word about what you think is contributing to the low pH trend.

Melanie Williams: Well at this point it is still under study. We have formed that partnership and right now they are currently collecting data and analyzing the data that they do have. It has been shown that the higher you go up in elevation the lower levels you're seeing, kind of indicating more towards atmospheric deposition. But at this time it is not really conclusive.

Forrest Westall: Most of the impairment for pH according to the map seems to be down toward the SouthFork drainage. Typically the lower pH issues have been in the higher elevations of our mountain watersheds.

Melanie Williams: I believe it is pretty evenly spread across the basin. It just seems more in the lower portion because the segments of stream are actually longer. So it looks like the majority of impairments are in the lower portion of the basin but they are also being seen pretty evenly throughout.

Dr. Larkin: I'd like to know for river basins like this that are not wholly contained in North Carolina, how much coordination do you do with South Carolina or whatever their applicable state is to really consider it a basinwide plan?

Melanie Williams: We do actually have a lot of communication between ourselves and South Carolina when it comes to rivers that cross the border that are impaired. We have monitoring stations just below the North Carolina line so we can collect data according to our methodology and evaluate the severity of the impairments there. When those red flags do come up as an impairment we do try to coordinate with South Carolina to develop some kind of management strategy or management plan. That was done with phosphorous impairment in South Carolina. We coordinated with them to get some of the Charlotte wastewater treatment plants to lower their phosphorous limits. The Lake Wylie TMDL was also coordinated with South Carolina. Any other nutrient issues we would have discussions with South Carolina on how to make those reductions.

Tom Ellis: There was a term in here that I was unfamiliar with that says category 5 listing requiring a TMDL. What's a category 5 listing?

Melanie Williams: A category 5 just indicates that a particular segment is impaired and at this time there's no restoration strategy for that particular segment. So it will be listed on the 303d(d) impaired waters list. Some other streams that are impaired but do have some sort of restoration

to plan our strategy will be moved into a category 4 which just indicates to EPA that it is impaired but there is a strategy on how to restore it.

Tom Ellis: Specifically my concern was that I didn't realize that DEH did shellfish sanitation work that far inland.

Coleen Sullins: They do not.

Tom Ellis: If we're going to have a TMDL for shellfish sanitation there's no resource in there so I suggest that we modify that portion.

Melanie Williams: I'm not really certain what you are referring to.

Tom Ellis: Page 517 and 518. It starts off with shellfish harvesting assessment methodology and I just don't think that's a.....

Melanie Williams: I think that you may be looking at one of the appendices which discusses our methodology for the integrated report. That's a wholistic document that just has all of our methodologies throughout the state.

Tom Ellis: I apologize. This is a massive document. I just got too far into it.

Yvonne Bailey: You were talking about there was an improvement in copper and it sounded like the source was like brake pads for trucks or something like that I would think is not very well regulated or if at all to be and tell us why the copper level might have gone down so much.

Melanie Williams: It's actually just kind of a theory at this point that it is brake pads. The majority of the impairments are being seen around the trucking industry area of Charlotte. Some of the levels may have dropped partly due to the equipment that ESS has been using. They have had an upgrade in equipment that shows better indication of copper levels so some of the old equipment may have been reading at a higher level than the new equipment they use now. But I do believe that they're using less copper in brake pads and that sort of thing so that may have also contributed.

Yvonne Bailey: Would it be stormwater management too or not?

Melanie Williams: It very possibly could be and we've been talking with Charlotte about some of those issues as well as some of the data that they are seeing and what kind of levels they have been collecting.

Forrest Westall: If there are no more comments I will make a motion. I make a motion to adopt the final draft of the Catawba River Basinwide Water Quality Plan. **Dr. Peterson** seconded. The motion passed.

10-39 Request Approval of the 2010 Coastal Habitat Protection Plan Update and Recommend Sending the 2010 CHPP to the Secretary and the Joint Legislative Commission for Seafood and Aquaculture

Summary (Jimmy Johnson): I'm the Eastern Regional Field Officer for the Department and I work primarily with North Carolina's Coastal Habitat Protection Plan. If you remember I was before you in May requesting your approval of sending the revised 2010 draft of the North Carolina's Coastal Habitat Protection Plan out to a series of public meetings. Those meetings were held in June in Morehead City, Wilmington and Manteo. There also was a 60-75 day comment period in which we did receive two letters, one from the North Carolina Coastal Federation and a group out of Wilmington that is called the Business Alliance for a Sound Economy or BASE. This is an acronym for their title and I believe you have copies of a summary of the public meetings as well as those two letters. I am here today to ask you to approve this draft document to be sent to the Secretary of the Department for a 30 day departmental review after which time it will be forwarded to the Joint Legislative Commission for Seafood and Aquaculture. They will also have 30 days to review the document. If no comments are received from either the department or the Commission from the General Assembly then the CHPP will be considered to have been revised.

In the Powerpoint document that was distributed you have in that document a summary of some of the comments that we received at the public meetings. There were several comments asking us to strengthen the language in several of the recommendations primarily the Recommendation 3.2 regarding hardening of ocean front shoreline having to do with jetties and groins. There were also comments with regards to vertical shoreline structures and the desire to have preferred alternatives to bulkheading in our estuarine shoreline. Also, at that time, you remember the Gulf oil spill was in full force at that point when the public meetings were being held and there was a lot of concern about offshore energy.

Taking those comments back to the Steering Committee of which **Dr. Peterson** and **Tom Ellis** represent all of you on the Steering Committee, it was decided to only adopt the change to Recommendation 3.4 and to recommend alternatives to harden estuarine shoreline, a preference in order to accommodate sea level rise and also to allow for the inward migration of our wetlands. So that was the one change in the recommendation that was approved and decided on by the Steering Committee. There was also one paragraph that was added to the document itself in the water column chapter regarding septic systems at the request of the group called BASE. Other than that the document has remained intact from what you saw in May and I'm asking for your approval to send this document, the 2010 revised version of the North Carolina CHPP to the Secretary of the Department for a 30 day departmental review.

Donnie Brewer: Could you just tell me the thought process about the Recommendation 3.2 to continue the ban on the hardening services?

Jimmy Johnson: There is currently a state ban on hardening of our oceanfront and the Coastal Resources Commission has done a significant study or hired out a significant study to be done regarding terminal groins and their findings and recommendations at best were inconclusive. So the Steering Committee, I believe determined to allow that process to continue itself to further develop rather than taking the stand of requiring or recommending no hardened shoreline

structures on the oceanfront at this time and allow the CRC to continue to develop their recommendations.

Donnie Brewer: Am I correct in understanding? Didn't the Legislature at least in the Senate pass a bill to actually negate that ban?

Jimmy Johnson: I think it is still being debated. The Coastal Resources Commission's recommendations were a series of requirements that they would recommend putting in place if the ban were lifted, basically amounting to almost a de facto ban on the hardened structures. But I'm not exactly sure at this point where it stands with the General Assembly. I know it was brought up for debate in the Senate but it never was presented in the House.

Donnie Brewer: Thank you.

Dr. Peterson: Jimmy is right. The debate has been intense. There was a study funded by the Department and through DCM to examine some test cases of what appeared to be qualified as terminal groins in the context of the way that was potentially envisioned by those in the state who would support it changing the hardening rule to allow these groins. This has been introduced to the General Assembly for at least three sessions that I can recall, and this upcoming one being the fourth. The report as Jimmy suggested by Moffit and Nichol didn't demonstrate conclusively what the injuries were associated with terminal groins and that there were no injuries. Part of the problem is that many of these structures don't actually qualify as terminal groins. There aren't many of these on the east coast for us to turn to get information that is suitable.

The other issue is to evaluate that issue requires a great deal more effort than was budgeted so in some ways this scratched the surface of what could be done. In the body of the Coastal Habitat Protection Report and its update, though, we have some clear statements of not wanting changes to allow any of these structures that would degrade fisheries habitat and therefore fish production. That is in the body of this. What we're really talking about here are some highlighted recommendations and I think some of the members of our Steering Committee which didn't include me were cautious about wading into what's obviously going to be another highly politicized issue of science and science application to policy in the next few months if not longer.

But I can speak to a little bit of this. When you have a terminal groin put in place, the study by Moffit and Nichol showed that did not reduce and perhaps increased the need for doing beach nourishment. Beach nourishment is a process whereby we bring sand from somewhere else and put it on the beach. That could be cleaning out the sandtraps in Moore County and trucking it to the beach which isn't high on the list of economically viable choices but there is trucking that occurs from inland sand sources. The other more common option is you dredge it from offshore and pipe it into the beach. That has the immediate effect of killing all the invertebrates on the beach where up to two meters of this sand is put and then bulldozed around to tailor the beach so it is shaped like a beach not heaps of sand. In that process we remove the food sources for a variety of surf fishes, a value to recreational fishing and particularly pompano, juvenile flounders of at least two species, sea mullet and to some degree drum, although they feed a little more deeply as well as taking the food away from shore birds who use that resource too. That take away lasts varying lengths of time but nonetheless it's a harm to the habitat and it's no joy to the fish that can't find food in that place. So it is pretty clear evidence that there are

concerns that relate to the fisheries habitat as well as habitat more broadly. But there wasn't any smoking gun that said we have to nourish three times as much, two times as much or even 50% more. The data just didn't support a firm conclusion. The data did show though that nourishment continues.

There were other issues that were habitat related but not necessarily fish. If you took all these studies together and you included in the terminal groin the ability to put a revetment around the inlet shoreline which some people include in their definition, what that tends to do is position that inlet in space so it can't move and fluctuate naturally. An inlet can't go north or south or east or west as readily and it removes a lot of the moving sand flats that are typically in the inlet. Those flats are vitally important for a variety of birds to forage on and notably including the piping plover which is a bird listed on the threatened and endangered list.

If these terminal groins and the people who are promoting are able to allow as well a revetment which is more or less a sea wall along the inlet shoreline, there will be severe habitat damage but that too is related more to birds and less directly related to fish. But in any case there are definite concerns raised by the hard work done by Moffit and Nichol in reviewing these four case studies and that has led most of the environmental community to argue "we've got a system in this state that was forward looking in banning hardening of our beaches, to protect the public trust resource and to keep the beach there among other things", but as well to protect the habitat that is important for shore birds, fishes and turtles. If it ain't broke why fix it was the attitude. But our group of Steering Committee folks was inclined to be cautious on this one and I think with more debate if we'd had it, at the committee we might have been saying something different. But there is a statement within the text that quite clearly says that.

I should say although you didn't ask it the attitudes were similar on the issue of ocean drilling which is to say that's an issue which has been examined by a committee of the legislature to advise on offshore energy policy and now there's a Gubernatorial Advisory Committee on offshore energy policy. I think now the folks on our Steering Committee for the CHPP felt that process should work its way out before we were out front with a particular recommendation from the CHPP Steering Committee.

So we had three of these kind of big ticket things, one of which we fell on the right side of the Lord on and that was the issue of encouraging and preferring some alternative if we find it to bulkheading of our sound shore lines and our rivers so as to allow the shoreline to be mobile and the habitats of importance which are largely vegetated like marsh and sea grass beds, and the like to be able to move up slope as water levels increase through the sea level rise.

Donnie Brewer: Thank you **Dr. Peterson**.

Motion (Tom Ellis): I'd like to move that the EMC approve the 2010 Coastal Habitat Protection Plan update and recommend sending the CHPP to the Secretary and Joint Legislative Commission for seafood and aquaculture. **Dr. Peterson** seconded. The motion passed.

Chairman Smith: Thank you Mr. Johnson. I want to extend our appreciation to **Mr. Ellis** and **Dr. Peterson** for serving on the CHPP Steering Committee which is an ongoing process.

10-40 Request to Proceed to Public Hearing with Draft Rules for Chlorophyll-a Thresholds for Nutrient-Enriched Waterbody Management (waiving 30 day rule may be required) This item was removed from the agenda.

10-41 Request for Consideration of the Hearing Officer's Recommendation on North Fork New River Outstanding Resource Waters (ORW) Reclassification in Ashe and Watauga Counties (New River Basin)

Chairman Smith: Mr. Percival is recusing himself on this item.

Summary (John Curry): In July and September of 2009 the Water Quality Committee and the Commission approved a request to proceed with rulemaking for the North Fork New River watershed in Ashe and Watauga Counties. The proposal presented at these meetings was to reclassify the entire watershed as ORW with exception of allowing the current discharges to expand. On March 16th I had the pleasure of chairing a public hearing that was held in Jefferson, North Carolina in Ashe County. Staff members present were Jeff Manning, Jamie McNees, Adriene Weaver, Matthew Faeber, and Steve Tedder. Four verbal comments were heard at the hearing and all were in support of the ORW. Comments suggested altering the proposed rule to allow new and expanded discharges in a restricted area with applicability of stringent permit limits. During the comment period nine written letters and 455 emails were received. All were in support of the ORW proposed classification.

In taking those comments into account the proposed rule that I'm going to recommend today be revised from the original that was presented in 2009 to change some of the proposed ORW waters to HQW. Land development regulations are the same for HQW and ORW designated waters. These regulations consist of development density and setback requirements associated with stormwater controls that are applied to new development activities in the areas if such activity requires a Sedimentation and Erosion Control Plan. Stricter Division of Land Resources erosion controls would also apply to the new developments. The ORW classification provides a higher level of supplementary protection than the HQW classification. ORW regulations do not allow new discharges or expansions of existing dischargers, whereas, HQW regulations require stricter treatment standards for new or expanded existing dischargers. ORW regulations apply to an entire watershed or drainage area. HQW requirements only apply to an area within one mile from and draining to HQW classified waters.

I'm going to ask staff to come up and place the map that we used at the public hearing and has been developed since that time, so that we can see that. In the subject waters there are no known immediate plans for new or expanded dischargers and no known proposed development that would be impacted by the classification, however, it's anticipated that future growth will spur the need for additional treatment of wastewaters. Based on consideration and review of the comments, staff and I recommend that the proposed ORW reclassification of North Fork New River watershed be considered. In doing so the watershed will remain proposed as ORW with the exception of Buffalo Creek, a portion of Big Horse and Old Field Branch or Grass Branch is recommended to be classified HQW. Clay Bank Creek and Little Buffalo Creek remain proposed as C Trout Plus which is a designation that the staff can explain. The plus indicates that there'll be a management strategy consisting of HQW rules that were applied in order to protect the downstream excellent rated waters. The effective date would be November 1, 2010 if we do adopt these new rules. I will ask Jeff to elaborate slightly on the negotiations that took

place with the local government officials that resulted in this change. Jeff and staff spent a considerable amount of time conducting those negotiations.

Jeff Manning: The original proposal is the entire green and blue and little yellow area in the middle of the map that was originally all proposed for ORW. On the right hand side of the map brown and hatched areas are our existing ORWs and HQWs just to give you some reference. After negotiating and hearing the public comments from the Ashe County Planning Department which covers this whole area and the National Committee for the New River, we decided to make the blue area in the center HQW, and that's to allow the potential for expanding their dischargers in the future so that they would have some sense of control over the discharge rather than having sprawl or septic tank type systems throughout the watershed. There's a real big sense of community in this entire watershed. The National Committee for the New River stood behind the proposal, and they worked closely with that county planning department. So there was a uniform agreement that made a lot of sense to do that. In the little yellow area right in the center around the Towns of West Jefferson and Jefferson those two little tributaries are currently impaired so they don't have excellent water quality and so we couldn't recommend those for HQW or ORW. But we are recommending the strategy with C Trout Plus, the strategy which is the same as HQW rules to protect downstream waters.

Dickson Phillips: Where could there be expanded dischargers on Buffalo Creek?

Jeff Manning: In the blue area and the yellow area there are potential areas for expanded dischargers.

Dickson Phillips: I'm just not familiar with that little drainage going up Buffalo Creek and I'm not aware there are any dischargers up there.

Jeff Manning: There aren't. The only three dischargers in the watershed are Lansing, West Jefferson and United Chemi-Con. Those are all in the blue and yellow areas now. The area wants to maintain the ability for growth in the future if they need to expand. They're not sure that they're going to expand but with ORW they wouldn't be able to expand at all. It wouldn't be an option and they would be forced to do some sort of land treatment. So they wanted to keep it open as an option.

Motion (John Curry): I move that these rules be adopted as proposed. **Mr. Brewer** seconded.

Forrest Westall: I wanted to recuse myself also.

John Curry: Mr. Chairman just for clarification. Of course the original proposal was made a little over a year ago. My motion is that we adopt the proposal that is reflected in this map with the HQW which I think were those changes which were in the proposal that was in our package.

Chairman Smith: I understood your motion to be saying and correct me the two of you if this is wrong. You are moving that we adopt the hearing officer's recommendation as presented to us in the package for today. Is that correct?

John Curry: Yes

Dr. Peterson: I'm curious about what we know about the source of impairment of those two segments in the yellow area into which there is discharge, at least from Jefferson you said, and whether the protections that we are about to offer in the light blue area would prevent such degradation that might occur there.

Jeff Manning: We did look at that. I believe it is impaired for biological integrity and the red are urbanized areas. Since it didn't have excellent water quality we couldn't recommend HQW be ORW, but we could recommend the same rules which is what we did. For the impaired waters they're getting new stormwater management requirements and discharge restrictions if they were to expand in the future, and the blue area is getting the same thing, new stormwater requirements with the HQW rules.

Dr. Peterson: So it is kind of the usual. We've got a lot suspects that could contribute to that degradation. Bet it is not real clear which it is, non point source or even point source in the sense of the discharge.

Jeff Manning: Correct.

Chairman Smith: There were no other comments and the motion passed. Thank you Mr. Manning and thank you **Mr. Curry** for your services as hearing officer.

John Curry: Thank you Mr. Chairman and also thanks to the staff for their excellent work.

Chairman Smith: That completes our actions items so we will move to the first of our two information items.

III. Information Items

10-06 Surface Water Quality Triennial Review: Status Update

Summary (Connie Brower): We do just have a very brief update as to where we are in the process of the Surface Water Quality Triennial Review. You may recall at the March EMC meeting the Commission did approve for us to take draft changes to 15A NCAC 2B surface water quality standards regulations out to public hearing. The public hearing cannot be scheduled until we do a fiscal note. So we are in a little bit of a limbo in between right now. But in between we had taken additional public outreach steps and we'd like to talk to you a little bit about those and where we are in the fiscal note process. Since the approval was granted we've had nine additional public meetings or presentations. When I say staff I'd like for you to understand that is not just staff within the planning section. Our pretreatment and emergency response unit folks Ms. Dana Foley and Ms. Deborah Gore have done outreach for us. We have been quite a traveling companion.

We have done nine presentations since March. Those have occurred in locations as far west as Morganton and as far east as New Bern. The topics have ranged from strictly fiscal, discussion about the fiscal comments, we have had presentations on the impact of the rules

themselves, the pretreatment and presentations on stormwater. So we have presented to River Basin Associations and Council of Governments, and at the request of MCIC we also presented to the Environmental Health and Safety School. We are scheduled to present two additional presentations for the American Waterworks Association, Water Environment Association, (AWWA, WEA) and advanced wastewater operators next week. We are also scheduled to be on their November annual meeting agenda. Those are the ones that are upcoming.

Since that approval in March the Complex Permitting Unit staff started to work on two calculators that could be made available to the public and to our permittees to be able to calculate estimated permit limits that would be derived from the changes to the metals standards. One calculator would enable someone to choose the method that would make the most fiscal impact as in worst case scenario. The second calculator that was provided would give more specific information and more directly associated with a given permit so people were given two options. The calculators went live on the web June 7th. On that same day staff from the planning section sent out a request using email listserves that were available to us to request information on the fiscal impact of implementing these standards and regulations. That was June 7th and following a three month timeframe to request the fiscal comments. The fiscal comments closing date was this past Tuesday. You may be aware that most people wait until the very last minute and that was true in this case too. We received about 90% of our comments between 2:00 and 5:00 p.m. on Tuesday. With that said I will say to you that we have not had enough time to open them all, read them and see exactly where the comments are and what are the range of costs. That is underway. I must give some kudos to the DENR Budget and Analysis staff because they were in my office yesterday at 2:00 p.m. wanting to know if I was ready to get going. They've already come to us, we have arranged for our first meeting with our internal staff on Monday to go through these comments and we have our first meeting with Office of State Budget Management next Wednesday, and that's with Ms. Anca Grozav.

Our hearing officers have been assigned by **Chairman Smith** who are **Mr. Donnie Brewer, Dr. Dave Moreau** and **Mr. Forrest Westall**. Throughout March until the timeframe now we have been trying to mail out to them sort of general updates periodically through email so that we can keep them informed. We intend to continue that process until we can schedule the actual public hearing after the fiscal note is approved by OSBM.

Chairman Smith: Any comments or questions? That's a helpful update.

10-07 Mercury Total Maximum Daily Load (TMDL) Update

Summary (Kathy Stecker): In our joint presentation this morning will be Sheila Holman, not Mike Abraczinskas as indicated on the agenda. Back when we presented the Lumber River Basin plan we mentioned that we were starting to develop a statewide mercury TMDL. That was back in January and March when we mentioned that to you and we are doing that in collaboration with the Division of Air Quality. We thought now would be a good time to tell you more about that TMDL. After my discussion Sheila will tell you a little bit about a conference we attended recently in Philadelphia regarding a regional mercury TMDL developed by seven Northeastern states.

Here is an outline of what we will be presenting. I will give a brief overview of our TMDL and then Sheila will tell you about that conference in Philadelphia. It's the State Department of Health and Human Services that issues fish consumption advisories in North Carolina. We have

a statewide advisory that includes recommendations to limit or avoid certain fish. When people can't safely eat all the fish they want from a water body then under the Federal Clean Water Act it's not supporting its fishable use. So it must be placed under Section 303(d) list of impaired waters. In North Carolina all waters are considered impaired due to mercury. Section 303(d) further requires that states develop total maximum daily loads for all impaired waters, therefore we are developing a statewide TMDL for mercury. I'm showing you this map to indicate that we are not alone. Red is not good on the map and if you read the small print you'll see that it's just Nebraska, the Virgin Islands and Guam that don't admit to having a mercury problem in their surface waters.

Methylmercury is what bio-accumulates in fish and some waters have certain characteristics that facilitate conversion of mercury to methylmercury such as acidic waters with lots of organic material like we find in the southeast of North Carolina. This map summarizes mercury concentration in Largemouth Bass. The red dots, and again red is not good, indicate the highest average concentrations of mercury in Largemouth Bass. But there are high levels of mercury in fish everywhere in the state, high enough for there to be a statewide advisory. We're seeing the mercury in the fish mostly because it's coming out of the air directly into surface waters or by washing off the land into surface waters. These percentages are summaries of what's been found pretty consistently around the country and that's what we expect to find here. I wanted to point out that there's a large global component. Mercury is easily vaporized so it can be reemitted after falling to the earth and it can cycle for decades in the atmosphere. Sheila will be saying a little more about coal fired power plants but they are a big source. Under the Clean Water Act atmospheric deposition is considered a non-point source so this shows relative contributions from point and non-point sources. You'll hear more about the Northeastern states in a little bit but here's a graphic from their work showing the breakdown of atmospheric sources. Something to keep in mind as you're looking at that giant global background piece of the pie is the idea that mercury can stay up in the atmosphere for a very long time. Current emissions from the U.S. that are not deposited here become part of the global pool so this does not just represent sources in other countries.

This won't be a typical TMDL. Typically we would collect water quality data from a particular water body or watershed, then use a water quality model to figure out what point and nonpoint source reductions are needed. This mercury TMDL will be statewide rather than water body specific and will also mainly be about the air, not water. We in DWQ are very grateful for the collaboration and expertise of the Division of Air Quality. Their work will quantify the instate and out of state contributions and tell us if and where further reductions are needed in North Carolina. In addition to certain technical requirements to qualify as a TMDL under the Clean Water Act there must be a public comment period and EPA must approve the TMDL. While the TMDL must include a discussion of NPDES permits no other implementation information is required. For our mercury TMDL we plan to hold public meetings and write an implementation plan that tells how reductions will be achieved. Some of you might recall the 2008 report to you on mercury emissions. The next report is due in 2012. When the Division of Air Quality reports back to you then, we hope that they will be able to incorporate useful information from this TMDL work. The next three slides show our schedule for completing the TMDL. I won't go over every step. On this slide I would like to highlight that we created a special web page for the mercury TMDL and we update that with new information, at least quarterly. The rest of this slide summarizes the major activities that we've completed already,

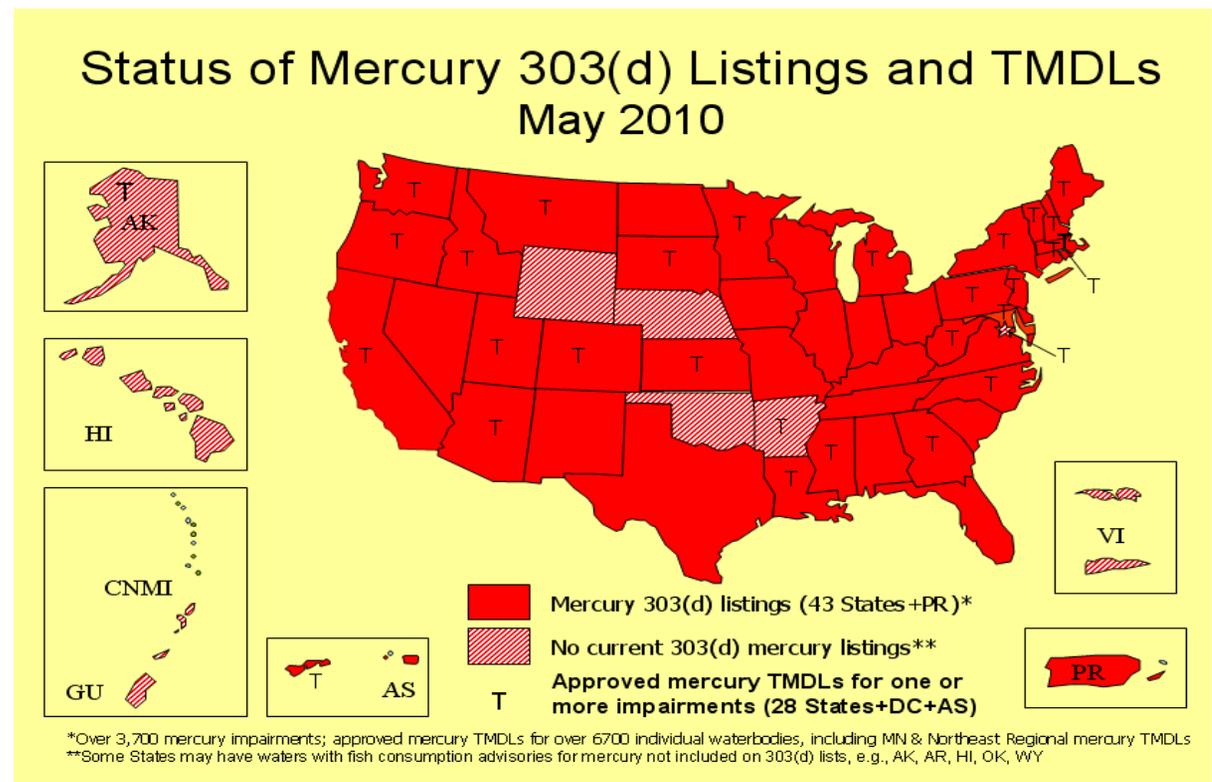
mainly coordination meetings with DAQ and DHHS. At the top of this slide is our meeting right now and at the bottom we have highlighted the expected completion date for the draft TMDL. In between we were thinking of coming back to you in March with an update. By that time the modeling will be completed and we can share preliminary results with you. The public meetings in April will primarily focus on stakeholders. We will provide information, share preliminary results and let them know there is a draft TMDL coming that they can comment on. We're planning to have a second public meeting during the TMDL comment period and we've highlighted on this slide when we expect the TMDL to be approved, and when we would have a draft implementation plan completed. But that won't be the end. We will need to track the progress of implementation and be looking at what else needs to be done to achieve the ultimate goal of lifting fish consumption advisories. We just wanted to let you know that we are already getting the word out. Mike Abraczinskas and I are mentioning the mercury TMDL in all of our presentations now letting people know it is under development so they can get more information or offer more information to us. We estimate that we've informed about 250 individuals so far as part of other presentations. For example, we mentioned it at the Western Piedmont Council of Governments Air Quality Conference and to the state Chapter of the American Waterworks Association. Then there's our website which I've given the URL or you can just Google and see mercury TMDL, and it's the first thing that comes up. On the rest of the slides I am just reiterating the other plans we have to make sure that everyone who wants to participate will have the opportunity. Now I will turn it over to Sheila and as you listen to her you will hear about issues that we'll probably be dealing with as we develop our TMDL here. Thank you.

Sheila Holman: Thank you Kathy. Let me first say that Mr. Abraczinskas sends his regrets. Unfortunately, for us but fortunately for him he's on a vacation with his family. Right now what I would like to begin with is a little bit of an overview of Section 319(g) which, up until probably March of this year, I didn't know a lot about it. About that time we started getting contacted by US EPA talking about the petition that was filed by the seven Northeastern states and their efforts to convene a conference. So basically what 319(g) provides is that if a state has water bodies that are not meeting applicable water quality standards and as a result in whole or in part due to pollution from non-point sources in another state, that state may petition the administrator of EPA to convene a conference to talk about how to reduce the pollution from outside of the first state. That is, in fact what EPA did. The seven Northeastern states worked on a petition. Actually, first they worked on their TMDL and as a result of the TMDL efforts they proceeded with the petition. However as Kathy stated earlier and as you remember from the red map the Northeastern states are not alone in the mercury impairment situation. There were eleven contributing states named in the petition. Those are listed for you at the bottom of the first slide. North Carolina is one of them. When we first heard about the petition we were frustrated first that we had not heard from the other states before the petition was filed, and second we believe that a lot of the good work in reducing mercury emissions in North Carolina had been ignored.

Coleen, Kathy, Mike and I had an opportunity to meet both with EPA and the facilitator that was going to facilitate this Section 319(g) Mercury Conference. We talked about that very issue and we talked about how do we make this conference meaningful and helpful to all the states. So we were able to help structure the agenda of that conference. What we started out

Mercury TMDL Background

- Statewide *fish consumption* advisory – DHHS
- Advisory = 303(d) listing
- We are not alone.....



with first was an update from each of the seven states that had filed the petition in terms of what they had done in their states to reduce mercury emissions, and then each of the eleven named states talked about the efforts in their respective states. What we realized in going through this process is that the data that was used to file the petition was vintage about 1999 to 2001 data and it obviously reflected the mercury emissions prior to the implementation of the Clean Smokestacks Act and other efforts within North Carolina. We wanted to first start off with what hasn't been accomplished.

At the conference we also identified key areas for further action at the state and national level and I think the first recognition is that this is clearly a national problem, and we also have to find ways to address that 70% contribution from the global pool. So even if we totally eliminate the 30% that's being generated in the U.S. we may not achieve the water quality results that we need to. So we need to establish the U.S. as a leader in mercury reduction and then use that to help leverage mercury reductions throughout the globe.

Another key concern that came out of the conference is that the Northeastern states reduction target may not be achievable. They're asking for a 98% reduction in the mercury emissions in all the named states, and right now the technologies don't quite get to 98%. It's above 90% but it's not to 98% yet. Also, as I said earlier we did express concern the dated inventories were used in the Northeastern study and we encouraged EPA to work with those states to update the information to reflect what we have today. Just some highlights from this study were roughly 30% of the atmospheric mercury deposition in the Northeastern comes from U.S. sources. Kathy shared it earlier only 70% comes from the global contribution. Another key point that they made was 49% of the U.S. portion of the deposition in the Northeastern comes from outside the Northeastern region, and obviously that's why the petition was filed. This shows you the breakdown again going back to data that was roughly 1999 to 2001. North Carolina contributes roughly 1.1 percent to the mercury impairment in the Northeastern.

We shared some of the information at the conference in terms of what has happened with mercury emissions in North Carolina between 1999 and 2008. From our top twenty-five sources which represent about 99% of our total emissions from our facilities we have reduced from about just over 5,000 lbs per year to 2,842 lbs per year. Just so you know how much comes from the coal fired electric generating units, in 1999 3,581 lbs of the 5,025 lbs came from the electric generating units. That number was reduced to 1,987 lbs in 2008. We do expect additional mercury reductions.

You all may remember some of the rules that are in place. The North Carolina mercury rule requires the two reports that Kathy alluded to and another key point to make about that mercury rule, is that any new electric generating sources that begin construction after the effective date of our mercury rule has to install Best Achievable Control Technology. So we do have a rule on the books that addresses those new sources of mercury coming from specifically electric generating units. As the completion of the Clean Smokestacks controls go on we'll continue to see more mercury reductions from both Duke Energy and Progress Energy. You all may be aware that there are plans underway from both of the utilities to replace a lot of their coal fired electric generating units with natural gas units that will see further reductions in mercury emissions. There are planned retirements of some of the coal fired electric generating units.

In addition, we have new incinerator rules on the books and we are working on upcoming boiler rules. The Air Quality Committee heard yesterday about the boiler MAC (maximum achievable controls or maximum achievable concentrations). EPA needs to finalize that boiler

MAC by this December and finally the utility MAC should be promulgated by November of 2011.

In addition, going back to North Carolina's mercury rule you will recall that in 2012, we will be coming back to talk to you on what the latest information is with the mercury emissions, what new source growth has occurred, what we expect to occur, the state of mercury control technology and the economic feasibility of those technologies, and then a recommendation on mercury control technologies including the cost in expected reductions. Based on this report our rule directs the Commission to review the mercury control requirements and decide if any real changes are necessary at that time.

The next step in terms of the 319(g) Mercury Conference basically the recommendation is that a national mercury reduction strategy is needed and it must begin to address the non U.S. contributions. Dialogue among the states will continue. Right now there is a development of an outcome document as well as a potential agreement. Both Kathy Stecker and Mike Abraczinskas are participating on those conference calls being coordinated by the Northeastern states. If an agreement is reached on 319(g), if you went back to the language paragraph 2 instructs that the management programs will need to be revised to reflect such agreement. So if the states do reach an agreement we will be looking to make changes to the management programs. Then there's a press release and a meeting summary to be generated and supposed to become available and we will be sharing them with you. I would be happy to take any questions on the Section 319(g) Mercury Conference and I'm sure Kathy will take any on the mercury TMDL.

Chairman Smith: Thank you. That's an excellent report and timely. Are there any comments or questions?

John Curry: I just wondered what links are you making available to the public or places where the public can get information on the health effects of either mercury or methylmercury?

Kathy Stecker: We have links from our DWQ website to the DHHS website showing, detailing the advisories.

John Curry: Thank you.

Dr. Moreau: Sheila we adopted those rules under the Cap and Trade Program and that was overturned when the National Cap and Trade Program was overturned. Did that have any effect on our rules that we adopted under that program?

Sheila Holman: Well it did affect the allocations that were set. So everything that related to the Federal Mercury Trading rule, all of that went away, but the requirement for the reports, the requirement for the batch on new sources, that still stays.

Dr. Moreau: That basic agreement that was struck is still in place.

Sheila Holman: Yes.

Ms. Deerhake: I have two questions. The 1.1% attributions in North Carolina by the Northeastern states, was that with the old data or after you had made them aware of the changes in the newer data?

Sheila Holman: That was with the old data. That was the conclusion of their TMDL and what led to the 319(g) petition, and what we have suggested and all the states suggested going back and revising the TMDL analysis with the updated information.

Ms. Deerhake: My second question would be a refresher for me what if anything, what role if any the EMC plays in approval of TMDLs?

Chairman Smith: That's a good question. I don't know the answer to that.

Kathy Stecker: It's Section 303(d) of the federal Clean Water Act. The way that you all usually see TMDLs is through the basin plans. At that point they have been submitted to EPA and approved.

Ms. Deerhake: So there will not be a need for the EMC to play a part in public hearings or hearing officer recommendations?

Kathy Stecker: It's not required.

Dr. Peterson: I don't know the proper pipeline here necessarily. Maybe it's through Dickson's Alternative Energy Committee. Maybe it's through the Commission. But there is currently a Gubernatorial Advisory Panel on offshore energy development at work addressing issues to the government and to the governor suggesting the initiatives she might need to take relative to alternative energies. To my knowledge, that group as wise and wide-ranging as it is has not had any input on this mercury issue and how closely it's tied to current coal burning, how alternative burnings of fossil fuels or even renewable fuels might contribute or help relieve the mercury pollution problem in fish, and any statement that would get that issue on the table. So again I don't know quite how we ought to proceed on that but it strikes me that ought to be an important factor in deliberating about offshore energy, and which of the options are going to help in this effort and where that goes.

Chairman Smith: That's a good point to consider for the Renewable Energy Committee. Thank you **Dr. Peterson.**

I'd like to ask that you put your powerpoints on our web page so that we all have access to the portions that we would like to retain. Good report and I look forward to hearing an update in March.

IV. Status Reports by EMC Committee Chairmen

A. Water Allocation Committee Mayor Darryl Moss, Chairman

The Water Allocation Committee did meet yesterday. We had no action items. We had several informational items and I will go over them briefly. We got an update on the IBT requests that are out there for Greenwood Utilities, Neuse WASA Regional Water System in Brunswick

County. Tom Reeder gave us a rather in-depth update on action taken in the Legislature at the last session. I'm sure more information will be coming down the pipe on that pretty quickly. Mr. Chair I would defer to you to speak to the basic modeling and maybe the work that Dr. Moreau is going to be doing if that's appropriate.

Chairman Smith: Sure. In the last session the General Assembly passed legislation that requires basin-wide models for each river basin across the state. One portion of that which is new, not only for North Carolina, but apparently for the country, is that those models have to take into consideration ecological flow. That is, what is the appropriate level of flow for a river basin to maintain ecological health. The statute calls for the creation of a Scientific Advisory Board that looks to the long term development of what ecological means, how it should be defined, so forth and how it should be modeled. Mr. Reeder is in the process of putting together that Scientific Advisory Board based on the statutory requirements and **Mr. Brewer** has agreed to be the EMC representative to that Scientific Advisory Board.

Separate from that **Dr. Moreau** suggested that we put together a Technical Advisory Group. It's going to take some time for that ecological flow piece to develop, several years, but in the meantime there will be study and development of what models should look like, how they should be defined, what resources to use and not use. **Dr. Moreau** has suggested that the EMC put together a Technical Advisory Group to be involved with the model development piece of that, which is a different piece, and be the liaison's back to the EMC since the statute requires that when that model or models are developed that they be brought to us for approval or disapproval. That way we won't hear about them for the first time when the job is done. **Dr. Moreau** having the idea of putting this TAG together has agreed to chair it and **Mr. Hall** has agreed to serve on it as well.

Mayor Moss: I apologize. Hindsight being 20/20 I should have told you that I was going to defer to you but you did a great job.

The last item that we had was an update on the Jordan allocation and Tom Reeder if I got this wrong tell me. I think we are expecting to have a recommendation before the full EMC in March 2011.

Tom Reeder: Yes. That's correct. Just want you to know that IBT is involved in the process in March 2013.

Mayor Moss: Thank you. That's the end of our report.

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

The Water Quality Committee had three items that remained on its agenda for yesterday and on which we acted. Two of them were from our action items. We had the approval or disapproval of local buffer programs for the Jordan Lake that came before us today. We also had a request to begin the process of reclassifications of surface waters in the French Broad River Basin looking at three and perhaps four of them to be classified from Class C Trout to Class C ORW or Class C HQW. Those will come before the Commission at its next meeting. These were largely in Transylvania but also in Madison County. The third item was an information item and that was an update on the early stages of the process of developing a nutrient management strategy for

High Rock Lake which is an impoundment in the Yadkin River. The entire lake is currently impaired for chlorophyll-a and there's been a TAC engaged in this since 2005 of state and local agencies to try to develop tools that could be useful in supporting the strategy. We will have further updates and, in particular the stage that this is in is to develop the process that will be used in nutrient response model as well as I recall, a watershed model. We will need to approve those models at some stage in 2011 so this will come as an action item sometime into the new year.

C. Groundwater Committee Kevin Martin, Chairman

The Groundwater Committee did meet. We had one action item and one information item. The action item was related to a request to proceed to the full EMC in November for permission to proceed to public hearing on proposed revision of injection well rules. We got a pretty informative presentation from staff on the need to make these changes. A lot of it was related to updates and clarifications as well as to address some new things we're dealing with like the Aquifer Storage and Recovery programs, and we did recommend that with some changes recommended by various members that were mostly editorial and/or clarification. Those will be before us in November with those changes. The information item we had was to let us know at the last meeting we were informed that the director was in the process of reviewing interim maximum allowable concentrations for some groundwater standards. Basically, we have been notified that those have been approved and will be effective October 1st. For a number of substances none of which I can pronounce so I am not going to try to, but those will be before us as rules. If you are kind of new to this, these get adopted in an interim so they are in effect by the Director. But they are subject to rulemaking and that will happen during our next Triennial Review. These will be included so they will go through the rulemaking process through us.

D. Air Quality Committee Marion Deerhake, Chairman

The Air Quality Committee did not meet. We had two draft rules that will be coming to you in the future meetings dealing with amendments to the ambient standards for oxides of nitrogen and sulfur dioxide. These are a result of federal changes to the standards so you will be seeing those coming.

Then we had four reports that were all interlinked and very helpful to help us understand the regulatory issues and status of federal regulations associated with combustion of air toxics. First of all we heard a presentation on the special orders by consent that are outstanding and also that had been closed. These range from odor to air toxics issues non-compliances. Then we got an update on the air toxics director's call that was made. It proposed boiler maximum achievable control technology standard which is scheduled to be promulgated in December but the comments are quite heavy and we're uncertain. You may recall the EMC adopted rules over the past year dealing with air toxics emissions from boilers and processed heaters. We moved because the federal folks had not made any real progress on the MAC standard. They have something proposed now but the final rule is still very uncertain. There is that intermingling of those two standards and how they affect regulated sources. Also there is the issue of the 112(j) applications that are being submitted because the MAC standards were not promulgated on time. Those are site specific maximum achievable control technology determinations that the state must make. So the interrelationship of all these is quite complex and a big challenge for the staff to handle logistically but they're doing a great job, and it was very helpful to hear those presentations.

Chairman Smith: I'll echo that. That combination, particularly the MAC hammer provision, is unusually complex, but we got very good reports on that. I think we all found that made sense to us which is pretty remarkable when you consider the complexity of those statutes and regulations as they interrelate. The special order of consent report update was a good idea too and **Dr. Peterson** has agreed to extend to the Water Quality Committee so that we have periodic reports on what outstanding special orders of consent there are. I think in the Air Quality Committee yesterday we agreed to do that once a year. So that was something nice to know about. That is how many special orders of consent are out there and what are the plans and schedules on those.

The Steering Committee, NPDES Committee and the Renewable Energy Committee did not meet.

III. Concluding Remarks

Coleen Sullins: Everything was handled so well that I didn't feel like I needed to say anything, except I did want to follow up on one of the comments that Dr. Larkins raised when we were talking about the Catawba Basin. He was asking about interaction with other states. I did want to say on the Catawba Basin, specifically there's a pretty significant interaction that the Division of Water Resources and the Division of Water Quality have. There's a North Carolina, South Carolina group that includes legislators and others that get together and talk about cross issues between the states. So there is a specific group designated there but we certainly do engage with other states where issues are coming from other states or impacting other states, decisions that were involved in our impacting other states. As you all know we have a water supply reclassification effort that impacts Virginia that we are currently working on, working with Virginia specifically on those issues. I believe that Sheila and I would say about that Section 319(g) Mercury Conference that we were very concerned that we were being called to a Section 319(g) Mercury Conference when the Northeastern states had not bothered to check with those states that they had fingered as contributing significantly to their mercury pollution in their state. We have every intention of ensuring that we are contacting the states who we determine to be significant contributors when we're working on a statewide mercury TMDL because that situation is not unique to the Northeastern states. Anybody who works on a mercury TMDL is going to be in the exact same situation because the contribution is traveling so far when it comes to our state. So I just wanted to pass along that, yes, that is something that we are very cognizant of and try to work with our fellow state partners when we're dealing with issues.

Sheila Holman: I don't have anything to add today. Thank you.

Frank Crawley: In November you'll have two contested cases coming your way dealing with water quality issues and we hope to get the record to you in plenty of time for you to review it before the meeting. So you will probably get those separately from the other meeting materials.

Sometime in the future after the first of the year two matters will be coming to you, contested cases concerning Blue Ridge Paper. There's a challenge to the renewal of the NPDES permit that's going through the administrative hearing process and that will come to the Commission for final agency decision. It wasn't too long ago that the NPDES Committee granted a variance to Blue Ridge and that is being challenged in the Office of Administrative

Hearings. That matter will come back to the NPDES Committee for final agency decision. So with respect to these contested cases just remember that the Administrative Procedures Act requires you to act in a quasi-judicial capacity and make an informed and impartial decision based upon the official record. So if you get any communications with respect to Blue Ridge Paper you can refer those folks to me and just tell them that contested cases are treated in a quasi-judicial matter and that you don't communicate with respect to them.

The NPDES Committee also dealt with a variance to the City of Raleigh. That particular matter is also in the Office of Administrative Hearings for administrative hearing and that will come back to the NPDES Committee so that will be quasi-judicial matter too. You should also not communicate with respect to those and tell folks that want to communicate with you that you have been instructed by your lawyer not to communicate about any aspect of those cases. With respect to the City of Raleigh there has also been filed a civil action in Wake County Superior Court against the City and the EMC, the Department and the State of North Carolina. They are alleging that the issuance of this variance to the City of Raleigh with the variance to the groundwater standard associated with the city's Neuse River Wastewater Treatment Plant violated the adjacent property owner's right to due process and compensation for an involuntary taking of the use and value of the property. Our office is going to be defending the EMC and the state in that matter. With respect to that we haven't discussed it Mr. Chairman, but I'd like to be able to communicate with you on behalf of the Commission legal maneuvers with respect to this lawsuit.

Chairman Smith: Well that's agreeable with me unless one of you want to volunteer to be the point person on that. I'd be happy to pass that torch. If there's anything that we think that needs EMC authorization, a particular step, we will be sure to err on the side of bringing it back to you. But if there's anything that needs doing in the two month interim between each of our meetings, if you all are comfortable with it, Mr. Crawley and I will use our best judgment. Is that ok with everybody?

General agreement indicated.

Dr. Moreau: You said these two actions on Blue Ridge are being challenged in administrative procedures. Does that come back to the NPDES Committee or does it come to the Commission?

Frank Crawley: It will come back to the NPDES Committee because it's a challenge to the NPDES permit and a challenge to the color variance which is related to the NPDES permit.

Dr. Moreau: So the committee is the final decision maker. It comes back to that committee?

Frank Crawley: And with respect to the groundwater variance for the City of Raleigh and the Neuse River treatment plant that will come back to the NPDES Committee.

Dr. Moreau: Thank you.

John Curry: Counsel, is there a possibility one or more of us might be subpoenaed in any of these cases and presumably if we are we contact you?

Frank Crawley: That's always a possibility and it has happened before.

Chairman Smith: On that Edge of Auburn lawsuit, that is the City of Raleigh, that adjoining landowners lawsuit brought against the City of Raleigh and the EMC Mr. Crawley sent me the complaint that was filed. The city is clearly the principal defendant. We aren't named until the 9th and 10th causes of action listed and those are pretty short. So the real work will be done on behalf of the City of Raleigh.

Are there any other questions of Mr. Crawley?

My two comments are ,one, I want to commend the Division of Air Quality and the Division of Water Quality for this joint effort on mercury both the TMDL and the broader effort on mercury. That's an excellent example of how both ivisions are impacted by a real problem. The methylmercury is a problem in water but it got there through the air so that's a good example of interagency cooperation. Secondly we have several remissions matters on our calendars. Group I will meet here and Group II will meet up stairs as usual. Hearing no further comments the meeting adjourned at 2:30 p.m.

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 AG09-09-10